## Contents

- **Cover**  

- **Contents**  

- **Summary Of Change**  

- **C Series**  
  - ThinkPad C14 Gen 1 Chromebook  

- **E Series**  
  - ThinkPad E14 Gen 4 (Intel)  
  - ThinkPad E14 Gen 5 (AMD)  
  - ThinkPad E14 Gen 5 (Intel)  
  - ThinkPad E14 Gen 6 (AMD)  
  - ThinkPad E14 Gen 6 (Intel)  
  - ThinkPad E15 Gen 4 (Intel)  
  - ThinkPad E16 Gen 1 (AMD)  
  - ThinkPad E16 Gen 1 (Intel)  
  - ThinkPad E16 Gen 2 (AMD)  
  - ThinkPad E16 Gen 2 (Intel)  

- **L Series**  
  - ThinkPad L13 2-in-1 Gen 5 (Intel)  
  - ThinkPad L13 Gen 3 (AMD)  
  - ThinkPad L13 Gen 3 (Intel)  
  - ThinkPad L13 Gen 4 (AMD)  
  - ThinkPad L13 Gen 4 (Intel)  
  - ThinkPad L13 Gen 5 (Intel)  
  - ThinkPad L13 Yoga Gen 3 (AMD)  
  - ThinkPad L13 Yoga Gen 3 (Intel)  
  - ThinkPad L13 Yoga Gen 4 (AMD)  
  - ThinkPad L13 Yoga Gen 4 (Intel)  
  - ThinkPad L14 Gen 3 (AMD)  
  - ThinkPad L14 Gen 3 (Intel)  
  - ThinkPad L14 Gen 4 (AMD)  
  - ThinkPad L14 Gen 4 (Intel)  
  - ThinkPad L14 Gen 5 (AMD)  
  - ThinkPad L14 Gen 5 (Intel)  
  - ThinkPad L15 Gen 3 (AMD)  
  - ThinkPad L15 Gen 3 (Intel)  
  - ThinkPad L15 Gen 4 (AMD)  
  - ThinkPad L15 Gen 4 (Intel)  
  - ThinkPad L16 Gen 1 (AMD)  
  - ThinkPad L16 Gen 1 (Intel)  

- **P Series**  
  - ThinkPad P1 Gen 5  
  - ThinkPad P1 Gen 6  
  - ThinkPad P1 Gen 7  
  - ThinkPad P14s Gen 4 (AMD)  
  - ThinkPad P14s Gen 4 (Intel)  
  - ThinkPad P14s Gen 5 (AMD)  
  - ThinkPad P14s Gen 5 (Intel)  
  - ThinkPad P15v Gen 3 (Intel)  
  - ThinkPad P16 Gen 2  
  - ThinkPad P16s Gen 2 (AMD)  
  - ThinkPad P16s Gen 2 (Intel)  

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**Page Numbers:**  
- Cover: 1  
- Contents: 2  
- Summary Of Change: 4  
- C Series: 5  
- E Series: 13  
- L Series: 105  
- P Series: 308
Summary of Changes

This section describes the technical changes made in this edition. This edition might also include minor corrections and editorial changes which are not identified.

July 17, 2024 - Version 633

Additions in this update

► New product(s)
  None

► Spec updated
  ThinkPad T14s Gen 5

Withdrawals in this update

► Withdrawn product(s)
  ThinkPad E14 Gen 4 (AMD)
  ThinkPad E15 Gen 4 (AMD)
  ThinkPad X1 Extreme Gen 5
  ThinkPad X1 Nano Gen 2
OVERVIEW

1. microSD card reader
2. USB 3.2 Gen 2
3. Kensington Nano Security Slot
4. Thunderbolt 4 (vPro) / USB4 (non-vPro)
5. Thunderbolt 4 (vPro) / USB4 (non-vPro)
6. HDMI
7. USB 3.2 Gen 2
8. Headphone / microphone combo jack (3.5mm)
9. Nano-SIM card slot *

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
12th Generation Intel® Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
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<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
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Operating System

Operating System**
- ChromeOS
- ChromeOS (with Chrome Education Upgrade)
- ChromeOS (with Chrome Enterprise Upgrade)

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
- Models with Intel® vPro™: supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
  - HDMI® supports up to 3840x2160@60Hz
  - Thunderbolt™ supports up to 5120x3200@60Hz
- Models with non-vPro™: supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB4™)
  - HDMI® supports up to 3840x2160@60Hz
  - USB4™ supports up to 5120x3200@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
- 4GB soldered memory, not upgradable
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable

Memory Slots**
- Memory soldered to system board, no slots, single-channel (4GB models)
- Memory soldered to system board, no slots, dual-channel (8GB or 16GB models)

Memory Type
LPDDR4x-4266
Storage

Storage Support
- 64GB eMMC 5.1 on systemboard
- 128GB eMMC 5.1 on systemboard
- One drive, up to 256GB M.2 2242 SSD

Storage Slot
- eMMC on systemboard, no slots (eMMC models)
- One M.2 2242 PCIe® 4.0 x4 slot (M.2 SSD models)

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Memory</td>
<td>eMMC 5.1</td>
<td>64GB / 128GB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] System has one eMMC on systemboard or one M.2 2242 SSD exclusively.
[2] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
microSD card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC5682I codec

Speakers
Stereo speakers, 2W x2, optimized with Waves MaxxAudio®

Microphone
Dual-microphone array

Camera
FHD 1080p, with privacy shutter, fixed focus

Battery

Battery
Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life

Configuration 1 (max battery life)
Google Power Load Test: 11.4 hr @80nits

Alternate configuration 2
Google Power Load Test: 11.0 hr @80nits

Alternate configuration 3
Google Power Load Test: 10.8 hr @80nits

Notes:
[1] Configuration 1 (max battery life): FHD (non-touch), Intel® Pentium® 8505U, 4GB LPDDR4x, Google Chrome OS, 57Wh battery
Alternate configuration 2: FHD (non-touch), Intel® i5-1235U, 8GB LPDDR4x, Google Chrome OS, 57Wh battery
Alternate configuration 3: FHD (touch), Intel® i7-1265U, 16GB LPDDR4x, Google Chrome OS, 57Wh battery

All battery life claims are approximate maximum and based on results using Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use.
**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:


**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14&quot;</td>
<td>FHD (1920x1080)</td>
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</tr>
</tbody>
</table>

**Touchscreen**

- OGS (One Glass Solution) multi-touch, supports 10-point touch
- Non-touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
Chrome keyboard, 6-row, spill-resistant

**Keyboard Backlight**
LED backlight

**UltraNav™**
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**
325.4 x 217 x 19.83 mm (12.81 x 8.54 x 0.78 inches)

**Weight**
Starting at 1.56 kg (3.44 lbs)

**Case Color**
Abyss blue

**Case Material**
PC-ABS (top), PC-ABS (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**
Network

Ethernet
No onboard Ethernet

WLAN + Bluetooth®[1]
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[2]

WWAN
- Fibocom L850-GL, 4G LTE CAT9, M.2 card
- No support

SIM Card
No physical SIM card inbox

NFC
No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Ports

Standard Ports
- 2x USB 3.2 Gen 2
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x microSD card reader

Optional Ports***
- 1x Nano-SIM card slot (WWAN support models)
- 2x Thunderbolt™ 4 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4) (vPro® models)
- 2x USB4® 20Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4) (non-vPro® models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® C14 Gen 1 Chromebook

SECURITY & PRIVACY

Security

Security Chip
Google Security Chip H1

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**
No support

**Other Security**
Camera privacy shutter

**MANAGEABILITY**

**System Management**

**System Management**
- Intel® vPro® Enterprise[^1]
- Non-vPro®

Notes:
[^1] Intel® vPro® offers a superset of DASH's defined capabilities.

**SERVICE**

**Warranty**

**Base Warranty**[^2]
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service

**ACCESSORIES**

**Bundled Accessories**

**Bundled Accessories**[^3]
None

Notes:
[^3] For more compatible accessory solutions, please visit [Accessories for ThinkPad® C14 Gen 1 Chromebook](#).

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**[^4]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: 5°C (41°F) to 43°C (109°F)

**Relative Humidity**
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage: 5% to 95% at wet-bulb temperature 27°C (81°F)

**Altitude**
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[^4] When you charge the battery, its temperature must be no lower than 10°C (50°F).

**CERTIFICATIONS**
Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 3
RoHS compliant
TCO Certified 9.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Feature with ** means that only one offering listed under the feature is configured on selected models.

Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

1. Thunderbolt 4
2. USB 3.2 Gen 1 (Always On)
3. HDMI
4. Headphone / microphone combo jack (3.5mm)
5. USB 2.0
6. Ethernet (RJ-45)
7. Kensington Security Slot

<table>
<thead>
<tr>
<th>1. Thunderbolt 4</th>
<th>5. USB 2.0</th>
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<tbody>
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PERFORMANCE

Processor

Processor Family
12th Generation Intel® Core™ i3 / i5 / i7 Processor

Processor**[1]

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<td>Intel® Iris® Xe Graphics[2]</td>
</tr>
<tr>
<td>Core™ i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
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<tr>
<td>Core™ i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics[6]</td>
</tr>
</tbody>
</table>

Notes:
[1] i5-1240p and i7-1260P are NOT available in EMEA.
[2], [3], [4], [5], [6] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
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<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® GeForce MX550</td>
<td>Discrete</td>
<td>2GB GDDR6</td>
<td>-</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 3 independent displays (native display and 2 external monitors via HDMI® and Thunderbolt™)
• HDMI® supports up to 3840x2160@60Hz
• Thunderbolt™ supports up to 5120x3200@60Hz

**Chipset**

**Memory**

**Max Memory**[1]

- Up to 32GB DDR4-3200
- Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200

**Memory Slots**

- One DDR4 SO-DIMM slot
- One memory soldered to system board, one DDR4 SO-DIMM slot, dual-channel capable

**Memory Type**

DDR4-3200

**Notes:**

[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

**Storage Support**[2]

Up to two drives, 2x M.2 SSD
- M.2 2242 SSD up to 1TB

**Storage Slot**

Two M.2 slots
- One M.2 2242 PCIe® 3.0 x4 slot
- One M.2 2242 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**Notes:**

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The system supports dual SSD via two M.2 slots, but Lenovo® only offers one SSD configuration, another SSD slot for user self-extension.

**Removable Storage**

**Optical**
None

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™, audio by HARMAN

**Microphone**
Dual-microphone array, near-field

**Camera**

- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
Battery

**Battery**
- Integrated Li-Polymer 45Wh battery, supports Rapid Charge (charge up to 80% in 1 hr)
- Integrated Li-Polymer 57Wh battery

**Max Battery Life**
- Models with 45Wh battery:
  - MobileMark® 2018: 9.4 hr
  - JEITA 2.0: 16.1 hr
  - Local video (1080p) playback@150nits: 11.8 hr
- Models with 57Wh battery:
  - MobileMark® 2018: 11.5 hr
  - MobileMark® 25: 10.9 hr
  - JEITA 2.0: 20.6 hr
  - Local video (1080p) playback@150nits: 15.6 hr

Notes:
[1] All battery life claims are approximate maximum and based on results using the MobileMark® 2014, MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p video playback (with 150nits brightness and default volume level) or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

Power Adapter

**Power Adapter**
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

DESIGN

Display

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14” FHD (1920x1080)</td>
<td>None</td>
<td>TN</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>500:1</td>
<td>45% NTSC</td>
<td>45°/45°/15°/35°</td>
<td></td>
</tr>
<tr>
<td>14” FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>14” FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>14” FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
</tbody>
</table>

**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1] Multi-touch panel is only for special bid in EMEA.
[2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
- 6-row, spill-resistant, multimedia Fn keys with Unified Communications controls
Keyboard Backlight
• LED backlight
• Non-backlight

UltraNav™
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 57 x 100 mm (2.24 x 3.94 inches)

Mechanical
Dimensions (WxDxH)(1)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium (top), aluminium (bottom) models</td>
<td>324 x 220.7 x 17.9 mm (12.76 x 8.69 x 0.7 inches)</td>
</tr>
<tr>
<td>Aluminium (top), PC-ABS (bottom) models</td>
<td>324 x 220.7 x 18.9 mm (12.76 x 8.69 x 0.74 inches)</td>
</tr>
</tbody>
</table>

Weight(2)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium (top), PC-ABS (bottom) models</td>
<td>Starting at 1.59 kg (3.51 lbs)</td>
</tr>
<tr>
<td>Aluminium (top), aluminium (bottom) models</td>
<td>Starting at 1.64 kg (3.62 lbs)</td>
</tr>
</tbody>
</table>

Case Color**
• Black
• Mineral metallic(3)

Case Material**
• Aluminium (top), PC-ABS (bottom)
• Aluminium (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] Mineral metallic case is NOT available in EMEA.

CONNECTIVITY

Network

Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**(1)
• Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card(2)
• Realtek® Wi-Fi® 6 RTL8822BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card(3)
• Intel® Wi-Fi® 6 AX210, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card(4)
• Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card(3)
• AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card(4)
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card(3)

WWAN
No support

SIM Card
No physical SIM card inbox

NFC
No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2], [3], [4] Wi-Fi® 6 full features might be limited by country-level restrictions.
Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

**Ports**

**Standard Ports**
- 1x USB 2.0
- 1x USB 3.2 Gen 1 (Always On)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

**Notes:**
- The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
  - USB 2.0: 480 Mbit/s;
  - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
  - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
  - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
  - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
  - Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Docking
Various docking solutions supported via Thunderbolt™.
For more compatible docking solutions, please visit [Docking for ThinkPad® E14 Gen 4 (Intel®)]

**SECURITY & PRIVACY**

**Security**

**Security Chip**
- Firmware TPM 2.0 integrated in SoC
- Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**

Kensington® Security Slot™, 3 x 7 mm

**Smart Card Reader**

No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button
- No fingerprint reader

**BIOS Security**
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

**Other Security**
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

**SERVICE**

**Warranty**

Base Warranty**
1-year mail-in service
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories(1)
• Lenovo® 15.6” laptop casual toploader, polyester
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E14 Gen 4 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature(1)
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

CERTIFICATIONS

Green Certifications(2)

Green Certifications(2)
• ENERGY STAR® 8.0
• EPEAT™ Gold Registered(3)
• ErP Lot 3
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
TÜV Rheinland® Low Blue Light (Software Solution)
• Feature with ** means that only one offering listed under the feature is configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>2.</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>3.</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>4.</td>
<td>USB-C 3.2 Gen 1</td>
</tr>
<tr>
<td>5.</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>6.</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>7.</td>
<td>HDMI</td>
</tr>
<tr>
<td>8.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 7330U</td>
<td>4</td>
<td>8</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 5625U</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 7430U</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 7530U</td>
<td>6</td>
<td>12</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 7730U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- No preload operating system

Notes:

[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)

- HDMI® supports up to 4096x2160@30Hz
- USB-C® supports up to 5120x2160@60Hz

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory[1]

Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200

Memory Slots

One memory soldered to systemboard, one DDR4 SO-DIMM slot, dual-channel capable

Memory Type

DDR4-3200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support[2]

Up to two drives, 2x M.2 SSD
ThinkPad E14 Gen 5 (AMD)

- M.2 2242 SSD up to 512GB
- M.2 2280 SSD up to 1TB

### Storage Slot
Two M.2 slots
- One M.2 2242 PCIe® 3.0 x4 slot
- One M.2 2280 PCIe® 3.0 x4 slot

### Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>128GB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**Notes:**

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

[2] The SSD with PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0 x4 due to AMD platform limitations.

[3] 128GB SSD is for special bid only.

### Removable Storage

#### Card Reader
No card reader

### Multi-Media

#### Audio Chip
High Definition (HD) Audio, Synaptic® CX11880 codec

#### Speakers
Stereo speakers, 2W x2, Dolby Atmos®

#### Microphone
Dual-microphone array, Dolby Voice®

#### Camera

- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

### Battery

#### Battery
- Integrated Li-Polymer 47Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

#### Battery Life

**Configuration 1 (max battery life)**
- MobileMark® 2018: up to 15.03 hr @200nits
- JEITA 2.0: up to 20.85 hr @150nits
- Local video playback: up to 19.56 hr @150nits

**Alternate configuration 2**
- MobileMark® 2018: up to 13.73 hr @200nits
- JEITA 2.0: up to 17.34 hr @150nits
- Local video playback: up to 15.1 hr @150nits

**Alternate configuration 3**
- MobileMark® 2018: up to 12.38 hr @200nits
- JEITA 2.0: up to 14.37 hr @150nits
- Local video playback: up to 15.2 hr @150nits

**Notes:**

[1] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 7730U, 8GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 7530U, 16GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (non-touch), AMD Ryzen™ 7 7730U, 8GB DDR4, Win 11, 47Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

- **Power Adapter**
  - 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
  - 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

**Notes:**


**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

- 6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

- TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

- 313 x 219.3 x 17.99 mm (12.32 x 8.63 x 0.71 inches)

**Weight**

- 2.0
### Models and Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium (top), PC-ABS (bottom)</td>
<td>Starting at 1.41 kg (3.11 lbs)</td>
</tr>
<tr>
<td>Aluminium (top), aluminium (bottom)</td>
<td>Starting at 1.43 kg (3.15 lbs)</td>
</tr>
</tbody>
</table>

### Case Color
- Arctic grey
- Graphite black

### Case Material
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), aluminium (bottom)

### Notes:
1. The system dimensions may vary depending on configurations.
2. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

## CONNECTIVITY

### Network

#### Ethernet
Gigabit Ethernet, Realtek® RTL8111H-CG, 1x RJ-45, supports Wake-on-LAN

#### WLAN + Bluetooth®
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 Card
- Realtek® Wi-Fi® 6 RTL8882BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 card
- Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 card
- Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 Card

#### WWAN
No support

#### SIM Card
No physical SIM card inbox

#### NFC
No support

### Notes:
1. Wi-Fi® 6 full features might be limited by country-level restrictions.
2. Wi-Fi® 6 full features might be limited by country-level restrictions. Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.
3. Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
4. Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.

### Ports

#### Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 1 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
1x HDMI® 1.4b
1x Headphone / microphone combo jack (3.5mm)
1x Ethernet (RJ-45)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking
Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® E14 Gen 5 (AMD)

SECURITY & PRIVACY

Security
Security Chip
Firmware TPM 2.0 integrated in SoC
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button
No fingerprint reader

BIOS Security
Supervisor password
Power-on password
NVMe® password
Self-healing BIOS

Other Security
(Optional) IR camera for Windows® Hello (facial recognition)
Camera privacy shutter

MANAGEABILITY

System Management
System Management
Non-DASH

SERVICE

Warranty
Base Warranty
1-year mail-in service
1-year courier or carry-in service
1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories\[1\]
None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E14 Gen 5 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature\[1\]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
25% PCC recycled plastic used in the battery
30% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in standard 65W adapter
Low-temperature solder

CERTIFICATIONS

Green Certifications\[2\]

Green Certifications\[3\]
• ENERGY STAR® 8.0
• EPEAT™ Gold Registered\[3\]
• ErP Lot 6
• ErP Lot 26
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- (Optional) TÜV Rheinland® Low Blue Light (Software Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
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OVERVIEW

1. USB 2.0
2. Ethernet (RJ-45)
3. Kensington Nano Security Slot
4. USB-C 3.2 Gen 2
5. Thunderbolt 4
6. USB 3.2 Gen 1 (Always On)
7. HDMI
8. Headphone / microphone combo jack (3.5mm)
PERFORMANCE

Processor

Processor Family
13th Generation Intel® U, P or H Series Core™ i3 / i5 / i7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1315U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[1]</td>
</tr>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[2]</td>
</tr>
<tr>
<td>Core™ i5-13420H</td>
<td>8 (4 P-core + 4 E-core)</td>
<td>12</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[3]</td>
</tr>
<tr>
<td>Core™ i5-13500H</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics[4]</td>
</tr>
<tr>
<td>Core™ i5-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[5]</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics[6]</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[7]</td>
</tr>
<tr>
<td>Core™ i7-13700H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics[8]</td>
</tr>
</tbody>
</table>

Notes:
[1], [2], [3], [4], [5], [6], [7], [8] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® GeForce MX550</td>
<td>Discrete</td>
<td>2GB GDDR6</td>
<td>-</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>
Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
• HDMI® supports up to 4096x2160@60Hz
• USB-C® supports up to 3840x2160@60Hz
• Thunderbolt™ supports up to 5120x2160@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
• Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200
• Up to 48GB (16GB soldered + 32GB SO-DIMM) DDR4-3200

Memory Slots
One memory soldered to system board, one DDR4 SO-DIMM slot, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] Maximum memory 48GB is only to test technical readiness of notebook. Available memory to sell would vary.

Storage

Storage Support
Up to two drives, 2x M.2 SSD
• M.2 2242 SSD up to 1TB

Storage Slot
Two M.2 slots
• One M.2 2242 PCIe® 3.0 x4 slot
• One M.2 2242 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>128GB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD[2]</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] M.2 PCIe® 4.0 x4 SSD in the M.2 PCIe® 3.0 x4 slot is downgraded to PCIe® 3.0 x4 performance.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Synaptic® CX11880 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®

Microphone
Dual-microphone array, Dolby Voice®

Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

Battery

Battery**
- Integrated Li-Polymer 47Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Battery Life[1]

Configuration 1 (max battery life)
MobileMark® 2018: up to 11.2 hr @200nits
MobileMark® 25: up to 8.58 hr with 725 performance score @250nits
JEITA 2.0: up to 15.2 hr @150nits
Local video playback: up to 13.9 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 9.16 hr @200nits
MobileMark® 25: up to 7.6 hr with 814 performance score @250nits
JEITA 2.0: up to 15.3 hr @150nits
Local video playback: up to 13.4 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 8.18 hr @200nits
MobileMark® 25: up to 6.7 hr with 716 performance score @250nits
JEITA 2.0: up to 14.9 hr @150nits
Local video playback: up to 13.1 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® i3-1315U, 8GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® i5-1340P, 16GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: 2.2K (non-touch), Intel® i7-1355U, 40GB DDR4, NVIDIA® GeForce MX550, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

DESIGN

Display

Display**[1]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
</table>

ThinkPad E14 Gen 5 (Intel) - January 26 2024
ThinkPad E14 Gen 5 (Intel)

<table>
<thead>
<tr>
<th>Screen Size</th>
<th>Resolution</th>
<th>Touch Support</th>
<th>Panel Type</th>
<th>Brightness</th>
<th>Anti-Glare</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color</th>
<th>Refresh Rate</th>
<th>Viewing Angles</th>
<th>Certifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot; WUXGA (1920x1200)</td>
<td>None IPS 300nits Anti-glare 16:10 800:1 45% NTSC 60Hz 85°/85°/85°/85° TÜV Low Blue Light (Software)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>14&quot; WUXGA (1920x1200)</td>
<td>Multi-touch IPS 300nits Anti-glare 16:10 800:1 45% NTSC 60Hz 85°/85°/85°/85° TÜV Low Blue Light (Software)</td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>14&quot; 2.2K (2240x1400)</td>
<td>None IPS 300nits Anti-glare 16:10 1500:1 100% sRGB 60Hz 85°/85°/85°/85° Eyesafe® Certified 2.0</td>
<td></td>
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</tr>
</tbody>
</table>

**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**
1. IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
- 6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard backlight**
- LED backlight
- Non-backlight

**UltraNav™**
- TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**
313 x 219.3 x 17.99 mm (12.32 x 8.63 x 0.71 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium (top), PC-ABS (bottom) models</td>
<td>Starting at 1.41 kg (3.11 lbs)</td>
</tr>
<tr>
<td>Aluminium (top), aluminium (bottom) models</td>
<td>Starting at 1.43 kg (3.15 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
- Arctic grey
- Graphite black

**Case Material**
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), aluminium (bottom)

**Notes:**
1. The system dimensions may vary depending on configurations.
2. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 card
ThinkPad E14 Gen 5 (Intel)

- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready), M.2 Card[3]
- Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[4]
- Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 card[5]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 Card[6]

WWAN
No support

SIM Card
No physical SIM card inbox

NFC
No support

---

Notes:

1. Wi-Fi® 6 full features might be limited by country-level restrictions.
2. Wi-Fi® 6 full features might be limited by country-level restrictions.
3. Wi-Fi® 6 full features might be limited by country-level restrictions.
4. Wi-Fi® 6 full features might be limited by country-level restrictions.
5. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Ports[1]

Standard Ports
- 1x USB 2.0
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

Notes:

1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
   - USB 2.0: 480 Mbit/s;
   - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
   - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
   - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
   - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
   - Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® E14 Gen 5 (Intel®)

SECURITY & PRIVACY

Security

Security Chip
- Firmware TPM 2.0 integrated in SoC
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter

MANAGEABILITY

System Management

System Management
• Intel® vPro® Enterprise
• Non-vPro®

SERVICE

Warranty

Base Warranty**
• 1-year mail-in service
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories[1]
• Lenovo® 15.6” laptop casual toploader, polyester, black
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E14 Gen 5 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)
Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability
Material
25% PCC recycled plastic used in the battery
30% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in standard 65W adapter
Low-temperature solder

CERTIFICATIONS

Green Certifications[^1]

• ENERGY STAR® 8.0
• EPEAT™ Gold Registered[^2]
• ErP Lot 6
• ErP Lot 26
• FSC certified package
• RoHS compliant
• TCO Certified 9.0

Notes:
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[3] EPEAT™ is registered where applicable, please visit [epeat.net](https://epeat.net) for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

• (Optional) Eyesafe® Certified 2.0
• (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
• (Optional) TÜV Rheinland® Low Blue Light (Software Solution)

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OVERVIEW

1. USB-A (USB 5Gbps)  
2. Ethernet (RJ-45)  
3. Kensington Nano Security Slot  
4. USB-C (USB 5Gbps), with USB PD 3.0 & DP 1.4  
5. USB-C (USB 10Gbps), with USB PD 3.0 & DP 1.4  
6. USB-A (USB 10Gbps), Always On  
7. HDMI  
8. Headphone / microphone combo jack (3.5mm)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>2</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>3</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>4</td>
<td>USB-C (USB 5Gbps), with USB PD 3.0 &amp; DP 1.4</td>
</tr>
<tr>
<td>5</td>
<td>USB-C (USB 10Gbps), with USB PD 3.0 &amp; DP 1.4</td>
</tr>
<tr>
<td>6</td>
<td>USB-A (USB 10Gbps), Always On</td>
</tr>
<tr>
<td>7</td>
<td>HDMI</td>
</tr>
<tr>
<td>8</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
</tbody>
</table>
**PERFORMANCE**

**Processor**

**Processor Family**
AMD Ryzen™ 3 / 5 / 7 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
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<th>Threads</th>
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</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 7335U</td>
<td>4</td>
<td>8</td>
<td>3.0GHz</td>
<td>4.3GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ 660M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 7535HS</td>
<td>6</td>
<td>12</td>
<td>3.3GHz</td>
<td>4.55GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 7535U</td>
<td>6</td>
<td>12</td>
<td>2.9GHz</td>
<td>4.55GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 7735HS</td>
<td>8</td>
<td>16</td>
<td>3.2GHz</td>
<td>4.75GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 7735U</td>
<td>8</td>
<td>16</td>
<td>2.7GHz</td>
<td>4.75GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M Graphics</td>
</tr>
</tbody>
</table>

**Operating System**

**Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 660M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 680M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

**Monitor Support**

**Monitor Support**
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)
- HDMI® supports up to 4K@60Hz
- USB-C® (USB 10Gbps) supports up to 5K@60Hz
- USB-C® (USB 5Gbps) supports up to 4K@60Hz

**Chipset**

**Chipset**
AMD SoC (System on Chip) platform

**Memory**

**Max Memory**
Up to 64GB DDR5-4800

**Memory Slots**
Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**
DDR5-4800

---

Notes:

[1] Maximum memory is only to test technical readiness of notebook. Available memory to sell would vary.
Storage

Storage Support
Up to two drives, 2x M.2 SSD
- M.2 2242 SSD up to 1TB
- M.2 2280 SSD up to 1TB

Storage Slot
Two M.2 slots
- One M.2 2242 PCIe® 4.0 x4 slot
- One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The system supports dual SSD via two M.2 slots, but Lenovo® only offers one M.2 2242 SSD configuration and M.2 2280 slot for user self-extension.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Senary SN6141 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®, audio by HARMAN

Microphone
Dual-microphone array with smart noise-cancelling

Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

Battery

Battery**
- Integrated Li-Polymer 47Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Battery Life[3]
Configuration 1 (max battery life)
MobileMark® 25: up to 13.5 hr with 588 performance score @250nits
JEITA 3.0 (Video/Idle): up to 11.76 hr / 21.8 hr @200nits
Local video playback: up to 19.59 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 13.08 hr with 604 performance score @250nits
JEITA 3.0 (Video/Idle): up to 11.75 hr / 20.1 hr @200nits
Local video playback: up to 18.84 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 10.1 hr with 667 performance score @250nits
JEITA 3.0 (Video/Idle): up to 8.4 hr / 16.3 hr @200nits
Local video playback: up to 14.65 hr @150nits

Notes:
[3] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 7735HS, 8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (non-touch), AMD Ryzen™ 7 7735U, 8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), AMD Ryzen™ 5 7535U, 8GB+8GB DDR5, Win 11, 47Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**[^1]

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

**Notes:**

[^1]: AC adapter offerings depend on the country.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[^1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[^2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS[^3]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

[^1], [^2], [^3]: IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

- 6-row, spill-resistant, multimedia Fn keys

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu

Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**[^5]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
</table>

[^1], [^2], [^3]: IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
Models with aluminium (top) and aluminium (bottom) 313 x 219.3 x 17.99 mm (12.32 x 8.63 x 0.71 inches)
Models with aluminium (top) and PC-ABS (bottom) 313 x 219.3 x 18.59 mm (12.32 x 8.63 x 0.73 inches)

<table>
<thead>
<tr>
<th>Weight[2]</th>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Models with aluminium (top) and aluminium (bottom)</td>
<td>Starting at 1.44 kg (3.17 lbs)</td>
</tr>
<tr>
<td></td>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>Starting at 1.42 kg (3.14 lbs)</td>
</tr>
</tbody>
</table>

Case Color**
- Black
- Grey

Case Material**
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
Gigabit Ethernet, Realtek® RTL8111H-CG, 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**[1]
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[2]
- Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[3]

WWAN
No support

SIM Card
No physical SIM card inbox

NFC
No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2], [3] Wi-Fi® 6E full features might be limited by country-level restrictions. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports[1]
Standard Ports
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with USB PD 3.0 and DisplayPort™ 1.4
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 3.0 and DisplayPort™ 1.4
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
1x Ethernet (RJ-45)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® E14 Gen 6 (AMD)

SECURITY & PRIVACY

Security

Security Chip**
- Discrete TPM 2.0, TCG certified, FIPS 140-2 certified
- Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

MANAGEABILITY

System Management
System Management
Non-DASH

SERVICE

Warranty

Base Warranty**
- 1-year mail-in service
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories
Bundled Accessories[1]
None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E14 Gen 6 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 25% PCC recycled plastic used in the battery
- 30% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in standard 65W adapter

Plastic free packaging
Dry-pressed bamboo & sugarcane fiber Cushions
FSC Certified paper in packaging

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 6
ErP Lot 26
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

MIL-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
• (Optional) TÜV Rheinland® Low Blue Light (Software Solution)

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. USB-A (USB 5Gbps)  
2. Ethernet (RJ-45)  
3. Kensington Nano Security Slot  
4. USB-C (USB 20Gbps), with USB PD 3.0 & DP 1.4  
5. Thunderbolt 4  
6. USB-A (USB 10Gbps), Always On  
7. HDMI  
8. Headphone / microphone combo jack (3.5mm)
PERFORMANCE

Processor
Processor Family
Intel® U or H Series Core™ Ultra 5 / 7 Processor (Series 1)

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra S 125H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz</td>
<td>P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics[1]</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra S 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra S 135U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics[2]</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
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<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
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</tr>
</tbody>
</table>

Notes:
[1], [2] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Ubuntu Linux[3]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

NPU

NPU
Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
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</tbody>
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Notes:
[1] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.
Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C®, and Thunderbolt™)
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 5K@60Hz
- Thunderbolt™ supports up to 8K@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
Up to 64GB DDR5-5600

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-5600

Notes:
[1] Maximum memory is only to test technical readiness of notebook. Available memory to sell would vary.

Storage

Storage Support
Up to two drives, 2x M.2 SSD
- M.2 2242 SSD up to 1TB
- M.2 2280 SSD up to 1TB

Storage Slot
Two M.2 slots
- One M.2 2242 PCIe® 4.0 x4 slot
- One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
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<th>Interface</th>
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<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The system supports dual SSD via two M.2 slots, but Lenovo® only offers one M.2 2242 SSD configuration and M.2 2280 slot for user self-extension.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Senary SN6141 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®, audio by HARMAN

Microphone
Dual-microphone array with smart noise-cancelling

Camera
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
**ThinkPad E14 Gen 6 (Intel)**

- HD 720p, with privacy shutter, fixed focus

**Battery**

**Battery**
- Integrated Li-Polymer 47Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

**Battery Life**

Configuration 1 (max battery life)
- MobileMark® 25: up to 11.8 hr with 793 performance score @250nits
- JEITA-BAT 3.0 (Video/Idle): up to 11.68 hr / 20.9 hr @200nits
- Local video playback: up to 20.24 hr @150nits

Alternate configuration 2
- MobileMark® 25: up to 11.75 hr with 590 performance score @250nits
- JEITA-BAT 3.0 (Video/Idle): up to 11.22 hr / 20.23 hr @200nits
- Local video playback: up to 19.4 hr @150nits

Alternate configuration 3
- MobileMark® 25: up to 9.33 hr with 591 performance score @250nits
- JEITA-BAT 3.0 (Video/Idle): up to 9.22 hr / 16.5 hr @200nits
- Local video playback: up to 15.66 hr @150nits

Notes:

- Configuration 1 (max battery life): WUXGA (non-touch), Intel® Core™ Ultra 5 125U, 8GB+8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
- Alternate configuration 2: WUXGA (touch), Intel® Core™ Ultra 5 135U, 16GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
- Alternate configuration 3: WUXGA (touch), Intel® Core™ Ultra 5 135U, 16GB DDR5, Win 11, 47Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

- AC adapter offerings depend on the country.

**DESIGN**

**Display**

<table>
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<tr>
<th>Size</th>
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<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
</tbody>
</table>
## Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

### Notes:
[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

## Input Device

### Keyboard
6-row, spill-resistant, multimedia Fn keys

### Keyboard Backlight
- LED backlight
- Non-backlight

### UltraNav™
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

## Mechanical

### Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with aluminium (top) and aluminium (bottom)</td>
<td>313 x 219.3 x 17.99 mm (12.32 x 8.63 x 0.71 inches)</td>
</tr>
<tr>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>313 x 219.3 x 18.59 mm (12.32 x 8.63 x 0.73 inches)</td>
</tr>
</tbody>
</table>

### Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with aluminium (top) and aluminium (bottom)</td>
<td>Starting at 1.44 kg (3.17 lbs)</td>
</tr>
<tr>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>Starting at 1.42 kg (3.14 lbs)</td>
</tr>
</tbody>
</table>

### Case Color
- Black
- Grey

### Case Material
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), aluminium (bottom)

### Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

## Connectivity

### Network

#### Ethernet
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

#### WLAN + Bluetooth
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card

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ThinkPad E14 Gen 6 (Intel) - June 24 2024
• Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card

WWAN
No support

SIM Card
No physical SIM card inbox

NFC
No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2], [3], [4] Wi-Fi® 6E full features might be limited by country-level restrictions.

6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Standard Ports
• 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
• 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
• 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), with USB PD 3.0 and DisplayPort™ 1.4
• 1x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® E14 Gen 6 (Intel®)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter

MANAGEABILITY

System Management

System Management
• Intel® vPro® Enterprise
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**
• 1-year mail-in service
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories
• Lenovo® 15.6” laptop casual toploader, polyester
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E14 Gen 6 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
• Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
• 25% PCC recycled plastic used in the battery
30% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in standard 65W adapter
Plastic free packaging
Dry-pressed bamboo & sugarcane fiber Cushions
FSC Certified paper in packaging

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- (Optional) TÜV Rheinland® Low Blue Light (Software Solution)

Feature with ** means that only one offering listed under the feature is configured on selected models.

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The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Thunderbolt 4
2. USB 3.2 Gen 1 (Always On)
3. HDMI
4. Headphone / microphone combo jack (3.5mm)
5. USB 2.0
6. Ethernet (RJ-45)
7. Kensington Security Slot

<table>
<thead>
<tr>
<th>1. Thunderbolt 4</th>
<th>5. USB 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. USB 3.2 Gen 1 (Always On)</td>
<td>6. Ethernet (RJ-45)</td>
</tr>
<tr>
<td>3. HDMI</td>
<td>7. Kensington Security Slot</td>
</tr>
<tr>
<td>4. Headphone / microphone combo jack (3.5mm)</td>
<td></td>
</tr>
</tbody>
</table>
PERFORMANCE

Processor

Processor Family
12th Generation Intel® Core™ i3 / i5 / i7 Processor

Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[2]</td>
</tr>
<tr>
<td>Core™ i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[3]</td>
</tr>
<tr>
<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[4]</td>
</tr>
<tr>
<td>Core™ i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics[5]</td>
</tr>
</tbody>
</table>

Notes:
[1] i5-1240p and i7-1260P are NOT available in EMEA.
[2], [3], [4], [5] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® GeForce MX550</td>
<td>Discrete</td>
<td>2GB GDDR6</td>
<td>-</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support

Supports up to 3 independent displays (native display and 2 external monitors via HDMI® and Thunderbolt™)
- HDMI® supports up to 3840x2160@60Hz
- Thunderbolt™ supports up to 5120x3200@60Hz
Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory[1]
- Up to 32GB DDR4-3200
- Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200

Memory Slots**
- One DDR4 SO-DIMM slot
- One memory soldered to systemboard, one DDR4 SO-DIMM slot, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support[1][2]
Up to two drives, 2x M.2 SSD
- M.2 2242 SSD up to 1TB

Storage Slot
Two M.2 slots
- One M.2 2242 PCIe® 3.0 x4 slot
- One M.2 2242 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The system supports dual SSD via two M.2 slots, but Lenovo® only offers one SSD configuration, another SSD slot for user self-extension.

Removable Storage

Optical
None

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™, audio by HARMAN

Microphone
Dual-microphone array, near-field

Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

Battery
Battery

- Integrated Li-Polymer 45Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 57Wh battery

Max Battery Life

- Models with 45Wh battery:
  - MobileMark® 2018: 8.0 hr
  - JEITA 2.0: 12.6 hr
  - Local video (1080p) playback@150nits: 11.1 hr
- Models with 57Wh battery:
  - MobileMark® 2018: 10.8 hr
  - MobileMark® 25: 9.9 hr
  - JEITA 2.0: 15.6 hr
  - Local video (1080p) playback@150nits: 14.6 hr

Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark® 2014, MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p video playback (with 150nits brightness and default volume level) or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

Power Adapter

Power Adapter

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:


DESIGN

Display

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.6” FHD (1920x1080)</td>
<td>None</td>
<td>TN</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>500:1</td>
<td>45% NTSC</td>
<td>45°/45°/15°/35°</td>
<td></td>
</tr>
<tr>
<td>15.6” FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>15.6” FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>15.6” FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
</tbody>
</table>

Touchscreen

- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:

[1] Multi-touch panel is only for special bid in EMEA.
[2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

Keyboard Backlight
LED backlight
Non-backlight

**UltraNav™**

TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 69 x 100 mm (2.72 x 3.94 inches)

**Mechanical**

**Dimensions (WxDxH)**[1]
365 x 240 x 18.9 mm (14.37 x 9.45 x 0.74 inches)

**Weight**[2]
Starting at 1.7 kg (3.75 lbs)

**Case Color**[**]**
- Black
- Mineral metallic[3]

**Case Material**
Aluminium (top), PC-ABS (bottom)

---

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] Mineral metallic case is NOT available in EMEA.

**CONNECTIVITY**

**Network**

**Ethernet**
Gigabit Ethernet, Intel® Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**[**]**[1]
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[2]
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[3]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[4]
- Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[5]
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[6]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[7]

**WWAN**
No support

**SIM Card**
No physical SIM card inbox

**NFC**
No support

---

**Notes:**
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2], [3], [4] Wi-Fi® 6 full features might be limited by country-level restrictions.
[5], [6], [7] Wi-Fi® 6E full features might be limited by country-level restrictions.

Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

**Ports**[1]

**Standard Ports**
- 1x USB 2.0
- 1x USB 3.2 Gen 1 (Always On)
1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
1x HDMI® 2.1, up to 4K/60Hz
1x Headphone / microphone combo jack (3.5mm)
1x Ethernet (RJ-45)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® E15 Gen 4 (Intel®)

SECURITY & PRIVACY

Security Chip
Firmware TPM 2.0 integrated in SoC
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button
No fingerprint reader

BIOS Security
Supervisor password
Power-on password
NVMe® password
Self-healing BIOS

Other Security
(Optional) IR camera for Windows® Hello (facial recognition)
Camera privacy shutter

SERVICE

Warranty
Base Warranty
1-year mail-in service
1-year courier or carry-in service
1-year courier or carry-in with 2-year system board service (Korea only)
1-year limited onsite service
No base warranty

ACCESSORIES

Bundled Accessories
Bundled Accessories
Lenovo® 15.6” laptop casual toploader, polyester

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E15 Gen 4 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
- MIL-STD-810H military test passed

Other Certifications
- TÜV Rheinland® Low Blue Light (Software Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th>1. USB 3.2 Gen 1</th>
<th>5. USB-C 3.2 Gen 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Ethernet (RJ-45)</td>
<td>6. USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>4. USB-C 3.2 Gen 1</td>
<td>8. Headphone / microphone combo jack (3.5mm)</td>
</tr>
</tbody>
</table>

![Image of ThinkPad E16 Gen 1 (AMD)]
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 7330U</td>
<td>4</td>
<td>8</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 7430U</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 7530U</td>
<td>6</td>
<td>12</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 7730U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)
- HDMI® supports up to 4096x2160@30Hz
- USB-C® supports up to 5120x2160@60Hz

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory[2]

Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200

Memory Slots

One memory soldered to systemboard, one DDR4 SO-DIMM slot, dual-channel capable

Memory Type

DDR4-3200

Notes:
[2] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support[3]

Up to two drives, 2x M.2 SSD
- M.2 2242 SSD up to 512GB
- M.2 2280 SSD up to 1TB
Storage Slot
Two M.2 slots
• One M.2 2242 PCIe® 3.0 x4 slot
• One M.2 2280 PCIe® 3.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The SSD with PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0 x4 due to AMD platform limitations.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Synaptic® CX11880 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®

Microphone
Dual-microphone array, Dolby Voice®

Camera**
• FHD 1080p + IR hybrid, with privacy shutter, fixed focus
• FHD 1080p, with privacy shutter, fixed focus
• HD 720p, with privacy shutter, fixed focus

Battery
Battery**
• Integrated Li-Polymer 47Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
• Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 2018: up to 14.45 hr @200nits
JEITA 2.0: up to 20.68 hr @150nits
Local video playback: up to 19.13 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 12.03 hr @200nits
JEITA 2.0: up to 16.71 hr @150nits
Local video playback: up to 15.25 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 12.38 hr @200nits
JEITA 2.0: up to 14.37 hr @150nits
Local video playback: up to 15.2 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 7730U, 8GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 7530U, 16GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (non-touch), AMD Ryzen™ 7 7730U, 8GB DDR4, Win 11, 47Wh battery, best power efficiency power mode
All battery life claims are approximate maximum and based on results using MobileMark® 2018, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**[^1]

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

[^1]: AC adapter offerings depend on the country.

**DESIGN**

**Display**

**Display**[^2]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:

[^2]: IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 68 x 115 mm (2.68 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**[^3]

356.1 x 247.7 x 19.85 mm (14.02 x 9.75 x 0.78 inches)

**Weight**[^4]

[^3]: Dimensions (WxDxH)
[^4]: Weight
[^1]: IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
[^2]: AC adapter offerings depend on the country.
### Models

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium (top), PC-ABS (bottom) models</td>
<td>Starting at 1.77 kg (3.90 lbs)</td>
</tr>
<tr>
<td>Aluminium (top), aluminium (bottom) models</td>
<td>Starting at 1.81 kg (3.99 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
Graphite black

**Case Material**
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), aluminium (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

### CONNECTIVITY

**Network**

**Ethernet**
Gigabit Ethernet, Realtek® RTL8111H-CG, 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 Card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 card
- Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 card
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 Card

**WWAN**
No support

**SIM Card**
No physical SIM card inbox

**NFC**
No support

Notes:

[1] Wi-Fi® 6 full features might be limited by country-level restrictions.

[2], [3] Wi-Fi® 6 full features might be limited by country-level restrictions.

Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.

[4] Wi-Fi® 6E full features might be limited by country-level restrictions.

Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

[5], [6] Wi-Fi® 6E full features might be limited by country-level restrictions.

Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.

**Ports**

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 1 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
• 1x HDMI® 1.4b
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® E16 Gen 1 (AMD)

SECURITY & PRIVACY

Security

Security Chip**
• Firmware TPM 2.0 integrated in SoC
• Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter

MANAGEABILITY

System Management

System Management
Non-DASH

SERVICE

Warranty

Base Warranty**
• 1-year mail-in service
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories

None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E16 Gen 1 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

25% PCC recycled plastic used in the battery
30% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in standard 65W adapter
Low-temperature solder

CERTIFICATIONS

Green Certifications

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- (Optional) TÜV Rheinland® Low Blue Light (Software Solution)

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OVERVIEW

1. USB 2.0
2. Ethernet (RJ-45)
3. Kensington Nano Security Slot
4. USB-C 3.2 Gen 2
5. Thunderbolt 4
6. USB 3.2 Gen 1 (Always On)
7. HDMI
8. Headphone / microphone combo jack (3.5mm)
PERFORMANCE

Processor

Processor Family
13th Generation Intel® U, P or H Series Core™ i3 / i5 / i7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1315U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[1]</td>
</tr>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[2]</td>
</tr>
<tr>
<td>Core™ i5-13420H</td>
<td>8 (4 P-core + 4 E-core)</td>
<td>12</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-13500H</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics[3]</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[4]</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics[5]</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-13700H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics[6]</td>
</tr>
</tbody>
</table>

Notes:
[1], [2], [3], [4], [5], [6] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® GeForce MX550</td>
<td>Discrete</td>
<td>2GB GDDR6 -</td>
<td>-</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>
Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
- HDMI® supports up to 4096x2160@60Hz
- USB-C® supports up to 3840x2160@60Hz
- Thunderbolt™ supports up to 5120x2160@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
- Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200
- Up to 48GB (16GB soldered + 32GB SO-DIMM) DDR4-3200

Memory Slots
One memory soldered to system board, one DDR4 SO-DIMM slot, dual-channel capable

Memory Type
DDR4-3200

Notes:

[1] Maximum memory 48GB is only to test technical readiness of notebook. Available memory to sell would vary.

Storage

Storage Support
Up to two drives, 2x M.2 SSD
- M.2 2242 SSD up to 1TB

Storage Slot
Two M.2 slots
- One M.2 2242 PCIe® 3.0 x4 slot
- One M.2 2242 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] M.2 PCIe® 4.0 x4 SSD in the M.2 PCIe® 3.0 x4 slot is downgraded to PCIe® 3.0 x4 performance.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Synaptic® CX11880 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®

Microphone
Dual-microphone array, Dolby Voice®
**Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

**Battery**

**Battery**

- Integrated Li-Polymer 47Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 2018: up to 10.78 hr @200nits
MobileMark® 25: up to 7.36 hr with 731 performance score @250nits
JEITA 2.0: up to 13.9 hr @150nits
Local video playback: up to 12.6 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 7.5 hr @200nits
MobileMark® 25: up to 6.1 hr with 720 performance score @250nits
JEITA 2.0: up to 12.9 hr @150nits
Local video playback: up to 11.9 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 7.95 hr @200nits
MobileMark® 25: up to 6.16 hr with 781 performance score @250nits
JEITA 2.0: up to 13 hr @150nits
Local video playback: up to 11 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® i3-1315U, 8GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® i5-1340P, 16GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: WQXGA (non-touch), Intel® i7-1355U, 40GB DDR4, NVIDIA® GeForce MX550, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-</td>
<td>16:10</td>
<td>800:1</td>
<td>45%</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low</td>
</tr>
</tbody>
</table>

ThinkPad E16 Gen 1 (Intel) - January 26 2024
ThinkPad E16 Gen 1 (Intel)

<table>
<thead>
<tr>
<th>(1920x1200)</th>
<th>glare</th>
<th>NTSC</th>
<th>Blue Light (Software)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16” WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
</tr>
<tr>
<td>16” WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
</tr>
<tr>
<td>16” WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
</tr>
</tbody>
</table>

**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
- 6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
- TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 68 x 115 mm (2.68 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**
- 356.1 x 247.7 x 19.85 mm (14.02 x 9.75 x 0.78 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium (top), PC-ABS (bottom) models</td>
<td>Starting at 1.77 kg (3.90 lbs)</td>
</tr>
<tr>
<td>Aluminium (top), aluminium (bottom) models</td>
<td>Starting at 1.81 kg (3.99 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
- Graphite black

**Case Material**
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), aluminium (bottom)

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card

---

ThinkPad E16 Gen 1 (Intel) - January 26 2024

5 of 10
Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 card

• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready), M.2 Card

• Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card

• Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 card

• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 Card

WWAN
No support

SIM Card
No physical SIM card inbox

NFC
No support

Notes:
[1] Wi-Fi® 6 full features might be limited by country-level restrictions.
[2] Wi-Fi® 6 full features might be limited by country-level restrictions. Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.
[3] Wi-Fi® 6 full features might be limited by country-level restrictions. Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.
[4] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
[5], [6] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.

Ports

Standard Ports
- 1x USB 2.0
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® E16 Gen 1 (Intel®)

SECURITY & PRIVACY

Security
**Security Chip**
- Firmware TPM 2.0 integrated in SoC
- Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

**MANAGEABILITY**

System Management

System Management
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

**SERVICE**

Warranty
Base Warranty
- 1-year mail-in service
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- No base warranty

**ACCESSORIES**

Bundled Accessories

Bundled Accessories
- Lenovo® 15.6” laptop casual toploader, polyester, black
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E16 Gen 1 (Intel®).

**OPERATING REQUIREMENTS**

Operating Environment
Temperature
Operating: 5°C (41°F) to 35°C (95°F)
Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability
Material
25% PCC recycled plastic used in the battery
30% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in standard 65W adapter
Low-temperature solder

CERTIFICATIONS

Green Certifications
ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 6
ErP Lot 26
FSC certified package
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) Eyesafe® Certified 2.0
(Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
(Optional) TÜV Rheinland® Low Blue Light (Software Solution)

Feature with ** means that only one offering listed under the feature is configured on selected models.

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you.

- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. USB-A (USB 5Gbps)  
2. Ethernet (RJ-45)  
3. Kensington Nano Security Slot  
4. USB-C (USB 5Gbps), with USB PD 3.0 & DP 1.4  
5. USB-C (USB 10Gbps), with USB PD 3.0 & DP 1.4  
6. USB-A (USB 10Gbps), Always On  
7. HDMI  
8. Headphone / microphone combo jack (3.5mm)
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 7335U</td>
<td>4</td>
<td>8</td>
<td>3.0GHz</td>
<td>4.3GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ 660M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 7535HS</td>
<td>6</td>
<td>12</td>
<td>3.3GHz</td>
<td>4.55GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 7535U</td>
<td>6</td>
<td>12</td>
<td>2.9GHz</td>
<td>4.55GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 7735HS</td>
<td>8</td>
<td>16</td>
<td>3.2GHz</td>
<td>4.75GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 7735U</td>
<td>8</td>
<td>16</td>
<td>2.7GHz</td>
<td>4.75GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 660M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 680M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)
- HDMI® supports up to 4K@60Hz
- USB-C® (USB 10Gbps) supports up to 5K@60Hz
- USB-C® (USB 5Gbps) supports up to 4K@60Hz

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory[1]
Up to 64GB DDR5-4800

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-4800

Notes:
[1] Maximum memory is only to test technical readiness of notebook. Available memory to sell would vary.
Storage

Storage Support
Up to two drives, 2x M.2 SSD
• M.2 2242 SSD up to 1TB
• M.2 2280 SSD up to 1TB

Storage Slot
Two M.2 slots
• One M.2 2242 PCIe® 4.0 x4 slot
• One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The system supports dual SSD via two M.2 slots, but Lenovo® only offers one M.2 2242 SSD configuration and M.2 2280 slot for user self-extension.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Senary SN6141 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®, audio by HARMAN

Microphone
Dual-microphone array with smart noise-cancelling

Camera**
• FHD 1080p + IR hybrid, with privacy shutter, fixed focus
• FHD 1080p, with privacy shutter, fixed focus
• HD 720p, with privacy shutter, fixed focus

Battery

Battery**
• Integrated Li-Polymer 47Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
• Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 25: up to 13.2 hr with 589 performance score @250nits
JEITA 3.0 (Video/Idle): up to 13.19 hr / 24.3 hr @200nits
Local video playback: up to 22.02 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 12.38 hr with 610 performance score @250nits
JEITA 3.0 (Video/Idle): up to 11.06 hr / 17.7 hr @200nits
Local video playback: up to 17.75 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 8.93 hr with 634 performance score @250nits
JEITA 3.0 (Video/Idle): up to 7.61 hr / 13.6 hr @200nits
Local video playback: up to 13.49 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 7735HS, 8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (non-touch), AMD Ryzen™ 7 7735U, 8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), AMD Ryzen™ 5 7535U, 8GB+8GB DDR5, Win 11, 47Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

### Power Adapter

**Power Adapter**

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

**Notes:**

1. AC adapter offerings depend on the country.

### DESIGN

#### Display

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
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<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS[4]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

1. IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

#### Input Device

**Keyboard**

6-row, spill-resistant, multimedia Fn keys, numeric keypad

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Mylar® surface multi-touch touchpad, 68 x 115 mm (2.68 x 4.53 inches)
**Mechanical**

**Dimensions (WxDxH)**[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with aluminium (top) and aluminium (bottom)</td>
<td>356.1 x 247.7 x 19.85 mm (14.02 x 9.75 x 0.78 inches)</td>
</tr>
<tr>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>356.1 x 247.7 x 20.20 mm (14.02 x 9.75 x 0.80 inches)</td>
</tr>
</tbody>
</table>

**Weight**[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>Starting at 1.78 kg (3.92 lbs)</td>
</tr>
<tr>
<td>Models with aluminium (top) and aluminium (bottom)</td>
<td>Starting at 1.81 kg (3.99 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**

Black

**Case Material**

- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), aluminium (bottom)

---

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

---

**CONNECTIVITY**

**Network**

**Ethernet**

Gigabit Ethernet, Realtek® RTL8111H-CG, 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**[1][2][3]

- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[2]
- Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[3]

**WWAN**

No support

**SIM Card**

No physical SIM card inbox

**NFC**

No support

---

**Notes:**

[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] [3] Wi-Fi® 6E full features might be limited by country-level restrictions.

6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](https://support.microsoft.com/en-us/windows/bluetooth-support).

**Ports**[1]

**Standard Ports**

- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
• 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with USB PD 3.0 and DisplayPort™ 1.4
• 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 3.0 and DisplayPort™ 1.4
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking
Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® E16 Gen 2 (AMD)

SECURITY & PRIVACY

Security
Security Chip**
• Discrete TPM 2.0, TCG certified, FIPS 140-2 certified
• Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter

MANAGEABILITY

System Management
System Management
Non-DASH

SERVICE

Warranty
Base Warranty**
• 1-year mail-in service
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• No base warranty

ACCESSORIES
Bundled Accessories

None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E16 Gen 2 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature
[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 25% PCC recycled plastic used in the battery
- 30% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in standard 65W adapter
- Plastic free packaging
- Dry-pressed bamboo & sugarcane fiber Cushions
- FSC Certified paper in packaging

CERTIFICATIONS

Green Certifications

Green Certifications[2]
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[3]
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
- MIL-STD-810H military test passed
Other Certifications

- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- (Optional) TÜV Rheinland® Low Blue Light (Software Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.

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## OVERVIEW

<table>
<thead>
<tr>
<th>1. USB-A (USB 5Gbps)</th>
<th>5. Thunderbolt 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Ethernet (RJ-45)</td>
<td>6. USB-A (USB 10Gbps), Always On</td>
</tr>
<tr>
<td>4. USB-C (USB 20Gbps), with USB PD 3.0 &amp; DP 1.4</td>
<td>8. Headphone / microphone combo jack (3.5mm)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Processor
Processor Family
Intel® U or H Series Core™ Ultra 5 / 7 Processor (Series 1)

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz</td>
<td>P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics[1]</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
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<td>14</td>
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<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics[2]</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Notes:
[1], [2] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Ubuntu Linux[3]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

NPU

NPU
Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB
of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

**Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C®, and Thunderbolt™)
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 5K@60Hz
- Thunderbolt™ supports up to 8K@60Hz

**Chipset**

Intel® SoC (System on Chip) platform

**Memory**

Max Memory\(^{[1]}\)
Up to 64GB DDR5-5600

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-5600

Notes:
\(^{[1]}\) Maximum memory is only to test technical readiness of notebook. Available memory to sell would vary.

**Storage**

Storage Support\(^{[2]}\)
Up to two drives, 2x M.2 SSD
- M.2 2242 SSD up to 1TB
- M.2 2280 SSD up to 1TB

Storage Slot
Two M.2 slots
- One M.2 2242 PCIe® 4.0 x4 slot
- One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
\(^{[1]}\) The system supports dual SSD via two M.2 slots, but Lenovo® only offers one M.2 2242 SSD configuration and M.2 2280 slot for user self-extension.

**Removable Storage**

Card Reader
No card reader

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Senary SN6141 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®, audio by HARMAN

Microphone
Dual-microphone array with smart noise-cancelling

Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
ThinkPad E16 Gen 2 (Intel)

- HD 720p, with privacy shutter, fixed focus

**Battery**

- Integrated Li-Polymer 47Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

**Battery Life**

Configuration 1 (max battery life)
- MobileMark® 25: up to 11.58 hr with 615 performance score @250nits
- JEITA-BAT 3.0 (Video/Idle): up to 10.82 hr / 20.22 hr @200nits
- Local video playback: up to 20.09 hr @150nits

Alternate configuration 2
- MobileMark® 25: up to 11.36 hr with 640 performance score @250nits
- JEITA-BAT 3.0 (Video/Idle): up to 10.5 hr / 19.71 hr @200nits
- Local video playback: up to 18.5 hr @150nits

Alternate configuration 3
- MobileMark® 25: up to 9.13 hr with 655 performance score @250nits
- JEITA-BAT 3.0 (Video/Idle): up to 8.5 hr / 16.3 hr @200nits
- Local video playback: up to 15.15 hr @150nits

Notes:

[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® Core™ Ultra 5 125U, 8GB+8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA (touch), Intel® Core™ Ultra 5 125H, 16GB DDR5, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 3: WUXGA (touch), Intel® Core™ Ultra 5 125H, 16GB DDR5, Win 11, 47Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.

Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use.

Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:


**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glide</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glide</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Software)</td>
</tr>
</tbody>
</table>
ThinkPad E16 Gen 2 (Intel)

**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1], [2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys, numeric keypad

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Mylar® surface multi-touch touchpad, 68 x 115 mm (2.68 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with aluminium (top) and aluminium (bottom)</td>
<td>356.1 x 247.7 x 19.85 mm (14.02 x 9.75 x 0.78 inches)</td>
</tr>
<tr>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>356.1 x 247.7 x 20.20 mm (14.02 x 9.75 x 0.80 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>Starting at 1.78 kg (3.92 lbs)</td>
</tr>
<tr>
<td>Models with aluminium (top) and aluminium (bottom)</td>
<td>Starting at 1.81 kg (3.99 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
Black

**Case Material**
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card
Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card

WWAN
No support

SIM Card
No physical SIM card inbox

NFC
No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2], [3], [4] Wi-Fi® 6E full features might be limited by country-level restrictions.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports[1]
Standard Ports
• 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
• 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
• 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), with USB PD 3.0 and DisplayPort™ 1.4
• 1x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking
Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® E16 Gen 2 (Intel®)

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified
Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm
Smart Card Reader
No smart card reader
Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader
BIOS Security
• Supervisor password
• Power-on password
• NVMe* password
Self-healing BIOS

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**
- 1-year mail-in service
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories[1]
- Lenovo® 15.6” laptop casual toploader, polyester
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® E16 Gen 2 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability
Material
25% PCC recycled plastic used in the battery
30% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in standard 65W adapter
Plastic free packaging
Dry-pressed bamboo & sugarcane fiber Cushions
FSC Certified paper in packaging

CERTIFICATIONS

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:
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[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- (Optional) TÜV Rheinland® Low Blue Light (Software Solution)

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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OVERVIEW

1. Nano-SIM card slot (WWAN model) *
2. Thunderbolt 4
3. USB-A (USB 5Gbps)
4. Headphone / microphone combo jack (3.5mm)
5. Pen slot *
6. HDMI
7. USB-A (USB 5Gbps), Always On
8. USB-C (USB 20Gbps), with USB PD 3.0 & DP 1.4
9. Kensington Nano Security Slot
10. Smart card reader *

Notes:
- Items with * are only available on selected models
PERFORMANCE

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Intel® U Series Core™ Ultra 5 / 7 Processor (Series 1)

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<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux[1]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

NPU

NPU

Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™):
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 5K@120Hz
- Thunderbolt™ supports up to 8K@60Hz

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory

- 8GB soldered memory, not upgradable
ThinkPad L13 2-in-1Gen 5 (Intel)

- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

**Memory Slots**
Memory soldered to systemboard, no slots, dual-channel

**Memory Type**
LPDDR5-6400

---

**Notes:**

[1] Installed memory is actually LPDDR5-7500 but run as LPDDR5-6400 due to platform limitation.

---

**Storage**

**Storage Support**
One drive, up to 1TB M.2 2280 SSD

**Storage Slot**
One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

---

**Notes:**

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

---

**Removable Storage**

**Card Reader**
No card reader

---

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™

**Microphone**
Dual-microphone array, far-field, Dolby Voice®

**Camera**

- Front FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- Front FHD 1080p + IR hybrid, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus
- Front HD 720p, with privacy shutter, fixed focus
- Front HD 720p, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus

---

**Battery**

**Battery**
Integrated Li-Polymer 46Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 25: up to 11.03 hr with 564 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 10.3 hr / 22.3 hr @200nits
Local video playback: up to 18.34 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 9.8 hr with 604 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 9.5 hr / 14.66 hr @200nits
Local video playback: up to 14.15 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 9.6 hr with 628 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 8.96 hr / 12.85 hr @200nits
Local video playback: up to 13.03 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (touch), Intel® Core™ Ultra 5 125U, 8GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® Core™ Ultra 5 135U, 16GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), Intel® Core™ Ultra 7 165U, 32GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**[1][2]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>400nits</td>
<td>Anti-glare, anti-smudge</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

**Touchscreen**

OGS (One Glass Solution) multi-touch, supports 10-point touch

Notes:
[1], [2] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Multi-mode**

**Multi-mode**

Laptop, tent, stand, and tablet modes supported by 360° hinge

**Input Device**

**Pen**

Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and
rechargeable
• No pen

Keyboard
6-row, spill-resistant, multimedia Fn keys

Keyboard Backlight
• LED backlight
• Non-backlight

UltraNav™
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

Mechanical

Dimensions (WxDxH)\(^1\)
305 x 218 x 17.06 mm (12.0 x 8.58 x 0.67 inches)

Weight\(^2\)
Starting at 1.32 kg (2.92 lbs)

Case Color\(^*\)
• Black
• Grey

Case Material
Aluminium (top), GFRP (bottom)

Notes:
\(^1\) The system dimensions may vary depending on configurations.
\(^2\) The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet\(^1\)
No onboard Ethernet

WLAN + Bluetooth®\(^2\)
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3\(^3\)

WWAN\(^*\)
• Wireless WAN upgradable to 4G (with antenna ready)
• Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
• No support

SIM Card
No physical SIM card inbox

NFC
• No support

Notes:
\(^1\) Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
\(^2\) Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
\(^3\) Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
Ports

Standard Ports
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), one Always On
- 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), with USB PD 3.0 and DisplayPort™ 1.4
- 1x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® L13 2-in-1 Gen 5 (Intel®)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE
Warranty

Base Warranty**
- 1-year courier or carry-in service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories**[1]
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to USB-A Adapter
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L13 2-in-1 Gen 5 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without packaging: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 30% PCC recycled plastic used in top cover frame material
- 30% PCC recycled plastic used in bottom cover material
- 50% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery pack
- 85% PCC recycled plastic used in key caps (backlight)
- 70% PCC recycled plastic used in key caps (non-backlight)
- 90% PCC recycled plastic used in standard adapter
- 90% PCC recycled plastic used in slim adapter
- 90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]
• ENERGY STAR® 8.0
• EPEAT™ Gold Registered[3]
• ErP Lot 6
• ErP Lot 26
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
  • (Optional) Eyesafe® Certified 2.0
  • (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Nano-SIM card slot *
2. USB-C 3.2 Gen 2
3. USB 3.2 Gen 1
4. Headphone / microphone combo jack (3.5mm)
5. HDMI
6. USB 3.2 Gen 1 (Always On)
7. USB-C 3.2 Gen 2
8. Kensington Nano Security Slot
9. Smart card reader *

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 5425U</td>
<td>4</td>
<td>8</td>
<td>2.7GHz</td>
<td>4.1GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 5625U[1]</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 5675U</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 5825U[2]</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 5875U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] AMD Ryzen™ 5 5625U is for special bid in EMEA.
[2] AMD Ryzen™ 7 5825U is for special bid in EMEA.

Operating System

Operating System

Windows® 11 Pro
Windows® 11 Home
Windows® 11 Home Single Language
Windows® 11 DG Windows® 10 Pro 64[1]
Ubuntu Linux[2]
No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®). More external displays can be supported via docking or daisy chain.
• HDMI® supports up to 3840x2160@60Hz
• USB-C® supports up to 5120x2880@60Hz

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
• 8GB soldered memory, not upgradable
• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots, dual-channel
Memory Type
DDR4-3200

Storage
Storage Support
One drive, up to 1TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 3.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The SSD with PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0x4 due to AMD platform limitations.

Removable Storage
Optical
None
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec
Speakers
Stereo speakers, 2W x2, Dolby Audio™
Microphone
Dual-microphone array, far-field, Dolby Voice®
Camera
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

Battery
Battery
Integrated Li-Polymer 46Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life
[1] Configuration 1 (max battery life)
MobileMark® 2018: up to 9.8 hr with 626 performance score @200nits
JEITA 2.0: up to 11.3 hr @150nits
Local video playback: up to 11.2 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 9.6 hr with 612 performance score @200nits
JEITA 2.0: up to 11.8 hr @150nits
Local video playback: up to 11.6 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 9.3 hr with 589 performance score @200nits
JEITA 2.0: up to 12.0 hr @150nits
Local video playback: up to 12.1 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (touch), AMD Ryzen™ 7 PRO 5875U, 16GB DDR4, Win 11, 46Wh battery, best
Alternate configuration 2: WUXGA (non-touch), AMD Ryzen™ 5 5625U, 16GB DDR4, Win 11, 46Wh battery, best power efficiency power mode

Alternate configuration 3: WUXGA (non-touch), AMD Ryzen™ 3 5425U, 8GB DDR4, Win 11, 46Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:

[2], [3] 45W USB-C® AC adapter is NOT available in EMEA.
[4], [5] 65W USB-C® slim AC adapter is NOT available in EMEA.
[6] No power adapter is for special bid only.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**

- LED backlight
ThinkPad L13 Gen 3 (AMD)

- Non-backlight

UltraNav™

TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

Dimensions (WxDxH)[1]

305 x 218 x 17.3 mm (12.0 x 8.58 x 0.68 inches)

**Weight**[2]

Starting at 1.25 kg (2.76 lbs)

**Case Color**

- Storm grey
- Thunder black

**Case Material**

Aluminium (top), GFRP (bottom)

---

Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**[1]

No onboard Ethernet

**WLAN + Bluetooth®**[2][3][4][5]

- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1[4]
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1[5]

**WWAN**

- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- No support

**SIM Card**

- Gemalto eSIM card (physical)
- No physical SIM card inbox

**NFC**

- Near Field Communication
- No support

---

Notes:

[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[3] Qualcomm® NFA-725A is for special bid only in EMEA.

[4], [5] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

[6] CAT16 is NOT available in EMEA.

**Ports**[1]

**Standard Ports**

- 1x USB 3.2 Gen 1
1x USB 3.2 Gen 1 (Always On)
2x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
1x HDMI® 2.1, up to 4K/60Hz
1x Headphone / microphone combo jack (3.5mm)

Optional Ports***
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® L13 Gen 3 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe* password
• Self-healing BIOS

Other Security
• Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter
• Glance by Mirametrix®

MANAGEABILITY

System Management

System Management
• DASH
• Non-DASH

SERVICE
Warranty

Base Warranty**

• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to HDMI® Adapter
• Lenovo® USB-C® to USB-A Adapter
• Lenovo® USB-C® to USB-C® Cable 2m
• Lenovo® USB-C® to VGA Adapter
• None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L13 Gen 3 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

50% PCC recycled plastic used in speaker enclosure
30% PCC recycled plastic used in the battery
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]

• ENERGY STAR® 8.0
• EPEAT™ Gold Registered[3]
• ErP Lot 3
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

1. Nano-SIM card slot *
2. Thunderbolt 4
3. USB 3.2 Gen 1
4. Headphone / microphone combo jack (3.5mm)
5. HDMI
6. USB 3.2 Gen 1 (Always On)
7. USB-C 3.2 Gen 2
8. Kensington Nano Security Slot
9. Smart card reader *

### Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
12th Generation Intel® Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] i3-1215U is NOT available in EMEA.
[2] i5-1235U is NOT available in EMEA.
[3] i7-1255U is NOT available in EMEA.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x3200@60Hz
- Thunderbolt™ supports up to 5120x3200@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform
Memory
Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots, dual-channel

Memory Type
DDR4-3200

Storage
Storage Support
One drive, up to 1TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 4.0 x4 slot

Storage Type
<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Optical
None

Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

Battery
Battery
Integrated Li-Polymer 46Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life
Configuration 1 (max battery life)
MobileMark® 2018: up to 8.9 hr with 629 performance score @200nits
JEITA 2.0: up to 14.3 hr @150nits
Local video playback: up to 11.9 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 8.7 hr with 622 performance score @200nits
JEITA 2.0: up to 13.7 hr @150nits
Local video playback: up to 11.2 hr @150nits
Alternate configuration 3
MobileMark® 2018: up to 8.2 hr with 704 performance score @200nits
JEITA 2.0: up to 13.0 hr @150nits
Local video playback: up to 11.0 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® i3-1215U, 8GB DDR4, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (non-touch), Intel® i5-1245U, 16GB DDR4, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (non-touch), Intel® i7-1265U, 32GB DDR4, Win 11, 46Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1][2]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[3]
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[4]
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[5]
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[6]
- No power adapter[7]

Notes:
[2] No power adapter is for special bid only
[3] 45W USB-C® AC adapter and 65W USB-C® slim AC adapter are NOT available in EMEA.
[4] 45W USB-C® AC adapter is NOT available in EMEA.
[5] 65W USB-C® slim AC adapter is NOT available in EMEA.
[6] No power adapter is for special bid only.

DESIGN

Display

Display**[3]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch
Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
• LED backlight
• Non-backlight

UltraNav™
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

Mechanical

Dimensions (WxDxH)
305 x 218 x 17.3 mm (12.0 x 8.58 x 0.68 inches)

Weight
Starting at 1.26 kg (2.78 lbs)

Case Color
• Storm grey
• Thunder black

Case Material
Aluminium (top), GFRP (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] Storm grey case is NOT available in EMEA.

CONNECTIVITY

Network

Ethernet
No onboard Ethernet

WLAN + Bluetooth®
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1

WWAN
• Wireless WAN upgradable to 4G (with antenna ready)
• Quectel EM05-G, 4G LTE CAT4, M.2 card
• Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
• No support

SIM Card
• Gemalto eSIM card (physical)
• No physical SIM card inbox

NFC
• Near Field Communication
• No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
Wi-Fi® 6 full features might be limited by country-level restrictions.

Wi-Fi® 6E full features might be limited by country-level restrictions.

Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Fibocom L860-GL CAT16 is special bid only in EMEA.

**Ports**

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® L13 Gen 3 (Intel*)](https://www.lenovo.com/en-us/commercial/thinkpad/l13-gen-3/docking)

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**
Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

**Other Security**
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter
MANAGEABILITY

System Management

Intel® vPro® Enterprise

Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**

1-year courier or carry-in service
1-year limited onsite service
3-year (1-yr battery) courier or carry-in service
3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Lenovo® HDMI® to VGA Monitor Adapter
Lenovo® USB-C® to DisplayPort™ Adapter
Lenovo® USB-C® to Ethernet Adapter (1Gbps)
Lenovo® USB-C® to HDMI® Adapter
Lenovo® USB-C® to USB-A Adapter
Lenovo® USB-C® to USB-C® Cable 2m
Lenovo® USB-C® to VGA Adapter
None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L13 Gen 3 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

Operating: 5°C (41°F) to 35°C (95°F)
Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL
Sustainability

Material
50% PCC recycled plastic used in speaker enclosure
30% PCC recycled plastic used in the battery
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[3]
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th>No.</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nano-SIM card slot *</td>
</tr>
<tr>
<td>2</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>3</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>4</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5</td>
<td>HDMI</td>
</tr>
<tr>
<td>6</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>7</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>8</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>9</td>
<td>Smart card reader *</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 7330U</td>
<td>4</td>
<td>8</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 7530U</td>
<td>6</td>
<td>12</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7730U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[^1]
- Ubuntu Linux[^2]
- No preload operating system

Notes:
[^1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[^2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®). More external displays can be supported via docking or daisy chain.
- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x2880@60Hz

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots, dual-channel

Memory Type
DDR4-3200

Storage

Storage Support[^3]
One drive, up to 1TB M.2 2242 SSD
**Storage Slot**

One M.2 2242 PCIe® 3.0 x4 slot

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

[2] The SSD with PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0 x4 due to AMD platform limitations.

**Removable Storage**

No card reader

**Multi-Media**

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**

Stereo speakers, 2W x2, Dolby Audio™ Premium

**Microphone**

Dual-microphone array, far-field, Dolby Voice®

**Camera**

- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

**Battery**

Integrated Li-Polymer 46Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)

MobileMark® 25: up to 10.65 hr with 574 performance score @250nits
JEITA 2.0: up to 15.16 hr @150nits
Local video playback: up to 13.65 hr @150nits

Alternate configuration 2

MobileMark® 25: up to 9.12 hr with 546 performance score @250nits
JEITA 2.0: up to 12.59 hr @150nits
Local video playback: up to 11.79 hr @150nits

Alternate configuration 3

MobileMark® 25: up to 9.06 hr with 503 performance score @250nits
JEITA 2.0: up to 13.14 hr @150nits
Local video playback: up to 12.13 hr @150nits

Notes:

[1] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 PRO 7730U, 16GB DDR4, Win 11, 46Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA (non-touch), AMD Ryzen™ 5 7530U PRO, 16GB DDR4, Win 11, 46Wh battery, best power efficiency power mode

Alternate configuration 3: WUXGA (touch), AMD Ryzen™ 3 7330U, 8GB DDR4, Win 11, 46Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.

Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality,
power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**[^1][^2]

- 45W USB-C (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter[^2]

**Notes:**

[^1]: AC adapter offerings depend on the country.
[^2]: No power adapter is for special bid only.

**DESIGN**

**Display**

**Display**[^1][^2][^3]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Low power, TÜV Low Blue Light</td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

[^1]: IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**[^3]

305 x 218 x 17.23 mm (12.0 x 8.58 x 0.68 inches)

**Weight**[^2]

Starting at 1.26 kg (2.78 lbs)
**Case Color**
- Storm grey
- Thunder black

**Case Material**
Aluminium (top), GFRP (bottom)

Notes:
1. The system dimensions may vary depending on configurations.
2. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
No onboard Ethernet

**WLAN + Bluetooth®**
AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**
No physical SIM card inbox

**NFC**
- Near Field Communication
- No support

Notes:
1. Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
2. Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

**Ports**

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports**
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
   - USB 2.0: 480 Mbit/s;
   - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s; 
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s; 
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s; 
Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Various docking solutions supported via USB-C®. 
For more compatible docking solutions, please visit [Docking for ThinkPad® L13 Gen 4 (AMD)](#)

---

**SECURITY & PRIVACY**

**Security**

**Security Chip**

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**

- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**

- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**

- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

**Other Security**

- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

---

**MANAGEABILITY**

**System Management**

**System Management**

- DASH
- Non-DASH

---

**SERVICE**

**Warranty**

**Base Warranty**

- 1-year courier or carry-in service
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service

---

**ACCESSORIES**

**Bundled Accessories**

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
Lenovo® USB-C® to Ethernet Adapter (1Gbps)
Lenovo® USB-C® to HDMI® Adapter
Lenovo® USB-C® to USB-A Adapter
Lenovo® USB-C® to USB-C® Cable 2m
Lenovo® USB-C® to VGA Adapter
None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L13 Gen 4 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

- 30% PCC recycled plastic used in top cover frame material
- 50% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery pack
- 90% PCC recycled plastic used in standard adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Nano-SIM card slot *
2. Thunderbolt 4
3. USB 3.2 Gen 1
4. Headphone / microphone combo jack (3.5mm)
5. HDMI
6. USB 3.2 Gen 1 (Always On)
7. USB-C 3.2 Gen 2
8. Kensington Nano Security Slot
9. Smart card reader *

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation Intel® U Series Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1315U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64\(^1\)
- Ubuntu Linux\(^2\)
- No preload operating system

Notes:
\(^1\) Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
\(^2\) Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
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<td>Intel® UHD Graphics</td>
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<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x3200@60Hz
- Thunderbolt™ supports up to 5120x3200@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable
**Memory Slots**
Memory soldered to systemboard, no slots, dual-channel

**Memory Type**
LPDDR5-4800

Notes:
[1] Installed memory is actually LPDDR5-6400 but run as LPDDR5-4800 due to platform limitation.

**Storage**
One drive, up to 1TB M.2 2242 SSD

**Storage Slot**
One M.2 2242 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™ Premium

**Microphone**
Dual-microphone array, far-field, Dolby Voice®

**Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

**Battery**

**Battery**
Integrated Li-Polymer 46Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

- **Configuration 1 (max battery life)**
  - MobileMark® 25: up to 10.61 hr with 621 performance score @250nits
  - JEITA 2.0: up to 20.03 hr @150nits
  - Local video playback: up to 16.71 hr @150nits

- **Alternate configuration 2**
  - MobileMark® 25: up to 10.16 hr with 705 performance score @250nits
  - JEITA 2.0: up to 16.21 hr @150nits
  - Local video playback: up to 14.9 hr @150nits

- **Alternate configuration 3**
  - MobileMark® 25: up to 9.6 hr with 709 performance score @250nits
  - JEITA 2.0: up to 14.21 hr @150nits
  - Local video playback: up to 12.9 hr @150nits
Notes:

1. Configuration 1 (max battery life): WUXGA (non-touch), Intel® i3-1315U, 8GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode
2. Alternate configuration 2: WUXGA (touch), Intel® i5-1345U, 16GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode
3. Alternate configuration 3: WUXGA (touch), Intel® i7-1365U, 32GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

<table>
<thead>
<tr>
<th>Power Adapter* [1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz</td>
</tr>
<tr>
<td>• 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz</td>
</tr>
<tr>
<td>• 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz</td>
</tr>
<tr>
<td>• 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz</td>
</tr>
<tr>
<td>• 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz</td>
</tr>
<tr>
<td>• 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz</td>
</tr>
<tr>
<td>• No power adapter [2]</td>
</tr>
</tbody>
</table>

Notes:

1. AC adapter offerings depend on the country.
2. No power adapter is for special bid only.

DESIGN

Display

<table>
<thead>
<tr>
<th>Display* [1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
</tr>
<tr>
<td>13.3&quot; WUXGA (1920x1200)</td>
</tr>
<tr>
<td>13.3&quot; WUXGA (1920x1200)</td>
</tr>
<tr>
<td>13.3&quot; WUXGA (1920x1200)</td>
</tr>
<tr>
<td>13.3&quot; WUXGA (1920x1200)</td>
</tr>
</tbody>
</table>

Touchscreen

• On-cell multi-touch, supports 10-point touch
• Non-touch

Notes:

1. IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
LED backlight
• Non-backlight

UltraNav™
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

Mechanical
Dimensions (WxDxH)\(^1\)
305 x 218 x 17.23 mm (12.0 x 8.58 x 0.68 inches)

Weight\(^2\)
Starting at 1.26 kg (2.78 lbs)

Case Color**
• Storm grey
• Thunder black

Case Material
Aluminium (top), GFRP (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet\(^1\)
No onboard Ethernet

WLAN + Bluetooth®**
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2\(^2\)
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3\(^3\)

WWAN**
• Wireless WAN upgradable to 4G (with antenna ready)
• Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
• Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
• No support

SIM Card
No physical SIM card inbox

NFC
• Near Field Communication
• No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Wi-Fi® 6 full features might be limited by country-level restrictions. Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.
[3] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports\(^1\)
Standard Ports
• 1x USB 3.2 Gen 1
1x USB 3.2 Gen 1 (Always On)  
1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)  
1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)  
1x HDMI® 2.1, up to 4K/60Hz  
1x Headphone / microphone combo jack (3.5mm)

Optional Ports  
1x Smart card reader  
1x Nano-SIM card slot (WWAN support models)

Notes:  
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.  
USB 2.0: 480 Mbit/s;  
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;  
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;  
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;  
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;  
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.  
For more compatible docking solutions, please visit [Docking for ThinkPad® L13 Gen 4 (Intel®)]

SECURITY & PRIVACY

Security

Security Chip  
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified  
Physical Locks  
Kensington® Nano Security Slot™, 2.5 x 6 mm  
Smart Card Reader  
• Smart card reader, supports ISO 7816 and EMV  
• No smart card reader  
Fingerprint Reader  
• Touch style fingerprint reader integrated in power button, match-on-chip  
• No fingerprint reader  
BIOS Security  
• Supervisor password  
• Power-on password  
• NVMe® password  
• Self-healing BIOS  
Other Security  
• (Optional) IR camera for Windows® Hello (facial recognition)  
• Camera privacy shutter

MANAGEABILITY

System Management

System Management  
• Intel® vPro® Enterprise[1]  
• Non-vPro®

Notes:  
[1] Intel® vPro® offers a superset of DASH's defined capabilities.
SERVICE

Warranty

Base Warranty**

• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories**[1]

• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to HDMI® Adapter
• Lenovo® USB-C® to USB-A Adapter
• Lenovo® USB-C® to USB-C® Cable 2m
• Lenovo® USB-C® to VGA Adapter
• None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L13 Gen 4 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

30% PCC recycled plastic used in top cover frame material
50% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery pack
90% PCC recycled plastic used in standard adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS
Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 6
ErP Lot 26
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Nano-SIM card slot (WWAN model) *  
2. Thunderbolt 4  
3. USB-A (USB 5Gbps)  
4. Headphone / microphone combo jack (3.5mm)  
5. HDMI  
6. USB-A (USB 5Gbps), Always On  
7. USB-C (USB 20Gbps), with USB PD 3.0 & DP 1.4  
8. Kensington Nano Security Slot  
9. Smart card reader *

Notes:  
• Items with * are only available on selected models
PERFORMANCE

Processor
Processor Family
Intel® U Series Core™ Ultra 5 / 7 Processor (Series 1)

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core™ Ultra 5 125U</strong></td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td><strong>Core™ Ultra 5 135U</strong></td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td><strong>Core™ Ultra 7 155U</strong></td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td><strong>Core™ Ultra 7 165U</strong></td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

NPU

NPU
Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 5K@120Hz
- Thunderbolt™ supports up to 8K@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
8GB soldered memory, not upgradable
16GB soldered memory, not upgradable
32GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots, dual-channel

Memory Type
LPDDR5-6400

Notes:
[1] Installed memory is actually LPDDR5-7500 but run as LPDDR5-6400 due to platform limitation.

Storage

Storage Support
One drive, up to 1TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type
<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

Battery

Battery
Integrated Li-Polymer 46Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life

Configuration 1 (max battery life)
MobileMark® 25: up to 11.3 hr with 576 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 10.97 hr / 27.34 hr @200nits
Local video playback: up to 20.57 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 9.93 hr with 656 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 9.95 hr / 18.7 hr @200nits
Local video playback: up to 15.92 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 9.86 hr with 619 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 9.31 hr / 14.42 hr @200nits
Local video playback: up to 14.42 hr @150nits
Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® Core™ Ultra 5 125U, 8GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® Core™ Ultra 5 135U, 16GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), Intel® Core™ Ultra 7 165U, 32GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

DESIGN

Display

Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[3]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[4]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1], [2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
- 6-row, spill-resistant, multimedia Fn keys

Keyboard Backlight

ThinkPad L13 Gen 5 (Intel) - June 24 2024 4 of 9
ThinkPad L13 Gen 5 (Intel)

- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

### Mechanical

**Dimensions (WxDxH)**
305 x 218 x 17.23 mm (12.0 x 8.58 x 0.68 inches)

**Weight**
Starting at 1.23 kg (2.71 lbs)

**Case Color**
- Black
- Grey

**Case Material**
Aluminium (top), GFRP (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

### CONNECTIVITY

**Network**

**Ethernet**
No onboard Ethernet

**WLAN + Bluetooth®**
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**
No physical SIM card inbox

**NFC**
- Near Field Communication
- No support

Notes:

[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

**Ports**

**Standard Ports**
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), one Always On
- 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), with USB PD 3.0 and DisplayPort™ 1.4
- 1x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)

Optional Ports***
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking
Various docking solutions supported via Thunderbolt™ or USB-C®. For more compatible docking solutions, please visit [Docking for ThinkPad® L13 Gen 5 (Intel*)](#)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter

MANAGEABILITY

System Management

System Management
• Intel® vPro® Enterprise[1]
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**
• 1-year courier or carry-in service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty
ACCESSORIES

Bundled Accessories

- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to USB-A Adapter
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L13 Gen 5 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without packaging: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 30% PCC recycled plastic used in top cover frame material
- 30% PCC recycled plastic used in bottom cover material
- 50% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery pack
- 85% PCC recycled plastic used in key caps (backlight)
- 70% PCC recycled plastic used in key caps (non-backlight)
- 90% PCC recycled plastic used in standard adapter
- 90% PCC recycled plastic used in slim adapter
- 90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-
Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

• (Optional) Eyesafe® Certified 2.0
• (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Nano-SIM card slot *
2. USB-C 3.2 Gen 2
3. USB 3.2 Gen 1
4. Headphone / microphone combo jack (3.5mm)
5. Pen slot *
6. HDMI
7. USB 3.2 Gen 1 (Always On)
8. USB-C 3.2 Gen 2
9. Kensington Nano Security Slot
10. Smart card reader *

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 5425U</td>
<td>4</td>
<td>8</td>
<td>2.7GHz</td>
<td>4.1GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 5625U</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 5675U</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 5825U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 5875U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] AMD Ryzen™ 5 5625U is for special bid in EMEA.
[2] AMD Ryzen™ 7 5825U is for special bid in EMEA.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®). More external displays can be supported via docking or daisy chain.
- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x2880@60Hz

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel
ThinkPad L13 Yoga Gen 3 (AMD)

Memory Type
DDR4-3200

Storage

Storage Support
One drive, up to 1TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 3.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / ITB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The SSD with PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0x4 due to AMD platform limitations.

Removable Storage

Optical
None

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera**
- Front FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- Front FHD 1080p + IR hybrid, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus
- Front FHD 1080p, with privacy shutter, fixed focus
- Front FHD 1080p, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus
- Front HD 720p, with privacy shutter, fixed focus
- Front HD 720p, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus

Battery

Integrated Li-Polymer 46Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life[1]

Configuration 1 (max battery life)
MobileMark® 2018: up to 9.8 hr with 628 performance score @200nits
JEITA 2.0: up to 11.7 hr @150nits
Local video playback: up to 11.5 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 9.7 hr with 623 performance score @200nits
JEITA 2.0: up to 12.1 hr @150nits
Local video playback: up to 12.1 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 9.4 hr with 590 performance score @200nits
JEITA 2.0: up to 12.5 hr @150nits
Local video playback: up to 12.5 hr @150nits
Notes:
[1] Configuration 1 (max battery life): WUXGA (touch), AMD Ryzen™ 7 PRO 5875U, 16GB DDR4, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 5625U, 16GB DDR4, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), AMD Ryzen™ 3 5425U, 8GB DDR4, Win 11, 46Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:
[2], [3] 45W USB-C® AC adapter is NOT available in EMEA.
[4], [5] 65W USB-C® slim AC adapter is NOT available in EMEA.

DESIGN

Display

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
</tbody>
</table>

Touchscreen

OGS (One Glass Solution) multi-touch, supports 10-point touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Multi-mode

Multi-mode

Laptop, tent, stand, and tablet modes supported by 360° hinge

Input Device

Pen

- Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and rechargeable
- No pen

ThinkPad L13 Yoga Gen 3 (AMD) - July 19 2023 4 of 9
Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

Notes:
[1] Customer needs to purchase an external pen separately.

Mechanical
Dimensions (WxDxH)[3]
305 x 218 x 17.1 mm (12.0 x 8.58 x 0.67 inches)

Weight[2]
Starting at 1.31 kg (2.89 lbs)

Case Color**
- Storm grey
- Thunder black

Case Material
Aluminium (top), GFRP (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet[1]
No onboard Ethernet

WLAN + Bluetooth®**[2][3]
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1[4]
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- No support

SIM Card
- Gemalto eSIM card (physical)
- No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

[4] Qualcomm® NFA-725A is for special bid only in EMEA.
[5] CAT16 is NOT available in EMEA.

### Ports

#### Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

#### Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

### Docking

Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® L13 Yoga® Gen 3 (AMD)]

### SECURITY & PRIVACY

#### Security

- **Security Chip**
  - Discrete TPM 2.0, TCG certified, FIPS 140-2 certified
- **Physical Locks**
  - Kensington® Nano Security Slot™, 2.5 x 6 mm
- **Smart Card Reader**
  - Smart card reader, supports ISO 7816 and EMV
  - No smart card reader
- **Fingerprint Reader**
  - Touch style fingerprint reader integrated in power button, match-on-chip
  - No fingerprint reader
- **BIOS Security**
  - Supervisor password
  - Power-on password
  - NVMe* password
  - Self-healing BIOS
- **Other Security**
  - Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
  - (Optional) IR camera for Windows® Hello (facial recognition)
  - Camera privacy shutter
  - Glance by Mirametrix®

### MANAGEABILITY
System Management

SERVICE

Warranty

Base Warranty**

1-year courier or carry-in service
1-year limited onsite service
3-year (1-yr battery) courier or carry-in service
3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

Lenovo® HDMI® to VGA Monitor Adapter
Lenovo® USB-C® to DisplayPort™ Adapter
Lenovo® USB-C® to Ethernet Adapter (1Gbps)
Lenovo® USB-C® to HDMI® Adapter
Lenovo® USB-C® to USB-A Adapter
Lenovo® USB-C® to USB-C® Cable 2m
Lenovo® USB-C® to VGA Adapter
None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L13 Yoga® Gen 3 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
Operator: 5°C (41°F) to 35°C (95°F)
Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
Operator: 8% to 95% at wet-bulb temperature 23°C (73°F)
Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
50% PCC recycled plastic used in speaker enclosure
30% PCC recycled plastic used in the battery
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 3
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

**Notes:**
- Items with * are only available on selected models

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Nano-SIM card slot *</td>
</tr>
<tr>
<td>2.</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>3.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>4.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5.</td>
<td>Pen slot *</td>
</tr>
<tr>
<td>6.</td>
<td>HDMI</td>
</tr>
<tr>
<td>7.</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>8.</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>9.</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>10.</td>
<td>Smart card reader *</td>
</tr>
</tbody>
</table>
PERFORMANCE

Processor

Processor Family
12th Generation Intel® Core™ i3 / i5 / i7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1215U[1]</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1235U[2]</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1255U[3]</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] i3-1215U is NOT available in EMEA.
[2] i5-1235U is NOT available in EMEA.
[3] i7-1255U is NOT available in EMEA.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
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<th>Memory</th>
<th>TGP</th>
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<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
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</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x3200@60Hz
- Thunderbolt™ supports up to 5120x3200@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform
ThinkPad L13 Yoga Gen 3 (Intel)

Memory
Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
DDR4-3200

Storage
Storage Support
One drive, up to 1TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
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<tr>
<td>M.2 2242 SSD</td>
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<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Optical
None

Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera
- Front FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- Front FHD 1080p + IR hybrid, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus
- Front FHD 1080p, with privacy shutter, fixed focus
- Front FHD 1080p, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus
- Front HD 720p, with privacy shutter, fixed focus
- Front HD 720p, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus

Battery
Integrated Li-Polymer 46Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life
Configuration 1 (max battery life)
MobileMark® 2018: up to 8.6 hr with 733 performance score @200nits
JEITA 2.0: up to 13.5 hr @150nits
Local video playback: up to 11.6 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 8.4 hr with 703 performance score @200nits
JEITA 2.0: up to 13.2 hr @150nits  
Local video playback: up to 10.9 hr @150nits

Alternate configuration 3  
MobileMark® 2018: up to 8.0 hr with 760 performance score @200nits  
JEITA 2.0: up to 12.9 hr @150nits  
Local video playback: up to 10.6 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (touch), Intel® i3-1215U, 8GB DDR4, Win 11, 46Wh battery, best power efficiency power mode  
Alternate configuration 2: WUXGA (touch), Intel® i5-1245U, 16GB DDR4, Win 11, 46Wh battery, best power efficiency power mode  
Alternate configuration 3: WUXGA (touch), Intel® i7-1265U, 32GB DDR4, Win 11, 46Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

Power Adapter**(1)**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz**(2)**
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz**(3)**
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz**(4)**
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz**(5)**

Notes:
[2], [3] 45W USB-C® AC adapter is NOT available in EMEA.  
[4], [5] 65W USB-C® slim AC adapter is NOT available in EMEA.

**Design**

**Display**

<table>
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<tr>
<th>Size</th>
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<td>IPS</td>
<td>300nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
</tbody>
</table>

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Multi-mode**

Multi-mode
Laptop, tent, stand, and tablet modes supported by 360° hinge

**Input Device**

**Pen**
- Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and rechargeable
- No pen

**Keyboard**
- 6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
- TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Notes:**
- [1] Customer needs to purchase an external pen separately.

**Mechanical**

**Dimensions (WxDxH)**
- 305 x 218 x 17.1 mm (12.0 x 8.58 x 0.67 inches)

**Weight**
- Starting at 1.32 kg (2.92 lbs)

**Case Color**
- Storm grey
- Thunder black

**Case Material**
- Aluminium (top), GFRP (bottom)

**Notes:**
- [1] The system dimensions may vary depending on configurations.
- [2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
- No onboard Ethernet

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- No support

**SIM Card**
- Gemalto eSIM card (physical)
- No physical SIM card inbox

**NFC**
- Near Field Communication
- No support
Notes:

[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3] Wi-Fi® 6 full features might be limited by country-level restrictions.
[4] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
[5] Fibocom L860-GL CAT16 is special bid only in EMEA.

Ports

Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® L13 Yoga® Gen 3 (Intel®)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- NVMe* password
- Self-healing BIOS

Other Security
Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)  
(Optional) IR camera for Windows® Hello (facial recognition)  
Camera privacy shutter  
Glance by Mirametrix®

MANAGEABILITY

System Management

System Management

Intel® vPro® Enterprise

Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories***[l]

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to HDMI® Adapter
- Lenovo® USB-C® to USB-A Adapter
- Lenovo® USB-C® to USB-C® Cable 2m
- Lenovo® USB-C® to VGA Adapter
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L13 Yoga® Gen 3 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).
ENVIRONMENTAL

Sustainability

Material
50% PCC recycled plastic used in speaker enclosure
30% PCC recycled plastic used in the battery
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[3]
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Nano-SIM card slot *
2. USB-C 3.2 Gen 2
3. USB 3.2 Gen 1
4. Headphone / microphone combo jack (3.5mm)
5. Pen slot *
6. HDMI
7. USB 3.2 Gen 1 (Always On)
8. USB-C 3.2 Gen 2
9. Kensington Nano Security Slot
10. Smart card reader *

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 7330U</td>
<td>4</td>
<td>8</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 7530U</td>
<td>6</td>
<td>12</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7730U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®). More external displays can be supported via docking or daisy chain.
- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x2880@60Hz

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
DDR4-3200

Storage

Storage Support[3]
One drive, up to 1TB M.2 2242 SSD
Storage Slot
One M.2 2242 PCIe® 3.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The SSD with PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0 x4 due to AMD platform limitations.

Removable Storage
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™ Premium

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera**
- Front FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- Front FHD 1080p + IR hybrid, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus
- Front FHD 1080p, with privacy shutter, fixed focus
- Front FHD 1080p, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus
- Front HD 720p, with privacy shutter, fixed focus
- Front HD 720p, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus
- Front HD 720p, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus

Battery

Battery
Integrated Li-Polymer 46Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 25: up to 10.91 hr with 572 performance score @250nits
JEITA 2.0: up to 15.07 hr @150nits
Local video playback: up to 13.57 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 9.65 hr with 544 performance score @250nits
JEITA 2.0: up to 13.05 hr @150nits
Local video playback: up to 12.28 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 9.29 hr with 508 performance score @250nits
JEITA 2.0: up to 13.5 hr @150nits
Local video playback: up to 12.71 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (touch), AMD Ryzen™ 7 PRO 7730U, 16GB DDR4, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 7530U PRO, 16GB DDR4, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), AMD Ryzen™ 3 7330U, 8GB DDR4, Win 11, 46Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p
local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**[1]

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

**DESIGN**

**Display**

**Display**[1]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot; WUXGA</td>
<td>(1920x1200)</td>
<td>Multi-touch</td>
<td>300nits</td>
<td>Anti-reflect, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, TÜV Low Blue Light</td>
</tr>
<tr>
<td>13.3&quot; WUXGA</td>
<td>(1920x1200)</td>
<td>Multi-touch</td>
<td>400nits</td>
<td>Anti-glare, anti-smudge</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td></td>
</tr>
</tbody>
</table>

**Touchscreen**

OGS (One Glass Solution) multi-touch, supports 10-point touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Multi-mode**

**Multi-mode**

Laptop, tent, stand, and tablet modes supported by 360° hinge

**Input Device**

**Pen**

- Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and rechargeable
- No pen[1]

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)
Notes:
[1] Customer needs to purchase an external pen separately.

**Mechanical**

**Dimensions (WxDxH)**

305 x 218 x 17.06 mm (12.0 x 8.58 x 0.67 inches)

**Weight**

Starting at 1.31 kg (2.89 lbs)

**Case Color**

- Storm grey
- Thunder black

**Case Material**

Aluminium (top), GFRP (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**

- No onboard Ethernet

**WLAN + Bluetooth®**

AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

**WWAN**

- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**

No physical SIM card inbox

**NFC**

- Near Field Communication
- No support

Notes:

[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

[2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

**Ports**

**Standard Ports**

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
Optional Ports

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® L13 Yoga® Gen 4 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

MANAGEABILITY

System Management

System Management
- DASH
- Non-DASH

SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year limited onsite service
3-year (1-yr battery) courier or carry-in service
3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories[1]
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to HDMI® Adapter
- Lenovo® USB-C® to USB-A Adapter
- Lenovo® USB-C® to USB-C® Cable 2m
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L13 Yoga® Gen 4 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without packaging: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
30% PCC recycled plastic used in top cover frame material
50% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery pack
90% PCC recycled plastic used in standard adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[3]
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0
Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nano-SIM card slot *</td>
</tr>
<tr>
<td>2</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>3</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>4</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5</td>
<td>Pen slot *</td>
</tr>
<tr>
<td>6</td>
<td>HDMI</td>
</tr>
<tr>
<td>7</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>8</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>9</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>10</td>
<td>Smart card reader *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation Intel® U Series Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1315U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x3200@60Hz
- Thunderbolt™ supports up to 5120x3200@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
ThinkPad L13 Yoga Gen 4 (Intel)

- 32GB soldered memory, not upgradable

**Memory Slots**
Memory soldered to systemboard, no slots, dual-channel

**Memory Type**
LPDDR5-4800

---

Notes:
[1] Installed memory is actually LPDDR5-6400 but run as LPDDR5-4800 due to platform limitation.

**Storage**

**Storage Support**
One drive, up to 1TB M.2 2242 SSD

**Storage Slot**
One M.2 2242 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™ Premium

**Microphone**
Dual-microphone array, far-field, Dolby Voice®

**Camera**
- Front FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- Front FHD 1080p + IR hybrid, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus
- Front FHD 1080p, with privacy shutter, fixed focus
- Front FHD 1080p, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus
- Front HD 720p, with privacy shutter, fixed focus
- Front HD 720p, with privacy shutter, fixed focus; rear 5.0-megapixel, autofocus

**Battery**

**Battery**
Integrated Li-Polymer 46Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 25: up to 10.76 hr with 628 performance score @250nits
JEITA 2.0: up to 20.83 hr @150nits
Local video playback: up to 16.23 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 10.25 hr with 569 performance score @250nits
JEITA 2.0: up to 15.33 hr @150nits
Local video playback: up to 13.3 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 9.35 hr with 726 performance score @250nits
JEITA 2.0: up to 13.28 hr @150nits
Local video playback: up to 11.57 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (touch), Intel® i3-1315U, 8GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® i5-1345U, 16GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), Intel® i7-1365U, 32GB LPDDR5, Win 11, 46Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter
Power Adapter**[1]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, TÜV Low Blue Light</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare, anti-smudge</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td></td>
</tr>
</tbody>
</table>

Touchscreen
OGS (One Glass Solution) multi-touch, supports 10-point touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Multi-mode
Multi-mode
Laptop, tent, stand, and tablet modes supported by 360° hinge

Input Device
Pen
Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and rechargeable

No pen

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
• LED backlight
• Non-backlight

UltraNav™
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

Notes:
[1] Customer needs to purchase an external pen separately.

Mechanical

Dimensions (WxDxH)[1]
305 x 218 x 17.06 mm (12.0 x 8.58 x 0.67 inches)

Weight[2]
Starting at 1.32 kg (2.92 lbs)

Case Color**
• Storm grey
• Thunder black

Case Material
Aluminium (top), GFRP (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet[1]
No onboard Ethernet

WLAN + Bluetooth®**
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2[2]
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[3]

WWAN**
• Wireless WAN upgradable to 4G (with antenna ready)
• Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
• Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
• No support

SIM Card
No physical SIM card inbox

NFC
• Near Field Communication
• No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Wi-Fi® 6 full features might be limited by country-level restrictions. Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.
Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®].

Ports

Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®. For more compatible docking solutions, please visit [Docking for ThinkPad® L13 Yoga® Gen 4 (Intel®)].

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

MANAGEABILITY
System Management

System Management

- Intel® vPro® Enterprise
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to HDMI® Adapter
- Lenovo® USB-C® to USB-A Adapter
- Lenovo® USB-C® to USB-C® Cable 2m
- Lenovo® USB-C® to VGA Adapter
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L13 Yoga® Gen 4 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
30% PCC recycled plastic used in top cover frame material
50% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery pack
90% PCC recycled plastic used in standard adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

**Green Certifications**

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit [epeat.net](http://epeat.net) and [energystar.gov](https://energystar.gov) for more information.

[3] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

Other Certifications

**Mil-Spec Test**

MIL-STD-810H military test passed

**Other Certifications**

(Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Ethernet (RJ-45)
2. USB-C 3.2 Gen 1
3. USB-C 3.2 Gen 2
4. HDMI
5. USB 3.2 Gen 1 (Always On)
6. Headphone / microphone combo jack (3.5mm)
7. Smart card reader *
8. microSD card reader
9. USB 3.2 Gen 1
10. Kensington Nano Security Slot
11. Nano-SIM card slot (WWAN model) *

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor
Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 5425U</td>
<td>4</td>
<td>8</td>
<td>2.7GHz</td>
<td>4.1GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 PRO 5475U</td>
<td>4</td>
<td>8</td>
<td>2.7GHz</td>
<td>4.1GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 5625U</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 5675U</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 5825U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 5875U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] AMD Ryzen™ 3 5425U, Ryzen™ 5 5625U, and Ryzen™ 7 5825U are for special bid in EMEA.
[2] AMD Ryzen™ 3 5425U is for special bid in EMEA.
[3] AMD Ryzen™ 5 5625U is for special bid in EMEA.
[4] AMD Ryzen™ 7 5825U is for special bid in EMEA.

Operating System

<table>
<thead>
<tr>
<th>Operating System**</th>
</tr>
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<tbody>
<tr>
<td>Windows® 11 Pro</td>
</tr>
<tr>
<td>Windows® 11 Home</td>
</tr>
<tr>
<td>Windows® 11 Home Single Language</td>
</tr>
<tr>
<td>Windows® 11 DG Windows® 10 Pro 64[1]</td>
</tr>
<tr>
<td>Ubuntu Linux[2]</td>
</tr>
<tr>
<td>Linux[3]</td>
</tr>
<tr>
<td>No preload operating system</td>
</tr>
</tbody>
</table>

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
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<th>Key Features</th>
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<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)
• HDMI® supports up to 3840x2160@60Hz
• USB-C® supports up to 5120x3200@60Hz

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

<table>
<thead>
<tr>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Memory[1]</td>
</tr>
<tr>
<td>Up to 64GB DDR4-3200</td>
</tr>
<tr>
<td>Memory Slots</td>
</tr>
</tbody>
</table>
Two DDR4 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR4-3200

---

**Notes:**

[1] The max memory is based on the test results with current Lenovo® memory offerings.

---

**Storage**

**Storage Support**

One drive, up to 1TB M.2 2242 SSD

**Storage Slot**

One M.2 2242 PCIe® 3.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>128GB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4[2]</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

---

**Notes:**

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

[2] The SSD with PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0x4 due to AMD platform limitations.

---

**Removable Storage**

**Optical**

None

**Card Reader**

microSD card reader

---

**Multi-Media**

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**

Stereo speakers, 2W x2, Dolby Audio™

**Microphone**

Dual-microphone array, far-field, Dolby Voice®

**Camera**

- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

---

**Battery**

**Battery**

- Integrated Li-Polymer 42Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 63Wh battery

**Battery Life**

Configuration 1 (max battery life)

MobileMark® 2018: up to 12.6 hr with 717 performance score @200nits
JEITA 2.0: up to 15.4 hr @150nits
Local video playback: up to 13.7 hr @150nits

Alternate configuration 2

MobileMark® 2018: up to 11.1 hr with 633 performance score @200nits
JEITA 2.0: up to 14.3 hr @150nits
Local video playback: up to 12.3 hr @150nits
Alternate configuration 3
MobileMark® 2018: up to 10.1 hr with 577 performance score @200nits
JEITA 2.0: up to 13.3 hr @150nits
Local video playback: up to 12.0 hr @150nits

Notes:
[1] Configuration 1 (max battery life): HD (non-touch), AMD Ryzen™ 7 PRO 5875U, 8GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: FHD (touch), AMD Ryzen™ 5 PRO 5675U, 32GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: FHD (touch), AMD Ryzen™ 3 PRO 5475U, 64GB DDR4, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter
Power Adapter**[1]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[2]
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[3]
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[4]
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[5]
- No power adapter[6]

Notes:
[2], [3] 45W USB-C® AC adapter is NOT available in EMEA.
[4], [5] 65W USB-C® slim AC adapter is NOT available in EMEA.
[6] No power adapter is for special bid only.

DESIGN

Display
Display**[1]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14”</td>
<td>HD (1366x768)</td>
<td>None</td>
<td>TN</td>
<td>220nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>500:1</td>
<td>45% NTSC</td>
<td>45°/45°/15°/35°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS[2]</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS[3]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS[4]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1] Display with HD TN is for special bid in EMEA.
Display with FHD 100% sRGB is for special bid in EMEA.
IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
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</thead>
<tbody>
<tr>
<td>Aluminium (top), PC-CF (bottom) models</td>
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<tr>
<td>Aluminium (top), PC-ABS (bottom) models</td>
<td>325.4 x 217 x 18.93 mm (12.81 x 8.54 x 0.75 inches)</td>
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<td>PC-ABS (top), PC-CF (bottom) models</td>
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<td>PC-ABS (top), PC-ABS (bottom) models</td>
<td>325.4 x 217 x 19.83 mm (12.81 x 8.54 x 0.78 inches)</td>
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**Weight**
Starting at 1.39 kg (3.06 lbs)

**Case Color**
Thunder black

**Case Material**
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), PC-CF (bottom)
- PC-ABS (top), PC-ABS (bottom)
- PC-ABS (top), PC-CF (bottom)

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3], [4] Aluminium top cover is NOT available in EMEA.

**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Realtek® RTL8111EPV (DASH models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Realtek® RTL8111HN (non-DASH models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth**
- Qualcomm® Wi-Fi® 6E QCNFA765, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- No WLAN and Bluetooth®

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- No support

**SIM Card**
- Gemalto eSIM card (physical)
- No physical SIM card inbox
NFC
- Near Field Communication[4]
- No support

Notes:
[1] Qualcomm® QCNFA765 is NOT available in EMEA.
[2], [3] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
[4] NFC is for special bid in EMEA.

Ports

Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 1 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x microSD card reader

Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking
Various docking solutions supported via USB-C®. For more compatible docking solutions, please visit Docking for ThinkPad® L14 Gen 3 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
Supervisor password • Power-on password • NVMe® password • Self-healing BIOS

Other Security
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter
• Glance by Mirametrix®

MANAGEABILITY

System Management

SERVICE

Warranty
Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories
Bundled Accessories***[1]
• Lenovo® HDMI® to DP Monitor Adapter
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to VGA Adapter
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L14 Gen 3 (AMD).

OPERATING REQUIREMENTS

Operating Environment
Temperature[1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL
Sustainability

Material
50% PCC recycled plastic used in speaker enclosure
30% PCC recycled plastic used in the battery
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications[1]

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[2]
- ErP Lot 3
- RoHS compliant
- TCO Certified

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Ethernet (RJ-45)  
2. USB-C 3.2 Gen 1  
3. Thunderbolt 4  
4. HDMI  
5. USB 3.2 Gen 1 (Always On)  
6. Headphone / microphone combo jack (3.5mm)  
7. Smart card reader *  
8. microSD card reader  
9. USB 3.2 Gen 1  
10. Kensington Nano Security Slot  
11. Nano-SIM card slot *

Notes:  
- Items with * are only available on selected models
PERFORMANCE

Processor Family

**Intel® Pentium® or 12th Generation Intel® Core™ i3 / i5 / i7 Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium® Gold 8505</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>8MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1250P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® P series processors are for special bid only in EMEA.
[2], [3], [4], [5], [6], [7], [8] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[^1]
- Windows® 10 IoT Enterprise LTSC 2021[^2]
- Ubuntu Linux[^3]
- Linux[^4]
- No preload operating system

Notes:
[^1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[^3], [^4] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[^5]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>
Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
• HDMI® supports up to 3840x2160@60Hz
• USB-C® supports up to 5120x3200@60Hz
• Thunderbolt™ supports up to 5120x3200@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
Up to 64GB DDR4-3200
Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable
Memory Type
DDR4-3200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
One drive, up to 1TB M.2 2242 SSD
Storage Slot
One M.2 2242 PCIe® 4.0 x4 slot
Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
microSD card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec
Speakers
Stereo speakers, 2W x2, Dolby Audio™
Microphone
Dual-microphone array, far-field, Dolby Voice®
Camera
• FHD 1080p + IR hybrid, with privacy shutter, fixed focus
• FHD 1080p, with privacy shutter, fixed focus
• HD 720p, with privacy shutter, fixed focus
**Battery**

- Integrated Li-Polymer 42Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 63Wh battery

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 2018: up to 12.1 hr with 832 performance score @200nits
JEITA 2.0: up to 18.2 hr @150nits
Local video playback: up to 20.8 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 10.3 hr with 999 performance score @200nits
JEITA 2.0: up to 14.9 hr @150nits
Local video playback: up to 16.1 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 6.7 hr with 994 performance score @200nits
JEITA 2.0: up to 9.7 hr @150nits
Local video playback: up to 10.3 hr @150nits

Notes:

[1] Configuration 1 (max battery life): FHD (non-touch), Intel® i3-1215U, 4GB DDR4, Win 10, 57Wh battery, best power efficiency power mode
Alternate configuration 2: FHD (touch), Intel® i5-1250P, 16GB DDR4, Win 10, 57Wh battery, best power efficiency power mode
Alternate configuration 3: FHD (non-touch), Intel® i7-1260P, 64GB DDR4, Win 10, 42Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:

[2] No power adapter is for special bid only.
45W USB-C® AC adapter and 65W USB-C® slim AC adapter are NOT available in EMEA.
[3], [4] 45W USB-C® AC adapter is NOT available in EMEA.
[5], [6] 65W USB-C® slim AC adapter is NOT available in EMEA.
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**DESIGN**

**Display**

**Data**
ThinkPad L14 Gen 3 (Intel)

Size Resolution Touch Type Brightness Surface Aspect Ratio Contrast Ratio Color Gamut Viewing Angle (L/R/U/D) Key Features
14” HD (1366x768) None TN 220nits Anti-glare 16:9 500:1 45% NTSC 45°/45°/15°/35° -
14” FHD (1920x1080) None IPS[2] 250nits Anti-glare 16:9 800:1 45% NTSC 85°/85°/85°/85° -
14” FHD (1920x1080) Multi-touch IPS[3] 300nits Anti-glare 16:9 1000:1 45% NTSC 85°/85°/85°/85° -
14” FHD (1920x1080) None IPS[4] 400nits Anti-glare 16:9 1500:1 100% sRGB 85°/85°/85°/85° Low power

Touchscreen
• On-cell multi-touch, supports 10-point touch
• Non-touch

Notes:
[1] Display with HD TN is for special bid in EMEA.
Display with FHD 100% sRGB is for special bid in EMEA.
[2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device
Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls
Keyboard Backlight
• LED backlight
• Non-backlight
UltraNav™
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

Mechanical
Dimensions (WxDxH)[5]

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Weight[2]
Starting at 1.39 kg (3.06 lbs)

Case Color
Thunder black

Case Material[6]
• Aluminium (top), PC-ABS (bottom)[3]
• Aluminium (top), PC-CF (bottom)[4]
• PC-ABS (top), PC-ABS (bottom)
• PC-ABS (top), PC-CF (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3], [4] Aluminium top cover is NOT available in EMEA.

CONNECTIVITY
Network

Ethernet

Gigabit Ethernet, 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®

- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1
- Qualcomm® Wi-Fi® 6E QCNA765, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1
- Qualcomm® Wi-Fi® 6E QCNFA765, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- No WLAN and Bluetooth®

WWAN

- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- No support

SIM Card

- Gemalto eSIM card (physical)
- No physical SIM card inbox

NFC

- Near Field Communication
- No support

Notes:

[1] Qualcomm® QCNFA725 and Qualcomm® QCNA765 are NOT available in EMEA.
[2] Wi-Fi® 6 full features might be limited by country-level restrictions.
[3], [4], [5], [6] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.
[7] CAT16 is NOT available in EMEA.
[8] NFC is for special bid in EMEA.

Ports

Standard Ports

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 1 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x microSD card reader

Optional Ports

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2×2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.
Docking

Various docking solutions supported via Thunderbolt™ or USB-C®. For more compatible docking solutions, please visit [Docking for ThinkPad® L14 Gen 3 (Intel®)](#).

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter
- Glance by Mirametrix®
- Tile ready

MANAGEABILITY

System Management

System Management**
- Intel® vPro® Enterprise[^1]
- Intel® vPro® Essentials[^2]
- Non-vPro®

Notes:
[^1], [^2] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories
Lenovo® HDMI® to DP Monitor Adapter
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to VGA Adapter
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L14 Gen 3 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
50% PCC recycled plastic used in speaker enclosure
25-30% PCC recycled plastic used in the battery
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications[2]

Green Certifications[2]
• ENERGY STAR® 8.0
• EPEAT™ Gold Registered[3]
• ErP Lot 3
• RoHS compliant
• TCO Certified

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed
• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>2.</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>3.</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>4.</td>
<td>HDMI</td>
</tr>
<tr>
<td>5.</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>6.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>7.</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>8.</td>
<td>microSD card reader</td>
</tr>
<tr>
<td>9.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>10.</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>11.</td>
<td>Nano-SIM card slot (WWAN model) *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
ThinkPad L14 Gen 4 (AMD)

**PERFORMANCE**

**Processor**

**Processor Family**
AMD Ryzen™ 3 / 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 PRO 7330U</td>
<td>4</td>
<td>8</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 7530U</td>
<td>6</td>
<td>12</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7730U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
</tbody>
</table>

**Operating System**

**Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- Linux
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

**Monitor Support**

**Monitor Support**
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®). More external displays can be supported via docking or daisy chain.
- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x2880@60Hz

**Chipset**

**Chipset**
AMD SoC (System on Chip) platform

**Memory**

**Max Memory**
Up to 64GB DDR4-3200

**Memory Slots**
Two DDR4 SO-DIMM slots, dual-channel capable

**Memory Type**
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**
Storage Support
One drive, up to 2TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 3.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The SSD with PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0 x4 due to AMD platform limitations.

Removable Storage
Card Reader
microSD card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

Battery

Battery**
- Integrated Li-Polymer 46.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 100W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 100W AC adapter
- Integrated Li-Polymer 63Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 100W AC adapter

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 25: up to 14.12 hr with 605 performance score @250nits
JEITA 2.0: up to 20.8 hr @150nits
Local video playback: up to 17.83 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 10.34 hr with 513 performance score @250nits
JEITA 2.0: up to 16.01 hr @150nits
Local video playback: up to 15.78 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 8.42 hr with 507 performance score @250nits
JEITA 2.0: up to 13.03 hr @150nits
Local video playback: up to 12.88 hr @150nits

Notes:
[1] Configuration 1 (max battery life): HD (non-touch), AMD Ryzen™ 7 PRO 7730U, 8GB DDR4, Win 11, 63Wh battery, best power efficiency power mode
Alternate configuration 2: FHD (touch), AMD Ryzen™ 5 PRO 7530U, 16GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: FHD (touch), AMD Ryzen™ 5 PRO 7530U, 16GB DDR4, Win 11, 46.5Wh battery, best power efficiency power mode
All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:
[2] No power adapter is for special bid only.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14”</td>
<td>HD (1366x768)</td>
<td>None</td>
<td>TN</td>
<td>220nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>500:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>45°/45°/15°/35°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1500:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

Dimensions (WxDxH)[3]
### Models Dimensions

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium (top), PC-CF (bottom) models</td>
<td>325.4 x 217 x 18.73 mm (12.81 x 8.54 x 0.74 inches)</td>
</tr>
<tr>
<td>Aluminium (top), PC-ABS (bottom) models</td>
<td>325.4 x 217 x 18.93 mm (12.81 x 8.54 x 0.75 inches)</td>
</tr>
<tr>
<td>PC-ABS (top), PC-CF (bottom) models</td>
<td>325.4 x 217 x 19.63 mm (12.81 x 8.54 x 0.77 inches)</td>
</tr>
<tr>
<td>PC-ABS (top), PC-ABS (bottom) models</td>
<td>325.4 x 217 x 19.83 mm (12.81 x 8.54 x 0.78 inches)</td>
</tr>
</tbody>
</table>

### Weight
Starting at 1.4 kg (3.09 lbs)

### Case Color
Thunder black

### Case Material
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), PC-CF (bottom)
- PC-ABS (top), PC-ABS (bottom)
- PC-ABS (top), PC-CF (bottom)

### Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

### CONNECTIVITY

#### Network

**Ethernet**
Gigabit Ethernet, Realtek® RTL8111EPV, 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
- No WLAN and Bluetooth®

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**
No physical SIM card inbox

**NFC**
- Near Field Communication
- No support

### Notes:
[1], [2] Wi-Fi® 6E full features might be limited by country-level restrictions. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](#).

### Ports

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)
• 1x microSD card reader

Optional Ports***
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
1 The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® L14 Gen 4 (AMD)]

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter

MANAGEABILITY

System Management

System Management
DASH

SERVICE

Warranty

Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories

• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to VGA Adapter
• None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L14 Gen 4 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature

• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

30% PCC recycled plastic used in top cover frame material
30% PCC recycled plastic used in bottom cover material
50% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery pack
90% PCC recycled plastic used in standard adapter
45% PCC recycled plastic used in SIM tray
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

Green Certifications

• ENERGY STAR® 8.0
• EPEAT™ Gold Registered
• ErP Lot 6
• ErP Lot 26
• RoHS compliant
• TCO Certified 9.0
Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

- Feature with ** means that only one offering listed under the feature is configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Ethernet (RJ-45)  
2. USB-C 3.2 Gen 2  
3. Thunderbolt 4  
4. HDMI  
5. USB 3.2 Gen 1 (Always On)  
6. Headphone / microphone combo jack (3.5mm)  
7. Smart card reader *  
8. microSD card reader  
9. USB 3.2 Gen 1  
10. Kensington Nano Security Slot  
11. Nano-SIM card slot *

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® U-series or 13th Generation Intel® U or P Series Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>U300</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>8MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i3-1315U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[1]</td>
</tr>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[2]</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[3]</td>
</tr>
<tr>
<td>Core™ i5-1350P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[4]</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[5]</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics[6]</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[7]</td>
</tr>
<tr>
<td>Core™ i7-1370P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics[8]</td>
</tr>
<tr>
<td>Core™ 3 100U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.7GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1], [2], [3], [4], [5], [6], [7], [8] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>
Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

NVIDIA® GeForce MX550 is NOT available in EMEA.

Monitor Support
Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x3200@60Hz
- Thunderbolt™ supports up to 5120x3200@60Hz

Chipset
Chipset
Intel® SoC (System on Chip) platform

Memory
Max Memory
Up to 64GB DDR4-3200
Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable
Memory Type
DDR4-3200

Storage
Storage Support
One drive, up to 2TB M.2 2242 SSD
Storage Slot
One M.2 2242 PCIe® 4.0 x4 slot
Storage Type
<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Removable Storage
Card Reader
microSD card reader

Multi-Media
Audio Chip
- Non-vPro® models: High Definition (HD) Audio, Realtek® ALC3287 codec
- vPro® models: High Definition (HD) Audio, Senary SN6147 codec
Speakers
Stereo speakers, 2W x2, Dolby Audio™
Dual-microphone array, far-field, Dolby Voice®

**Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

**Battery**

**Battery**
- Integrated Li-Polymer 46.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 100W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 100W AC adapter
- Integrated Li-Polymer 63Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 100W AC adapter

**Battery Life**

**Configuration 1 (max battery life)**
- MobileMark® 25: up to 14.38 hr @250nits
- JEITA 2.0: up to 27.39 hr @150nits
- Local video playback: up to 28.77 hr @150nits

**Alternate configuration 2**
- MobileMark® 25: up to 9.35 hr @250nits
- JEITA 2.0: up to 16.86 hr @150nits
- Local video playback: up to 16.67 hr @150nits

**Alternate configuration 3**
- MobileMark® 25: up to 7.6 hr @250nits
- JEITA 2.0: up to 15.38 hr @150nits
- Local video playback: up to 30.01 hr @150nits

**Notes:**
1. Configuration 1 (max battery life): FHD (non-touch), Intel® i3-1315U, 8GB DDR4, Win 11, 63Wh battery, best power efficiency power mode
2. Alternate configuration 2: FHD (non-touch), Intel® i5-1350P, 16GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
3. Alternate configuration 3: FHD (touch), Intel® i7-1360P, 64GB DDR4, NVIDIA® GeForce MX550, Win 11, 63Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use.

Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

**Notes:**
1. AC adapter offerings depend on the country.
2. No power adapter is for special bid only.
Display

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>HD (1366x768)</td>
<td>None</td>
<td>TN</td>
<td>220nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>500:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>45°/45°/15°/35°</td>
<td>-</td>
</tr>
<tr>
<td>14&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14&quot;</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS(1)</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1500:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power</td>
</tr>
</tbody>
</table>

**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

Mechanical

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium (top), PC-CF (bottom) models</td>
<td>325.4 x 217 x 18.73 mm (12.81 x 8.54 x 0.74 inches)</td>
</tr>
<tr>
<td>Aluminium (top), PC-ABS (bottom) models</td>
<td>325.4 x 217 x 18.93 mm (12.81 x 8.54 x 0.75 inches)</td>
</tr>
<tr>
<td>PC-ABS (top), PC-CF (bottom) models</td>
<td>325.4 x 217 x 19.63 mm (12.81 x 8.54 x 0.77 inches)</td>
</tr>
<tr>
<td>PC-ABS (top), PC-ABS (bottom) models</td>
<td>325.4 x 217 x 19.83 mm (12.81 x 8.54 x 0.78 inches)</td>
</tr>
</tbody>
</table>

**Weight**
Starting at 1.4 kg (3.09 lbs)

**Case Color**
Thunder black

**Case Material**
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), PC-CF (bottom)
- PC-ABS (top), PC-ABS (bottom)
- PC-ABS (top), PC-CF (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY
Network
Ethernet**
• Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
• Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[1]
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card[2]
• No WLAN and Bluetooth®

WWAN**
• Wireless WAN upgradable to 4G (with antenna ready)
• Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
• Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
• No support

SIM Card
No physical SIM card inbox

NFC
• Near Field Communication
• No support

Notes:
[1] Wi-Fi® 6 full features might be limited by country-level restrictions.
Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

[2] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports[1]
Standard Ports
• 1x USB 3.2 Gen 1
• 1x USB 3.2 Gen 1 (Always On)
• 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
• 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)
• 1x microSD card reader

Optional Ports***
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking
Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® L14 Gen 4 (Intel®)
SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

MANAGEABILITY

System Management
System Management**
- Intel® vPro® Enterprise
- Intel® vPro® Essentials
- Non-vPro®

Notes:
[1], [2] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty
Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories
Bundled Accessories***(1)
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L14 Gen 4 (Intel®).
OPERATING REQUIREMENTS

Operating Environment
Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability
Material
- 30% PCC recycled plastic used in top cover frame material
- 50% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery pack
- 90% PCC recycled plastic used in standard adapter
- 45% PCC recycled plastic used in SIM tray
- Low-temperature solder
- 90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Mil-Spec Test
MIL-STD-810H military test passed

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
**OVERVIEW**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>2</td>
<td>USB-C (USB 10Gbps), with USB PD 3.0 &amp; DP 1.4</td>
</tr>
<tr>
<td>3</td>
<td>USB-C (USB4 40Gbps), with USB PD 3.0 &amp; DP 1.4</td>
</tr>
<tr>
<td>4</td>
<td>HDMI</td>
</tr>
<tr>
<td>5</td>
<td>USB-A (USB 5Gbps), Always On</td>
</tr>
<tr>
<td>6</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>7</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>8</td>
<td>USB-A (Hi-Speed USB)</td>
</tr>
<tr>
<td>9</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>10</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>11</td>
<td>Nano-SIM card slot (WWAN model) *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
**PERFORMANCE**

**Processor**

Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 PRO 7335U</td>
<td>4</td>
<td>8</td>
<td>3.0GHz</td>
<td>4.3GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ 660M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 7535U</td>
<td>6</td>
<td>12</td>
<td>2.9GHz</td>
<td>4.55GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7735U</td>
<td>8</td>
<td>16</td>
<td>2.7GHz</td>
<td>4.75GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M Graphics</td>
</tr>
</tbody>
</table>

**Operating System**

Operating System **
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

**Graphics**

Graphics **

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 660M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 680M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

**Monitor Support**

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and USB4*)
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 5K@120Hz
- USB4* supports up to 5K@120Hz

**Chipset**

Chipset
AMD SoC (System on Chip) platform

**Memory**

Max Memory
Up to 64GB DDR5-4800

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type[5]
DDDR5-4800
Notes:

[1] Installed memory is actually DDR5-5600 but may run as DDR5-4800 due to platform limitation.

**Storage**

**Storage Support**
One drive, up to 2TB M.2 2280 SSD

**Storage Slot**
One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™

**Microphone**
Dual-microphone array, far-field, Dolby Voice®

**Camera**
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

**Battery**

**Battery**
- Integrated Li-Polymer 46.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 25: up to 13.55 hr with 640 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 10.46 hr / 19.56 hr @200nits
Local video playback: up to 17.6 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 10.48 hr with 685 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 7.22 hr / 13.3 hr @200nits
Local video playback: up to 12.0 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 8.83 hr with 626 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 6.66 hr / 12.67 hr @200nits
Local video playback: up to 11.16 hr @150nits

Notes:

[1] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 PRO 7735U, 8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (non-touch), AMD Ryzen™ 5 PRO 7535U, 8GB+8GB DDR5, Win 11, 46.5Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), AMD Ryzen™ 3 PRO 7335U, 32GB+32GB DDR5, Win 11, 46.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

Power Adapter**[1]**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

**DESIGN**

**Display**

Display**[1]**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None IPS</td>
<td>400nits Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
<td></td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None IPS</td>
<td>400nits Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>3M™ DBEF5[2]</td>
<td></td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch IPS</td>
<td>400nits Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Eyesafe® Certified 2.0, 3M™ DBEF5[3]</td>
<td></td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
[2], [3] 3M™ DBEF5 (Dual Brightness Enhancement Film) improves the experience with higher brightness and lower energy.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with aluminium (top) and PC-CF (bottom)</td>
<td>313.7 x 226 x 18.66 mm (12.35 x 8.90 x 0.73 inches)</td>
</tr>
<tr>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>313.7 x 226 x 18.76 mm (12.35 x 8.90 x 0.74 inches)</td>
</tr>
<tr>
<td>Models with PC-ABS (top) and PC-ABS (bottom)</td>
<td>313.7 x 226 x 18.92 mm (12.35 x 8.90 x 0.74 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>Starting at 1.38 kg (3.04 lbs)</td>
</tr>
<tr>
<td>Models with aluminium (top) and PC-CF (bottom)</td>
<td>Starting at 1.36 kg (2.99 lbs)</td>
</tr>
<tr>
<td>Models with PC-ABS (top) and PC-ABS (bottom)</td>
<td>Starting at 1.41 kg (3.11 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**

Black

**Case Material**

- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), PC-CF (bottom)
- PC-ABS (top), PC-ABS (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**

Gigabit Ethernet, Realtek® RTL8111EPV (DASH models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**

Qualcomm® Wi-Fi® 6E NFA725, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

**WWAN**

- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**

No physical SIM card inbox

**NFC**

- Near Field Communication
- No support

Notes:

[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] Wi-Fi® 6E full features might be limited by country-level restrictions. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](https://www.microsoft.com).
Ports

Standard Ports
- 1x USB-A (Hi-Speed USB / USB 2.0)
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), one Always On
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 3.0 and DisplayPort™ 1.4
- 1x USB-C® (USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 1.4
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® L14 Gen 5 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

MANAGEABILITY

System Management
System Management
DASH

SERVICE

Warranty
Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 3-year courier or carry-in service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L14 Gen 5 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 50% recycled aluminium on top cover
- 60% PCC recycled on keyboard frame
- 50% PCC recycled on PC/ABS bottom cover
- 30% PCC recycled on PC/CF bottom cover
- 85% PCC recycled plastic used in key caps (backlight)
- 70% PCC recycled plastic used in key caps (non-backlight)
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery pack enclosure
- 90% PCC recycled plastic used in slim 65W adapters
- Low-temperature solder
- FSC Certified Plastic Free Packaging

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]
- ENERGY STAR® 8.0
ThinkPad L14 Gen 5 (AMD)

- EPEAT™ Gold Registered[3]
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
### OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>2</td>
<td>USB-C (USB 20Gbps), with USB PD 3.0 &amp; DP 1.4</td>
</tr>
<tr>
<td>3</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>4</td>
<td>HDMI</td>
</tr>
<tr>
<td>5</td>
<td>USB-A (USB 5Gbps), Always On</td>
</tr>
<tr>
<td>6</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>7</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>8</td>
<td>USB-A (Hi-Speed USB)</td>
</tr>
<tr>
<td>9</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>10</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>11</td>
<td>Nano-SIM card slot (WWAN model) *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
**PERFORMANCE**

**Processor**

**Processor Family**

Intel® U or H Series Core™ Ultra 5 / 7 Processor (Series 1)

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz</td>
<td>P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Notes:

[1], [2] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- Linux
- No preload operating system

Notes:

[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

**NPU**

**NPU**

Intel® AI Boost integrated in Intel® Core™ Ultra processor

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>
Notes:
[1] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

**Monitor Support**

**Monitor Support**
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 5K@120Hz
- Thunderbolt™ supports up to 8K@60Hz

**Chipset**

**Chipset**
Intel® SoC (System on Chip) platform

**Memory**

**Max Memory**[1]
Up to 64GB DDR5-5600

**Memory Slots**
Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**
DDR5-5600

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

**Storage Support**[1]
One drive, up to 2TB M.2 2280 SSD

**Storage Slot**
One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Senary SN6147 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™

**Microphone**
Dual-microphone array, far-field, Dolby Voice®

**Camera**
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
Battery

**Integrated Li-Polymer 46.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter**

**Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter**

Battery Life[1]

Configuration 1 (max battery life)

MobileMark® 25: up to 14.65 hr with 574 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 13.6 hr / 32.39 hr @200nits
Local video playback: up to 25.56 hr @150nits

Alternate configuration 2

MobileMark® 25: up to 14.12 hr with 626 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 13.26 hr / 28.5 hr @200nits
Local video playback: up to 23.78 hr @150nits

Alternate configuration 3

MobileMark® 25: up to 10.86 hr with 626 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 6.9 hr / 17.5 hr @200nits
Local video playback: up to 14.53 hr @150nits

Notes:

[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® Core™ Ultra 5 125U, 8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (non-touch), Intel® Core™ Ultra 5 125H, 8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (non-touch), Intel® Core™ Ultra 5 125H, 8GB+8GB DDR5, Win 11, 46.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

**Power Adapter**[1]

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:


DESIGN

Display

**Size** | **Resolution** | **Touch** | **Type** | **Brightness** | **Surface** | **Aspect Ratio** | **Contrast Ratio** | **Color Gamut** | **Refresh Rate** | **Viewing Angle (L/R/U/D)** | **Key Features**
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---
14" | WUXGA (1920x1200) | None | IPS | 400nits | Anti-glare | 16:10 | 1500:1 | 100% sRGB | 60Hz | 89°/89°/89°/89° | Low power, Eyesafe® Certified
### Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

1. IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
2. 3M™ DBEF5 (Dual Brightness Enhancement Film) improves the experience with higher brightness and lower energy.

### Input Device

#### Keyboard
6-row, spill-resistant, multimedia Fn keys

#### Keyboard Backlight
- LED backlight
- Non-backlight

#### UltraNav™
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Mylar® surface multi-touch touchpad, 60 x 115 mm (2.36 x 4.53 inches)

### Mechanical

#### Dimensions (WxDxH)[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with aluminium (top) and PC-CF (bottom)</td>
<td>313.7 x 226 x 18.66 mm (12.35 x 8.90 x 0.73 inches)</td>
</tr>
<tr>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>313.7 x 226 x 18.76 mm (12.35 x 8.90 x 0.74 inches)</td>
</tr>
<tr>
<td>Models with PC-ABS (top) and PC-ABS (bottom)</td>
<td>313.7 x 226 x 18.92 mm (12.35 x 8.90 x 0.74 inches)</td>
</tr>
</tbody>
</table>

#### Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with PC-ABS (top) and PC-ABS (bottom)</td>
<td>Starting at 1.4 kg (3.09 lbs)</td>
</tr>
<tr>
<td>Models with aluminium (top) and PC-ABS (bottom)</td>
<td>Starting at 1.38 kg (3.04 lbs)</td>
</tr>
<tr>
<td>Models with aluminium (top) and PC-CF (bottom)</td>
<td>Starting at 1.36 kg (2.99 lbs)</td>
</tr>
</tbody>
</table>

#### Case Color
Black

#### Case Material**
- Aluminium (top), PC-ABS (bottom)
- Aluminium (top), PC-CF (bottom)
- PC-ABS (top), PC-ABS (bottom)

**Notes:**

1. The system dimensions may vary depending on configurations.
2. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

### CONNECTIVITY
Network
Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**(1)
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3(2)
- Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)(3)

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
[3] 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports**(1)
Standard Ports
- 1x USB-A (Hi-Speed USB / USB 2.0)
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), one Always On
- 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), with USB PD 3.0 and DisplayPort™ 1.4
- 1x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking
Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® L14 Gen 5 (Intel®)

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter

MANAGEABILITY

System Management
System Management**
• Intel® vPro® Enterprise[1]
• Intel® vPro® Essentials[2]
• Non-vPro®

Notes: [1], [2] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty
Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories
Bundled Accessories***[1]
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to VGA Adapter
• None

Notes: [1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L14 Gen 5 (Intel®).

OPERATING REQUIREMENTS
Operating Environment

Temperature\(^\text{[1]}\)
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without packaging: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
\(^{[1]}\) When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 50% recycled aluminium on top cover
- 60% PCC recycled on keyboard frame
- 50% PCC recycled on PC/ABS bottom cover
- 30% PCC recycled on PC/CF bottom cover
- 85% PCC recycled plastic used in key caps (backlight)
- 70% PCC recycled plastic used in key caps (non-backlight)
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery pack enclosure
- 90% PCC recycled plastic used in slim 65W adapters
- Low-temperature solder
- FSC Certified Plastic Free Packaging

CERTIFICATIONS

Green Certifications\(^\text{[2]}\)

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered\(^\text{[3]}\)
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:
\(^{[1]}\) The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
\(^{[2]}\) EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
\(^{[3]}\) EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
- MIL-STD-810H military test passed

Other Certifications
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
# OVERVIEW

1. Ethernet (RJ-45)
2. USB-C 3.2 Gen 1
3. USB-C 3.2 Gen 2
4. HDMI
5. USB 3.2 Gen 1 (Always On)
6. Headphone / microphone combo jack (3.5mm)
7. Smart card reader *
8. microSD card reader
9. USB 3.2 Gen 1
10. Kensington Nano Security Slot
11. Nano-SIM card slot (WWAN model) *

## Notes:
- Items with * are only available on selected models.
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 PRO 5425U</td>
<td>4</td>
<td>8</td>
<td>2.7GHz</td>
<td>4.1GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 PRO 5475U</td>
<td>4</td>
<td>8</td>
<td>2.7GHz</td>
<td>4.1GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 5625U</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 5675U</td>
<td>6</td>
<td>12</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 5825U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 5875U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] AMD Ryzen™ 3 5425U is for special bid in EMEA.
[2] AMD Ryzen™ 5 5625U is for special bid in EMEA.
[3] AMD Ryzen™ 7 5825U is for special bid in EMEA.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)
- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x3200@60Hz

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory[1]

Up to 64GB DDR4-3200

Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable
Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage
Storage Support
One drive, up to 1TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 3.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>128GB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4[2]</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The SSD with PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0x4 due to AMD platform limitations.

Removable Storage
Optical
None

Card Reader
microSD card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

Battery

Battery
- Integrated Li-Polymer 42Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 63Wh battery

Battery Life
Configuration 1 (max battery life)
MobileMark® 2018: up to 11.1 hr with 721 performance score @200nits
JEITA 2.0: up to 14.7 hr @150nits
Local video playback: up to 13.3 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 10.2 hr with 661 performance score @200nits
JEITA 2.0: up to 13.4 hr @150nits
Local video playback: up to 13.1 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 9.5 hr with 619 performance score @200nits  
JEITA 2.0: up to 12.6 hr @150nits  
Local video playback: up to 12.9 hr @150nits

Notes:
[1] Configuration 1 (max battery life): FHD (touch), AMD Ryzen™ 7 PRO 5875U, 8GB DDR4, Win 11, 57Wh battery, best power efficiency power mode  
Alternate configuration 2: FHD (touch), AMD Ryzen™ 5 PRO 5675U, 32GB DDR4, Win 11, 57Wh battery, best power efficiency power mode  
Alternate configuration 3: FHD (touch), AMD Ryzen™ 3 PRO 5475U, 64GB DDR4, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1][2]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[3]
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[4]
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[5]
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz[6]
- No power adapter[7]

Notes:
[2] No power adapter is for special bid only.  
[3], [4] 45W USB-C® AC adapter is NOT available in EMEA.  
[5], [6] 65W USB-C® slim AC adapter is NOT available in EMEA.  
[7] No power adapter is for special bid only.

DESIGN

Display

Display**[1]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.6”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glares</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>15.6”</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glares</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch  
- Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad
Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

Mechanical
Dimensions (WxDxH)\(^1\)
360.2 x 237 x 19.93 mm (14.18 x 9.33 x 0.78 inches)

Weight\(^2\)
Starting at 1.76 kg (3.87 lbs)

Case Color
Thunder black

Case Material
PC-ABS (top), PC-ABS (bottom)

Notes:
\(^1\) The system dimensions may vary depending on configurations.
\(^2\) The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet*\(^*\)
- Gigabit Ethernet, Realtek® RTL8111EPV (DASH models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Realtek® RTL8111HN (non-DASH models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**\(^{[2],[3]}\)
- Qualcomm® Wi-Fi® 6E QCNFA765, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card\(^{[2]}\)
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card\(^{[3]}\)
- No WLAN and Bluetooth®

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- No support

SIM Card
- Gemalto eSIM card (physical)
- No physical SIM card inbox

NFC
- Near Field Communication\(^{[4]}\)
- No support

Notes:
\(^{[1]}\) Qualcomm® QCNFA765 is NOT available in EMEA.
\(^{[2]},{[3]}\) Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.
Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
\(^{[4]}\) NFC is for special bid in EMEA.

Ports\(^{[1]}\)

Standard Ports
• 1x USB 3.2 Gen 1
• 1x USB 3.2 Gen 1 (Always On)
• 1x USB-C® 3.2 Gen 1 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
• 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)
• 1x microSD card reader

**Optional Ports**

• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Docking

Various docking solutions supported via USB-C®.

For more compatible docking solutions, please visit [Docking for ThinkPad® L15 Gen 3 (AMD)](https://www.lenovo.com)

**SECURITY & PRIVACY**

**Security**

**Security Chip**

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**

• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

**Fingerprint Reader**

• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

**BIOS Security**

• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

**Other Security**

• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter
• Glance by Mirametrix®

**MANAGEABILITY**

**System Management**

**System Management**

• DASH
• Non-DASH
SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit [Accessories for ThinkPad® L15 Gen 3 (AMD)].

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 50% PCC recycled plastic used in speaker enclosure
- 30% PCC recycled plastic used in the battery
- 95% PCC recycled plastic used in standard 65W adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications[2]

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[3]
- ErP Lot 3
Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

1. Ethernet (RJ-45)
2. USB-C 3.2 Gen 1
3. Thunderbolt 4
4. HDMI
5. USB 3.2 Gen 1 (Always On)
6. Headphone / microphone combo jack (3.5mm)
7. Smart card reader *
8. microSD card reader
9. USB 3.2 Gen 1
10. Kensington Nano Security Slot
11. Nano-SIM card slot *

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® Pentium® or 12th Generation Intel® Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium® Gold 8505</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>8MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[2]</td>
</tr>
<tr>
<td>Core™ i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[3]</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[4]</td>
</tr>
<tr>
<td>Core™ i5-1250P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[5]</td>
</tr>
<tr>
<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[6]</td>
</tr>
<tr>
<td>Core™ i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics[7]</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[8]</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® P series processors are for special bid only in EMEA.
[2], [3], [4], [5], [6], [7], [8] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Windows® 10 IoT Enterprise LTSC 2021[2]
- Ubuntu Linux[3]
- Linux[4]
- No preload operating system

Notes:
[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[3], [4] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>
Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support
Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
• HDMI® supports up to 3840x2160@60Hz
• USB-C® supports up to 5120x3200@60Hz
• Thunderbolt™ supports up to 5120x3200@60Hz

Chipset
Chipset
Intel® SoC (System on Chip) platform

Memory
Max Memory[1]
Up to 64GB DDR4-3200
Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable
Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage
Storage Support[1]
One drive, up to 1TB M.2 2242 SSD
Storage Slot
One M.2 2242 PCIe® 4.0 x4 slot
Storage Type
<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Optical
None
Card Reader
microSD card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec
Speakers
Stereo speakers, 2W x2, Dolby Audio™
Microphone
Dual-microphone array, far-field, Dolby Voice®
Camera**
• FHD 1080p + IR hybrid, with privacy shutter, fixed focus
ThinkPad L15 Gen 3 (Intel)

- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

**Battery**

- Integrated Li-Polymer 42Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 63Wh battery

**Battery Life**

Configuration 1 (max battery life)
- MobileMark® 2018: up to 11.1 hr with 825 performance score @200nits
- JEITA 2.0: up to 16.2 hr @150nits
- Local video playback: up to 16.3 hr @150nits

Alternate configuration 2
- MobileMark® 2018: up to 9.6 hr with 1009 performance score @200nits
- JEITA 2.0: up to 12.3 hr @150nits
- Local video playback: up to 12.7 hr @150nits

Alternate configuration 3
- MobileMark® 2018: up to 6.2 hr with 998 performance score @200nits
- JEITA 2.0: up to 9.4 hr @150nits
- Local video playback: up to 9.4 hr @150nits

Notes:

[1] Configuration 1 (max battery life): FHD (touch), Intel® i3-1215U, 4GB DDR4, Win 10, 57Wh battery, best power efficiency power mode

Alternate configuration 2: FHD (non-touch), Intel® i5-1250P, 16GB DDR4, Win 10, 57Wh battery, best power efficiency power mode

Alternate configuration 3: FHD (touch), Intel® i7-1260P, 64GB DDR4, Win 10, 42Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:

[2], [3] 45W USB-C® AC adapter is NOT available in EMEA.
[4], [5] 65W USB-C® slim AC adapter is NOT available in EMEA.
[6] No power adapter is for special bid only.

**DESIGN**

**Display**

- **Display**
**ThinkPad L15 Gen 3 (Intel)**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.6”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>15.6”</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
</tr>
</tbody>
</table>

**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**
360.2 x 237 x 19.93 mm (14.18 x 9.33 x 0.78 inches)

**Weight**
Starting at 1.76 kg (3.87 lbs)

**Case Color**
Thunder black

**Case Material**
PC-ABS (top), PC-ABS (bottom)

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
Gigabit Ethernet, 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1
- Qualcomm® Wi-Fi® 6E QCNFA765, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- No WLAN and Bluetooth®

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
• No support

SIM Card
• Gemalto eSIM card (physical)
• No physical SIM card inbox

NFC
• Near Field Communication\(^{(8)}\)
• No support

Notes:
[1] Qualcomm® QCNFA725 and Qualcomm® QCNFA765 are NOT available in EMEA.
[2] Wi-Fi® 6 full features might be limited by country-level restrictions. Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.
[3], [4], [5], [6] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
[7] CAT16 is NOT available in EMEA.
[8] NFC is for special bid in EMEA.

Ports\(^{(1)}\)

Standard Ports
• 1x USB 3.2 Gen 1
• 1x USB 3.2 Gen 1 (Always On)
• 1x USB-C® 3.2 Gen 1 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
• 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)
• 1x microSD card reader

Optional Ports***
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® L15 Gen 3 (Intel®)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter
• Glance by Mirametrix®
• Tile ready

MANAGEABILITY

System Management

System Management**
• Intel® vPro® Enterprise[1]
• Intel® vPro® Essentials[2]
• Non-vPro®

Notes:
[1], [2] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
• Lenovo® HDMI® to DP Monitor Adapter
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to VGA Adapter
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L15 Gen 3 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability
Material
50% PCC recycled plastic used in speaker enclosure
25-30% PCC recycled plastic used in the battery
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications
ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 3
RoHS compliant
TCO Certified

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Mil-Spec Test
MIL-STD-810H military test passed

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Ethernet (RJ-45)
2. USB-C 3.2 Gen 2
3. USB-C 3.2 Gen 2
4. HDMI
5. USB 3.2 Gen 2 (Always On)
6. Headphone / microphone combo jack (3.5mm)
7. Smart card reader *
8. microSD card reader
9. USB 3.2 Gen 1
10. Kensington Nano Security Slot
11. Nano-SIM card slot (WWAN model) *

Notes:
• Items with * are only available on selected models
**PERFORMANCE**

**Processor**

**Processor Family**
AMD Ryzen™ 3 / 5 / 7 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 PRO 7330U</td>
<td>4</td>
<td>8</td>
<td>2.3GHz</td>
<td>4.3GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 7530U</td>
<td>6</td>
<td>12</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7730U</td>
<td>8</td>
<td>16</td>
<td>2.0GHz</td>
<td>4.5GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ Graphics</td>
</tr>
</tbody>
</table>

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- Linux
- No preload operating system

Notes:

[1], [2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.


**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

**Monitor Support**

**Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®). More external displays can be supported via docking or daisy chain.

- HDMI® supports up to 3840x2160@60Hz
- USB-C® supports up to 5120x2880@60Hz

**Chipset**

**Chipset**

AMD SoC (System on Chip) platform

**Memory**

**Max Memory**

Up to 64GB DDR4-3200

**Memory Slots**

Two DDR4 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR4-3200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**
Storage Support
One drive, up to 2TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 3.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The SSD with PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0 x4 due to AMD platform limitations.

Removable Storage
Card Reader
microSD card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

Battery
Battery
- Integrated Li-Polymer 46.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 100W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 100W AC adapter
- Integrated Li-Polymer 63Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 100W AC adapter

Battery Life
Configuration 1 (max battery life)
MobileMark® 25: up to 12.18 hr with 607 performance score @250nits
JEITA 2.0: up to 18.1 hr @150nits
Local video playback: up to 17.45 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 9.31 hr with 512 performance score @250nits
JEITA 2.0: up to 15.12 hr @150nits
Local video playback: up to 15.32 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 7.52 hr with 509 performance score @250nits
JEITA 2.0: up to 12.33 hr @150nits
Local video playback: up to 12.46 hr @150nits

Notes:
[1] Configuration 1 (max battery life): FHD (non-touch), AMD Ryzen™ 7 PRO 7730U, 8GB DDR4, Win 11, 63Wh battery, best power efficiency power mode
Alternate configuration 2: FHD (touch), AMD Ryzen™ 5 PRO 7530U, 16GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: FHD (touch), AMD Ryzen™ 5 PRO 7530U, 16GB DDR4, Win 11, 46.5Wh battery, best power efficiency power mode
All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

- **Power Adapter**
  - 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
  - 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
  - 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
  - 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
  - 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
  - 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
  - 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
  - No power adapter

**Notes:**
- [1] AC adapter offerings depend on the country.
- [2] No power adapter is for special bid only.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.6&quot;</td>
<td>FHD</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>NTSC 45%</td>
<td>60Hz</td>
<td>85°/85°/85°/85°/85°</td>
</tr>
<tr>
<td>15.6&quot;</td>
<td>FHD</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>NTSC 45%</td>
<td>60Hz</td>
<td>85°/85°/85°/85°/85°</td>
</tr>
</tbody>
</table>

**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**
- [1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
- 6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)[3]**
360.2 x 237 x 19.93 mm (14.18 x 9.33 x 0.78 inches)

**Weight[2]**
Starting at 1.77 kg (3.91 lbs)

**Case Color**
CONNECTIVITY

Network

Ethernet
Gigabit Ethernet, Realtek® RTL8111EPV, 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
- No WLAN and Bluetooth®

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1], [2] Wi-Fi® 6E full features might be limited by country-level restrictions.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x microSD card reader

Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® L15 Gen 4 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter

MANAGEABILITY

System Management

System Management
DASH

SERVICE

Warranty

Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to VGA Adapter
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

ENVIRONMENTAL

Sustainability

Material
- 30% PCC recycled plastic used in top cover frame material
- 30% PCC recycled plastic used in bottom cover material
- 50% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery pack
- 90% PCC recycled plastic used in standard adapter
- 45% PCC recycled plastic used in SIM tray
- Low-temperature solder
- 90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 6
ErP Lot 26
RoHS compliant
TCO Certified 9.0

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed
• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th>1. Ethernet (RJ-45)</th>
<th>7. Smart card reader *</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. USB-C 3.2 Gen 2</td>
<td>8. microSD card reader</td>
</tr>
<tr>
<td>3. Thunderbolt 4</td>
<td>9. USB 3.2 Gen 1</td>
</tr>
<tr>
<td>4. HDMI</td>
<td>10. Kensington Nano Security Slot</td>
</tr>
<tr>
<td>5. USB 3.2 Gen 1 (Always On)</td>
<td>11. Nano-SIM card slot *</td>
</tr>
<tr>
<td>6. Headphone / microphone combo jack (3.5mm)</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® U-series or 13th Generation Intel® U or P Series Core™ i3 / i5 / i7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>U300</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>8MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i3-1315U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1350P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ 3 100U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 900MHz</td>
<td>P-core 4.7GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® Graphics</td>
</tr>
</tbody>
</table>

Notes:

[1], [2], [3], [4], [5], [6], [7] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:

[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>
NVIDIA® GeForce MX550 Discrete 2GB GDDR6 - DirectX® 12

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.
[2] NVIDIA® GeForce MX550 is NOT available in EMEA.

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
• HDMI® supports up to 3840x2160@60Hz
• USB-C® supports up to 5120x3200@60Hz
• Thunderbolt™ supports up to 5120x3200@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
Up to 64GB DDR4-3200

Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
One drive, up to 2TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
microSD card reader

Multi-Media

Audio Chip
• Non-vPro® models: High Definition (HD) Audio, Realtek® ALC3287 codec
• vPro® models: High Definition (HD) Audio, Senary SN6147 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera
**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

**Battery**

**Battery**

- Integrated Li-Polymer 46.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 100W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 100W AC adapter
- Integrated Li-Polymer 63Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 100W AC adapter

**Battery Life**[1]

<table>
<thead>
<tr>
<th>Configuration 1 (max battery life)</th>
<th>MobileMark® 25: up to 11.5 hr @250nits</th>
<th>JEITA 2.0: up to 18.42 hr @150nits</th>
<th>Local video playback: up to 19.5 hr @150nits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate configuration 2</td>
<td>MobileMark® 25: up to 8.93 hr @250nits</td>
<td>JEITA 2.0: up to 14.92 hr @150nits</td>
<td>Local video playback: up to 14.54 hr @150nits</td>
</tr>
<tr>
<td>Alternate configuration 3</td>
<td>MobileMark® 25: up to 7.35 hr @250nits</td>
<td>JEITA 2.0: up to 14.57 hr @150nits</td>
<td>Local video playback: up to 14.25 hr @150nits</td>
</tr>
</tbody>
</table>

**Notes:**

[1] Configuration 1 (max battery life): FHD (touch), Intel® i5-1340P, 8GB DDR4, Win 11, 63Wh battery, best power efficiency power mode
Alternate configuration 2: FHD (non-touch), Intel® i5-1350P, 16GB DDR4, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: FHD (touch), Intel® i7-1360P, 64GB DDR4, NVIDIA® Geforce MX550, Win 11, 63Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter[2]

**Notes:**

[2] No power adapter is for special bid only.

**DESIGN**

**Display**

**Display**
**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**
360.2 x 237 x 19.93 mm (14.18 x 9.33 x 0.78 inches)

**Weight**
Starting at 1.77 kg (3.91 lbs)

**Case Color**
Thunder black

**Case Material**
PC-ABS (top), PC-ABS (bottom)

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
- No WLAN and Bluetooth®

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**
No physical SIM card inbox

**NFC**
- Near Field Communication
- No support

**Notes:**

1. Wi-Fi® 6 full features might be limited by country-level restrictions.
2. Wi-Fi® 6E full features might be limited by country-level restrictions.
   - Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
   - 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
   - Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](#).

**Ports**

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x microSD card reader

**Optional Ports**
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

**Notes:**

1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
   - USB 2.0: 480 Mbit/s;
   - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
   - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
   - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
   - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
   - Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.

For more compatible docking solutions, please visit [Docking for ThinkPad® L15 Gen 4 (Intel®)](#).

**SECURITY & PRIVACY**

**Security**

**Security Chip**
- Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**
- Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader
BIOS Security

- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security

- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

MANAGEABILITY

System Management

System Management**

- Intel® vPro® Enterprise[1]
- Intel® vPro® Essentials[2]
- Non-vPro®

Notes:

[1], [2] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to VGA Adapter
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L15 Gen 4 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)
Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
30% PCC recycled plastic used in top cover frame material
50% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery pack
90% PCC recycled plastic used in standard adapter
45% PCC recycled plastic used in SIM tray
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th>1. Ethernet (RJ-45)</th>
<th>7. Headphone / microphone combo jack (3.5mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. USB-C (USB 10Gbps), with USB PD 3.0 &amp; DP 1.4</td>
<td>8. USB-A (Hi-Speed USB)</td>
</tr>
<tr>
<td>3. USB-C (USB4 40Gbps), with USB PD 3.0 &amp; DP 1.4</td>
<td>9. USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>4. HDMI</td>
<td>10. Kensington Nano Security Slot</td>
</tr>
<tr>
<td>5. USB-A (USB 5Gbps), Always On</td>
<td>11. Nano-SIM card slot (WWAN model) *</td>
</tr>
<tr>
<td>6. Smart card reader *</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor
Processor Family
AMD Ryzen™ 3 / 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 PRO 7335U</td>
<td>4</td>
<td>8</td>
<td>3.0GHz</td>
<td>4.3GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>AMD Radeon™ 660M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 7535U</td>
<td>6</td>
<td>12</td>
<td>2.9GHz</td>
<td>4.55GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7735U</td>
<td>8</td>
<td>16</td>
<td>2.7GHz</td>
<td>4.75GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M Graphics</td>
</tr>
</tbody>
</table>

Operating System

<table>
<thead>
<tr>
<th>Operating System**</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Windows® 11 Pro</td>
</tr>
<tr>
<td>• Windows® 11 Home</td>
</tr>
<tr>
<td>• Windows® 11 DG Windows® 10 Pro 64[^1]</td>
</tr>
<tr>
<td>• Ubuntu Linux[^2]</td>
</tr>
<tr>
<td>• Linux[^3]</td>
</tr>
<tr>
<td>• No preload operating system</td>
</tr>
</tbody>
</table>

Notes:
[^1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[^2],[^3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 660M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 680M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

<table>
<thead>
<tr>
<th>Monitor Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and USB4®)</td>
</tr>
<tr>
<td>• HDMI® supports up to 4K@60Hz</td>
</tr>
<tr>
<td>• USB-C® supports up to 5K@120Hz</td>
</tr>
<tr>
<td>• USB4® supports up to 5K@120Hz</td>
</tr>
</tbody>
</table>

Chipset

<table>
<thead>
<tr>
<th>Chipset</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD SoC (System on Chip) platform</td>
</tr>
</tbody>
</table>

Memory

<table>
<thead>
<tr>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Memory</td>
</tr>
<tr>
<td>Up to 64GB DDR5-4800</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Memory Slots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two DDR5 SO-DIMM slots, dual-channel capable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Memory Type[^5]</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDR5-4800</td>
</tr>
</tbody>
</table>

[^1][^2][^3]: Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.
Notes:
[1] Installed memory is actually DDR5-5600 but may run as DDR5-4800 due to platform limitation.

Storage
Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera

• 5.0MP + IR discrete, with privacy shutter, fixed focus
• HD 720p, with privacy shutter, fixed focus

Battery

Battery

• Integrated Li-Polymer 46.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
• Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life

Configuration 1 (max battery life)
MobileMark® 25: up to 13.02 hr with 653 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 10.38 hr / 18.27 hr @200nits
Local video playback: up to 16.75 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 9.22 hr with 683 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 6.56 hr / 11 hr @200nits
Local video playback: up to 10.17 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 8.07 hr with 631 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 6.09 hr / 10.18 hr @200nits
Local video playback: up to 8.72 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 PRO 7735U, 8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 PRO 7535U, 8GB+8GB DDR5, Win 11, 46.5Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), AMD Ryzen™ 3 PRO 7335U, 32GB+32GB DDR5, Win 11, 46.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.

Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use.

Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

DESIGN

Display

Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>-</td>
</tr>
<tr>
<td>16”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>16”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1]. [2]. [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
6-row, spill-resistant, multimedia Fn keys, numeric keypad

Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Mylar® surface multi-touch touchpad, 67.6 x 115 mm (2.66 x 4.53 inches)

Mechanical
ThinkPad L16 Gen 1 (AMD)

Dimensions (WxDxH)
357.2 x 253.4 x 20.78 mm (14.06 x 9.98 x 0.82 inches)

Weight
Starting at 1.77 kg (3.90 lbs)

Case Color
Black

Case Material
PC-ABS (top), PC-ABS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
Gigabit Ethernet, Realtek® RTL8111EPV (DASH models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®
Qualcomm® Wi-Fi® 6E NFA725, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Standard Ports
- 1x USB-A (Hi-Speed USB / USB 2.0)
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), one Always On
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 3.0 and DisplayPort™ 1.4
- 1x USB-C® (USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 1.4
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

**Docking**

Various docking solutions supported via USB-C®.

For more compatible docking solutions, please visit [Docking for ThinkPad® L16 Gen 1 (AMD)](https://www.lenovo.com/us/en-thinkpad-l16-gen-1-amd)

**SECURITY & PRIVACY**

**Security**

**Security Chip**

Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

**Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**

- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**

- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**

- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

**Other Security**

- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

**MANAGEABILITY**

**System Management**

**System Management**

**DASH**

**SERVICE**

**Warranty**

**Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

**ACCESSORIES**

**Bundled Accessories**

**Bundled Accessories**

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to VGA Adapter
Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L16 Gen 1 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 60% PCC recycled on keyboard frame
- 50% PCC recycled on PC/ABS bottom cover
- 85% PCC recycled plastic used in key caps (backlight)
- 70% PCC recycled plastic used in key caps (non-backlight)
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery pack enclosure
- 90% PCC recycled plastic used in slim 65W adapters
- Low-temperature solder
- FSC certified plastic free packaging

CERTIFICATIONS

Green Certifications

Green Certifications

ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:

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[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
- MIL-STD-810H military test passed

Other Certifications
• (Optional) Eyesafe® Certified 2.0
• (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Ethernet (RJ-45)  
2. USB-C (USB 20Gbps), with USB PD 3.0 & DP 1.4  
3. Thunderbolt 4  
4. HDMI  
5. USB-A (USB 5Gbps), Always On  
6. Smart card reader *  
7. Headphone / microphone combo jack (3.5mm)  
8. USB-A (Hi-Speed USB)  
9. USB-A (USB 5Gbps)  
10. Kensington Nano Security Slot  
11. Nano-SIM card slot (WWAN model) *

Notes:  
* Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® U or H Series Core™ Ultra 5 / 7 Processor (Series 1)

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz</td>
<td>P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Notes:
[1], [2] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[^1]
- Ubuntu Linux[^2]
- Linux[^3]
- No preload operating system

Notes:
[^1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[^2],[^3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

NPU

NPU
Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics[^1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>
Notes:

[1] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
• HDMI® supports up to 4K@60Hz
• USB-C® supports up to 5K@120Hz
• Thunderbolt™ supports up to 8K@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
Up to 64GB DDR5-5600
Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable
Memory Type
DDR5-5600

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
One drive, up to 2TB M.2 2280 SSD
Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type*

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Senary SN6147 codec
Speakers
Stereo speakers, 2W x2, Dolby Audio™
Microphone
Dual-microphone array, far-field, Dolby Voice®
Camera**
• 5.0MP + IR discrete, with privacy shutter, fixed focus
• HD 720p, with privacy shutter, fixed focus
Battery

**Battery**
- Integrated Li-Polymer 46.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

<table>
<thead>
<tr>
<th>Configuration 1 (max battery life)</th>
<th>MobileMark® 25: up to 13.68 hr with 722 performance score @250nits</th>
<th>JEITA-BAT 3.0 (Video/Idle): up to 12.56 hr / 24.65 hr @200nits</th>
<th>Local video playback: up to 25.2 hr @150nits</th>
</tr>
</thead>
</table>

Alternate configuration 2

<table>
<thead>
<tr>
<th>MobileMark® 25: up to 13.3 hr with 791 performance score @250nits</th>
<th>JEITA-BAT 3.0 (Video/Idle): up to 12.39 hr / 27.4 hr @200nits</th>
<th>Local video playback: up to 22.91 hr @150nits</th>
</tr>
</thead>
</table>

Alternate configuration 3

<table>
<thead>
<tr>
<th>MobileMark® 25: up to 9.05 hr with 792 performance score @250nits</th>
<th>JEITA-BAT 3.0 (Video/Idle): up to 6.23 hr / 13 hr @200nits</th>
<th>Local video playback: up to 12.81 hr @150nits</th>
</tr>
</thead>
</table>

**Notes:**

[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® Core™ Ultra 5 125U, 8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (non-touch), Intel® Core™ Ultra 5 125H, 8GB DDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (non-touch), Intel® Core™ Ultra 5 125H, 8GB+8GB DDR5, Win 11, 46.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

**Power Adapter**
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

**Notes:**


**DESIGN**

Display

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Eyesafe Certified</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Eyesafe Certified</td>
</tr>
</tbody>
</table>
## Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

---

### Notes:

1. [1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

## Input Device

### Keyboard
- 6-row, spill-resistant, multimedia Fn keys, numeric keypad

### Keyboard Backlight
- LED backlight
- Non-backlight

### UltraNav™
- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
- Mylar® surface multi-touch touchpad, 67.6 x 115 mm (2.66 x 4.53 inches)

## Mechanical

### Dimensions (WxDxH)
- 357.2 x 253.4 x 20.78 mm (14.06 x 9.98 x 0.82 inches)

### Weight
- Starting at 1.77 kg (3.90 lbs)

### Case Color
- Black

### Case Material
- PC-ABS (top), PC-ABS (bottom)

---

### Notes:

1. The system dimensions may vary depending on configurations.
2. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

## CONNECTIVITY

### Network

#### Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

#### WLAN + Bluetooth®**
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)

#### WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- No support

### SIM Card
- No physical SIM card inbox
NFC
• Near Field Communication
• No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
[3] Wi-Fi® 7 is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Standard Ports
• 1x USB-A (Hi-Speed USB / USB 2.0)
• 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), one Always On
• 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), with USB PD 3.0 and DisplayPort™ 1.4
• 1x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)

Optional Ports***
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Docking
Various docking solutions supported via Thunderbolt™ or USB-C®. For more compatible docking solutions, please visit Docking for ThinkPad® L16 Gen 1 (Intel®)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
Self-healing BIOS

Other Security
(Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter

MANAGEABILITY

System Management
System Management**
• Intel® vPro® Enterprise
• Intel® vPro® Essentials
• Non-vPro®

Notes:
[1], [2] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty
Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories
Bundled Accessories**[1]
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to VGA Adapter
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® L16 Gen 1 (Intel®).

OPERATING REQUIREMENTS

Operating Environment
Temperature[1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
• Storage without packaging: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL
Sustainability
Material
50% recycled aluminium on top cover
60% PCC recycled on keyboard frame
50% PCC recycled on PC/ABS bottom cover
30% PCC recycled on PC/CF bottom cover
85% PCC recycled plastic used in key caps (backlight)
70% PCC recycled plastic used in key caps (non-backlight)
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery pack enclosure
90% PCC recycled plastic used in slim 65W adapters
Low-temperature solder
FSC Certified Plastic Free Packaging

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 6
ErP Lot 26
RoHS compliant
TCO Certified 9.0

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Eyesafe® Certified 2.0
TÜV Rheinland® Low Blue Light (Hardware Solution)

Notes:
[1] The items listed under the “Green Certifications” section may only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Feature with ** means that only one offering listed under the feature is configured on selected models.

Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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**OVERVIEW**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power connector</td>
</tr>
<tr>
<td>2</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>3</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>4</td>
<td>HDMI</td>
</tr>
<tr>
<td>5</td>
<td>Headphone (3.5mm)</td>
</tr>
<tr>
<td>6</td>
<td>SD Express 7.0 card reader</td>
</tr>
<tr>
<td>7</td>
<td>Nano-SIM card slot *</td>
</tr>
<tr>
<td>8</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>9</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>10</td>
<td>Kensington Nano Security Slot</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
12th Generation H series Intel® Core™ i7 / i9 processor, supports up to 14 cores, up to 5.0GHz

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i7-12700H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.3GHz / E-core 1.7GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-12800H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i9-12900H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 5.0GHz / E-core 3.8GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux
- Ubuntu Linux LTS
- Ubuntu Linux with Data Science Preload
- Red Hat Enterprise Linux 8.6 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® RTX A1000 Laptop GPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>35W</td>
<td>Dynamic Boost 2.0, DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000 8GB Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>35W</td>
<td>Dynamic Boost 2.0, DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD graphics.
[2], [3], [4], [5], [6] Vapor Chamber cooling is available only with NV RTX A3000 / A4500 / A5500 and GeForce RTX 3070 / 3080 GPUs.
Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
• HDMI® supports up to 3840x2160@60Hz on Intel® Iris® Xe models; 7680x4320@60Hz on discrete NVIDIA® graphics models
• Thunderbolt™ supports up to 5120x3200@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
Up to 64GB DDR5-4800
Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable
Memory Type
DDR5-4800 non-ECC

Storage

Storage Support
• Models with integrated graphics or NVIDIA® RTX A1000/A2000: up to two drives, 2x M.2 SSD
  • M.2 2280 SSD up to 8TB, 4TB each
  • RAID 0/1 support
• Models with NVIDIA® GeForce/RTX A3000/A4500/A5500: one drive, up to 4TB M.2 2280 SSD

Storage Slot
• Models with Intel® integrated graphics or NVIDIA® RTX A1000/A2000: two M.2 2280 PCIe® 4.0 x4 slots
• Models with NVIDIA® GeForce/RTX A3000/A4500/A5500: one M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
• RAID 0/1 support (for models with integrated graphics or NVIDIA® RTX A1000/A2000)
• No support

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] PCIe® x4 SSD may be PCIe® 3.0 x4 or PCIe® 4.0 x4 as substitution.

Removable Storage

Card Reader
SD Express 7.0 card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers
Stereo speakers, 2W x2, optimized with Dolby Atmos®

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera
• FHD 1080p + IR with privacy shutter, fixed focus
**Battery**

Integrated Li-Polymer 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

**Power Adapter**

<table>
<thead>
<tr>
<th>Power Adapter**[1]**</th>
</tr>
</thead>
<tbody>
<tr>
<td>135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz</td>
</tr>
<tr>
<td>170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz</td>
</tr>
<tr>
<td>230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

**Notes:**


## DESIGN

### Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>89°/89°/-/-</td>
<td>X-Rite® Factory Color Calibration, Dolby Vision®, DisplayHDR™ 400, 86.08% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>89°/89°/-/-</td>
<td>X-Rite® Factory Color Calibration, Dolby Vision®, DisplayHDR™ 400, 86.08% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>None</td>
<td>IPS</td>
<td>600nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% Adobe® RGB</td>
<td>85°/85°/-/-</td>
<td>X-Rite® Factory Color Calibration, Dolby Vision®, DisplayHDR™ 400, 86.08% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>600nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% Adobe® RGB</td>
<td>85°/85°/-/-</td>
<td>X-Rite® Factory Color Calibration, Dolby Vision®, DisplayHDR™ 400, 86.08% screen to body ratio, DC dimming</td>
</tr>
</tbody>
</table>

**Color Calibration**

X-Rite® factory color calibration

**Touchscreen**

- OGM (One Glass Metal mesh) multi-touch, supports 10-point touch
- Non-touch

**Notes:**

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**
Pen
- Lenovo® Precision Pen 2 with built-in rechargeable battery, 4096 levels of pressure sensitivity, tilt detection, supports WGP, AES 2.0 and MPP 2.0 protocols. For more information, please read Lenovo® Precision Pen 2
- No pen (purchase separately)
- No support (non-touch display doesn't support pen input)

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
LED backlight

UltraNav™
3-button TrackPoint® pointing device and glass surface multi-touch touchpad, 67.6 x 115 mm (2.66 x 4.53 inches)

Mechanical
Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-touch models</td>
<td>359.5 x 253.8 x 17.7 mm (14.15 x 9.99 x 0.7 inches)</td>
</tr>
<tr>
<td>Touch models</td>
<td>359.5 x 253.8 x 18.2 mm (14.15 x 9.99 x 0.72 inches)</td>
</tr>
</tbody>
</table>

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-touch models</td>
<td>Starting at 1.81 kg (3.99 lbs)</td>
</tr>
<tr>
<td>Touch models</td>
<td>Starting at 1.86 kg (4.1 lbs)</td>
</tr>
</tbody>
</table>

Case Color[**]
- 37-degree twill CF weave
- Black

Case Material[**]
- CFRP / GFRP (top), aluminium (bottom)
- CFRP / GFRP hybrid (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet[1]
No onboard Ethernet

WLAN + Bluetooth®[2]
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready)

WWAN
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1] Ethernet support via optional docking or Lenovo® USB-C® to Ethernet Adapter.
Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.

Ports

Standard Ports
- 2x USB 3.2 Gen 1 (one Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- Models with NVIDIA® graphics: 1x HDMI® 2.1, up to 8K/60Hz
- Models with integrated graphics: 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD Express 7.0 card reader
- 1x Power connector

Optional Ports
1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® P1 Gen 5

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security
- NVMe® password
- Power-on password
- Self-healing BIOS
- Supervisor password

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- Bottom cover tamper detection
- Camera privacy shutter (camera models)

MANAGEABILITY

System Management

System Management[1]
- Intel® vPro® Enterprise
**Notes:**
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

**SERVICE**

**Warranty**

**Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

**ACCESSORIES**

**Bundled Accessories**

**Bundled Accessories**
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to Ethernet Adapter (2.5Gbps)
- Lenovo® USB-C® to VGA Adapter

**Notes:**
[1] For more compatible accessory solutions, please visit [Accessories for ThinkPad® P1 Gen 5](https://example.com)

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

**Relative Humidity**
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

**Altitude**
Maximum altitude (without pressurization): 3048 m (10,000 ft)

**Notes:**
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

**ENVIRONMENTAL**

**Sustainability**

**Material**
90% recycled and/or sustainable packaging

**Notes:**
FSC: Forest Stewardship Council.
CERTIFICATIONS

Green Certifications

Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
RoHS compliant

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

ISV Certifications

ISV Certifications

Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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OVERVIEW

1. SD Express 7.0 card reader  
2. Nano-SIM card slot *  
3. USB 3.2 Gen 1  
4. USB 3.2 Gen 1 (Always On)  
5. Kensington Nano Security Slot  
6. Power connector  
7. Thunderbolt 4  
8. Thunderbolt 4  
9. HDMI  
10. Headphone (3.5mm)

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation H series Intel® Core™ i7 / i9 processor, supports up to 14 cores, up to 5.4GHz

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i7-13700H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
</tr>
<tr>
<td>Core™ i7-13800H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 5.2GHz / E-core 4.0GHz</td>
<td>24MB</td>
</tr>
<tr>
<td>Core™ i9-13900H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 5.4GHz / E-core 4.1GHz</td>
<td>24MB</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux
- Ubuntu Linux
- Ubuntu Linux LTS
- Ubuntu Linux with Data Science Preload
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware][1])
- No preload operating system

Notes:

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® GeForce RTX™ 4060</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>80W</td>
<td>Advanced Optimus (OTA), Dynamic Boost 2.0, DirectX® 12 Ultimate</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 4080</td>
<td>Discrete</td>
<td>12GB GDDR6</td>
<td>80W</td>
<td>Advanced Optimus, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 4090</td>
<td>Discrete</td>
<td>16GB GDDR6</td>
<td>80W</td>
<td>Advanced Optimus, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate</td>
</tr>
<tr>
<td>NVIDIA® RTX 2000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 3500 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>12GB GDDR6 ECC</td>
<td>80W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 4000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>12GB GDDR6 ECC</td>
<td>80W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 5000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>16GB GDDR6 ECC</td>
<td>80W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX A1000 Laptop GPU</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
- HDMI® supports up to 7680x4320@60Hz
- Thunderbolt™ supports up to 5120x3200@60Hz
ThinkPad P1 Gen 6

**Chipset**
Intel® SoC (System on Chip) platform

**Memory**
**Max Memory**
Up to 96GB (2x 48GB DDR5 SO-DIMM)

**Memory Slots**
Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**
DDR5-5600 non-ECC

**Storage**
**Storage Support**
- Models with NVIDIA® RTX A1000/2000 Ada:
  - up to two drives, 2x M.2 SSD
  - M.2 2280 SSD up to 8TB, 4TB each
  - RAID 0/1 support
- Models with NVIDIA® RTX 3500/4000/5000 Ada or GeForce RTX4060/4080/4090:
  - one drive, up to 4TB M.2 2280 SSD

**Storage Slot**
- Models with NVIDIA® RTX A1000/2000 Ada:
  - Two M.2 2280 PCIe® 4.0 x4 slots
- Models with NVIDIA® RTX 3500/4000/5000 Ada or GeForce RTX4060/4080/4090:
  - One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD PCIe NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD PCIe® NVMe, PCIe® x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
<td></td>
</tr>
</tbody>
</table>

**RAID**
RAID 0/1 support (for models with NVIDIA® RTX A1000/2000 Ada)

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**
**Card Reader**
SD Express 7.0 card reader

**Multi-Media**
**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3306 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Atmos®

**Microphone**
Dual-microphone array, far-field, Dolby Voice®

**Camera**
- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- FHD 1080p + IR hybrid with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- No camera

**Battery**

---

ThinkPad P1 Gen 6 - May 06 2024 3 of 9
Integrated Li-Polymer 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

**Power Adapter**

**Power Adapter**

- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

---

**Notes:**


---

**DESIGN**

**Display**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>TÜV Low Blue Light, X-Rite® Factory Color Calibration, 86.2% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS[2]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>165Hz</td>
<td>89°/89°/80°/80°</td>
<td>TÜV Low Blue Light, X-Rite® Factory Color Calibration, 86.2% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>Add-on Film Touch</td>
<td>OLED</td>
<td>SDR 400nits / HDR 500nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>60Hz</td>
<td>87.5° / 87.5° / 87.5° / 87.5°</td>
<td>DisplayHDR™ 400, Dolby Vision®, TÜV Low Blue Light, X-Rite® Factory Color Calibration, 86.1% screen to body ratio</td>
</tr>
</tbody>
</table>

**Color Calibration**

X-Rite® factory color calibration

**Touchscreen**

- Add-on Film Touch, supports 10-point touch (OLED models only)
- Non-touch

**Notes:**

[1], [2] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls
Keyboard Backlight
LED backlight

UltraNav™
3-button TrackPoint® pointing device and glass surface multi-touch touchpad, 67.6 x 115 mm (2.66 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

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<tr>
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<td>359.5 x 253.8 x 17.3 mm (14.15 x 9.99 x 0.68 inches)</td>
</tr>
<tr>
<td>Non-touch models</td>
<td>359.5 x 253.8 x 17.5 mm (14.15 x 9.99 x 0.69 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touch models</td>
<td>Starting at 1.78 kg (3.92 lbs)</td>
</tr>
<tr>
<td>Non-touch models</td>
<td>Starting at 1.86 kg (4.11 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**

- Black
- Black, weave

**Case Material**

- CFRP / GFRP (top), aluminium (bottom)
- CFRP / GFRP hybrid (top), aluminium (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**

No onboard Ethernet

**WLAN + Bluetooth®**

Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

**WWAN**

- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- Qualcomm® Snapdragon® X55 5G Modem-RF System, Sub-6 GHz, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**

No physical SIM card inbox

**NFC**

- Near Field Communication
- No support

Notes:

[1] Ethernet support via optional docking or Lenovo® USB-C® to Ethernet Adapter, up to 2.5GbE.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](#).
Ports

Standard Ports
- 2x USB 3.2 Gen 1 (one Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD Express 7.0 card reader
- 1x Security keyhole
- 1x Power connector

Optional Ports
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® P1 Gen 6

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security
- NVMe® password
- Power-on password
- Self-healing BIOS
- Supervisor password

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- (Optional) Ultrasonic Human Presence Detection for IR camera
- Bottom cover tamper detection
- Camera privacy shutter (camera models)

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise

Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**

• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories[1]

• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (2.5Gbps)
• Lenovo® USB-C® to VGA Adapter

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® P1 Gen 6

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material[1]

90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery
30% PCC recycled plastic used in 170W power adapter
90% recycled and/or sustainable packaging

Notes:

FSC: Forest Stewardship Council.

CERTIFICATIONS
Green Certifications\(^1\)
Green Certifications\(^2\)
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered\(^1\)
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit [epeat.net](http://epeat.net) and [energystar.gov](http://energystar.gov) for more information.
[3] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

Other Certifications
Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
TÜV Rheinland® Low Blue Light

ISV Certifications
ISV Certifications
Please visit [ISV certifications for Lenovo® Workstations](http://isv.lenovo.com)

Feature with ** means that only one offering listed under the feature is configured on selected models.

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## OVERVIEW

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<thead>
<tr>
<th>1. SD Express 7.0 card reader</th>
<th>5. Power connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. USB-A (USB 5Gbps), Always On</td>
<td>6. 2x Thunderbolt 4</td>
</tr>
<tr>
<td>3. USB-C (USB 10Gbps), with USB PD 3.0 &amp; DP 1.4</td>
<td>7. HDMI</td>
</tr>
<tr>
<td>4. Kensington Nano Security Slot</td>
<td>8. Headphone / microphone combo jack (3.5mm)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Processor

Processor Family

Intel® H Series Core™ Ultra 5 / 7 / 9 Processor; supports up to 16 cores; up to 5.1GHz

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 135H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.6GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 5.0GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 9 185H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 2.3GHz / E-core 1.8GHz / LPE-core 1GHz</td>
<td>P-core 5.1GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 Government Edition 64
- Fedora Linux[^1]
- Ubuntu Linux LTS[^2]
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

Notes:

[^1] Fedora Linux will be available after July 30th, 2024.
[^2] Ubuntu Linux LTS will be available after July 30th, 2024.

NPU

NPU

Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 4060 Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>60W</td>
<td>Advanced Optimus (OTA), Dynamic Boost 2.0, DirectX® 12 Ultimate</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 4070 Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>60W</td>
<td>Advanced Optimus (OTA), Dynamic Boost 2.0, DirectX® 12 Ultimate</td>
</tr>
<tr>
<td>NVIDIA® RTX 1000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>60W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 2000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>60W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
</tbody>
</table>
**Monitor Support**

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via 2x Thunderbolt™ 4, 1x USB-C®, and 1x HDMI®).

Max resolution for multiple external display:
- 3x 3840x2160@60Hz (Thunderbolt™ 4, USB-C®, and HDMI®)

Max resolution for single external display:
- Thunderbolt™ 4 supports up to 7680x4320@60Hz
- HDMI® supports up to 7680x4320@60Hz
- USB-C® supports up to 7680x4320@60Hz (with DSC)

**Chipset**

Chipset

Intel® SoC (System on Chip) platform

**Memory**

Max Memory

Up to 64GB (1x 64GB LPCAMM2), upgradable

Memory Slots

One LPCAMM2 connector, dual-channel

Memory Type

LPDDR5x-7467

**Storage**

Storage Support

Up to two drives, 2x M.2 SSD
- M.2 2280 SSD up to 8TB, 4TB each
- RAID 0/1 support

Storage Slot

Two M.2 2280 PCIe® 4.0 x4 slots

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID

RAID 0/1 support

**Notes:**

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

Card Reader

SD Express 7.0 card reader

**Multi-Media**

Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers

Stereo speakers, 2W x2, Dolby Atmos®

Microphone

- Dual-microphone array, far-field, Dolby Voice®
- No microphone (for special bid model)
Camera
- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- No camera (for special bid model)

Battery

Integrated Li-Polymer 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Power Adapter

Power Adapter**[1]
- 135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>91.7% screen to body ratio, TÜV Low Blue Light, X-Rite® Factory Color Calibration, DC dimming</td>
</tr>
<tr>
<td>16”</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>165Hz</td>
<td>89°/89°/89°/89°</td>
<td>91.7% screen to body ratio, TÜV Low Blue Light, X-Rite® Factory Color Calibration, DC dimming</td>
</tr>
<tr>
<td>16”</td>
<td>WQUXGA (3840x2400)</td>
<td>Add On Film Touch</td>
<td>OLED</td>
<td>SDR 400nits / HDR 500nits</td>
<td>Anti-reflection / Anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>60Hz</td>
<td>87.5° / 87.5° / 87.5° / 87.5°</td>
<td>91.7% screen to body ratio, Eyesafe® Certified 2.0, X-Rite® Factory Color Calibration, DisplayHDR™ 400, Dolby Vision®, PWM dimming</td>
</tr>
</tbody>
</table>

Color Calibration
X-Rite® factory color calibration
Touchscreen
- Add-on Film Touch, supports 10-point touch (WQUXGA display)
- Non-touch

Input Device
Keyboard
6-row, spill-resistant, multimedia Fn keys

Keyboard Backlight
LED backlight

UltraNav™
3-button TrackPoint® pointing device and glass surface multi-touch Haptic Touchpad, 85 x 135 mm (3.35 x 5.31 inches)

Mechanical
Dimensions (WxDxH)\(^1\)
354.4 x 241.2 x 17.05 mm (13.95 x 9.49 x 0.67 inches)

Weight\(^2\)
Starting at 1.82 kg (4.03 lbs)

Case Color
Black

Case Material
Aluminium (top), aluminium (bottom)

Notes:
\[^1\] The system dimensions may vary depending on configurations.
\[^2\] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
No onboard Ethernet

WLAN + Bluetooth®\(^1\)
Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4

WWAN
No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
\[^1\] Wi-Fi® 7 and Bluetooth® 5.4 require the supported Windows® OS.
Wi-Fi® 7 requires a separate Wi-Fi® 7 router and / or other networking devices to meet full WiFi 7 requirements.
Wi-Fi® 7 is backwards compatible with prior WiFi standards.
Wi-Fi® 7 is available in countries where Wi-Fi® 7 is supported.

Ports\(^1\)
Standard Ports\(^2\)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 3.0 (135W input) and DisplayPort™ 1.4
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 (135W input) and DisplayPort™ 2.1
1x HDMI® 2.1, up to 8K/60Hz
1x Headphone / microphone combo jack (3.5mm)
1x SD Express 7.0 card reader
1x Security keyhole

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
[2] Thunderbolt™ and USB-C® ports support 135W inputs, and charging speed and system performance may be degraded if a lower-power charger is used. Chargers should be higher than 65W.

Docking
Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® P1 Gen 7

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified
Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm
Smart Card Reader
No smart card reader
Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip
BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS
Other Security
• Camera privacy shutter (camera models)
• (Optional) IR camera for Windows® Hello (facial recognition)
• (Optional) Ultrasonic Human Presence Detection for IR camera
• Bottom cover tamper detection

MANAGEABILITY

System Management
System Management
• Intel® vPro® Enterprise
• Non-vPro®

SERVICE

Warranty
Base Warranty**
• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
ACCESSORIES

Bundled Accessories

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (2.5Gbps)
- Lenovo® USB-C® to VGA Adapter

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 85% PCC recycled plastic used in key caps
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery
- 30% PCC recycled plastic used in power adapter

Plastic free packaging with 90% recycled and/or FSC certified content

Notes:
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

- (Optional) Intel® Evo™ Platform
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light

ISV Certifications

ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

- Feature with ** means that only one offering listed under the feature is configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Ethernet (RJ-45)  
2. USB4  
3. USB-C 3.2 Gen 2  
4. HDMI  
5. USB 3.2 Gen 1 (Always On)  
6. Headphone / microphone combo jack (3.5mm)  
7. Smart card reader *  
8. USB 3.2 Gen 1  
9. Security keyhole

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 PRO 7040U Series Processor, supports up to 8 cores, up to 5.1GHz

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 7540U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7840U</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.1 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](#))
- No preload operating system

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 740M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® 3.2 Gen 2 and USB4®)
- HDMI® supports up to 3840x2160@60Hz
- USB-C® 3.2 Gen 2 and USB4® support up to 5120x2880@60Hz (USB-C® to DP)

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
- Models with 16GB LPDDR5x: 16GB soldered memory, not upgradable
- Models with 32GB LPDDR5x: 32GB soldered memory, not upgradable
- Models with 64GB LPDDR5x: 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDR5x-7500 non-ECC

Notes:
[1] System comes with LPDDR5x-7500 DIMMs and will run as LPDDR5x-6400 due to platform limitations.

Storage

Storage Support

One drive, up to 2TB M.2 2280 SSD
Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera

- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- FHD 1080p + IR hybrid with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- HD 720p with privacy shutter, fixed focus

Battery

Battery

- Integrated Li-Polymer 39.3Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Power Adapter

Power Adapter

- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

Design

Display

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>84% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>84% screen to body ratio, DC dimming</td>
</tr>
</tbody>
</table>
## Color Calibration**
- ICC Template color calibration (low power display)
- X-Rite® factory color calibration (OLED display)
- No color calibration

## Touchscreen
- On-cell multi-touch, supports 10-point touch (selected FHD display)
- Non-touch

### Notes:
1. [1], [2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

---

### Input Device

**Keyboard**
- 6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
- 3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.4 x 4.53 inches)

---

### Mechanical

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with black cover</td>
<td>317.7 x 226.9 x 17.9 mm (12.51 x 8.93 x 0.7 inches)</td>
</tr>
<tr>
<td>Models with grey cover</td>
<td>317.7 x 227.36 x 17.9 mm (12.51 x 8.95 x 0.7 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with black cover</td>
<td>Starting at 1.34 kg (2.97 lbs)</td>
</tr>
</tbody>
</table>
Models with grey cover Starting at 1.38 kg (3.05 lbs)

Case Color**
- Storm grey
- Villi black

Case Material**
- Models with black cover: PC 50% GF + PC 20% CF (top), PPS (bottom)
- Models with grey cover: aluminium (top), PPS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
Gigabit Ethernet, Realtek® RTL8111EPV, 1x RJ-45, supports Wake-on-LAN and AMD PRO Manageability

WLAN + Bluetooth®**
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[1]
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[2]

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1], [2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports[1]

Standard Ports
- 2x USB 3.2 Gen 1 (one Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Security keyhole

Optional Ports**
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the
host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®. For more compatible docking solutions, please visit Docking for ThinkPad® P14s Gen 4 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0 (TCG certified) and Microsoft® Pluton TPM 2.0, one enabled at one time[1]

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• NVMe® password
• Power-on password
• Self-healing BIOS
• Supervisor password

Other Security
• Camera privacy shutter (camera models)
• (Optional) IR camera for Windows® Hello (facial recognition)
• (Optional) Ultrasonic Human Presence Detection for IR camera
• Bottom cover tamper detection

Notes:
[1] Microsoft® Pluton TPM 2.0 is only applicable on Windows® 11.

MANAGEABILITY

System Management

AMD PRO Manageability

SERVICE

Warranty

Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
ACCESSORIES

Bundled Accessories

Bundled Accessories
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® P14s Gen 4 (AMD)

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery
- 90% PCC recycled plastic used in standard and slim 65W adapter
- 90% recycled and/or sustainable packaging

Notes:
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Eye Comfort Certification
- (Optional) TÜV Rheinland® Low Blue Light

ISV Certifications

ISV Certifications

Please visit ISV certifications for Lenovo® Workstations

Feature with ** means that only one offering listed under the feature is configured on selected models.

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The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Ethernet (RJ-45)  
2. Thunderbolt 4  
3. Thunderbolt 4  
4. HDMI  
5. USB 3.2 Gen 1 (Always On)  
6. Headphone / microphone combo jack (3.5mm)  
7. Smart card reader *  
8. USB 3.2 Gen 1  
9. Security keyhole

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor
Processor Family
13th Generation P series Intel® Core™ i5 / i7 processor, supports up to 14 cores, up to 5.2GHz

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1350P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1370P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.1 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware][1])
- No preload operating system

Notes:

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® RTX A500 Laptop GPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>30W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™):
- HDMI® supports up to 3840x2160@60Hz
- Thunderbolt™ supports up to 7680x4320@60Hz

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
• Models with 16GB LPDDR5x: 16GB soldered memory, not upgradable
• Models with 32GB LPDDR5x: 32GB soldered memory, not upgradable
• Models with 64GB LPDDR5x: 64GB soldered memory, not upgradable
• Models with DDR5 memory: up to 48GB (16GB soldered + 32GB SO-DIMM)

Memory Slots**
• Models with DDR5 memory: one memory soldered to system board, one DDR5 SO-DIMM slot, dual-channel capable
• Models with LPDDR5x memory: memory soldered to system board, no slots, dual-channel

Memory Type**
• DDR5-5600 non-ECC (models with integrated graphics)\(^1\)
• LPDDR5x-7500 non-ECC (models with discrete graphics)\(^2\)

Notes:
\(^1\) System comes with DDR5-5600 DIMMs and will run as DDR5-5200 due to platform limitations.
\(^2\) System comes with LPDDR5x-7500 DIMMs and will run as LPDDR5x-4800 due to platform limitations.

Storage
Storage Support\(^3\)
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
\(^1\) The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
• Dual-microphone array, far-field, Dolby Voice®
• No microphone (for special bid model)

Camera**
• 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
• FHD 1080p + IR hybrid with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
• HD 720p with privacy shutter, fixed focus
• No camera (for special bid model)

Battery
Battery**
• Integrated Li-Polymer 39.3Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
• Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Power Adapter
Power Adapter**\(^4\)
• 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
ThinkPad P14s Gen 4 (Intel)

- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

**Notes:**


## DESIGN

### Display

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>84% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>84% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>ICC Template color calibration, Low power, Low Blue Light, Eyesafe® Certified 2.0, TÜV Eye Comfort, 84% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[4]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard, 84% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS[4]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/-/-</td>
<td>Low Blue Light, 84% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection, anti-fingerprint</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
<td>X-Rite® Factory Color Calibration, Low Blue Light, Eyesafe® Certified 2.0, DisplayHDR™ True Black 500, Dolby Vision®, 84% screen to body ratio</td>
</tr>
</tbody>
</table>

**Color Calibration**

- ICC Template color calibration (low power display)
- X-Rite® factory color calibration (OLED display)
- No color calibration

**Touchscreen**

- On-cell multi-touch, supports 10-point touch (selected FHD display)
- Non-touch
Notes:
[1], [2], [3], [4], [5] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.4 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with black cover and integrated graphics</td>
<td>317.7 x 226.9 x 17.9 mm (12.51 x 8.93 x 0.7 inches)</td>
</tr>
<tr>
<td>Models with black cover and NVIDIA® RTX A500 graphics</td>
<td>317.7 x 226.9 x 17.95 mm (12.51 x 8.93 x 0.707 inches)</td>
</tr>
<tr>
<td>Models with gery cover</td>
<td>317.7 x 227.36 x 17.9 mm (12.51 x 8.95 x 0.7 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with black cover</td>
<td>Starting at 1.34 kg (2.97 lbs)</td>
</tr>
<tr>
<td>Model with storm grey</td>
<td>Starting at 1.38 kg (3.05 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
- Storm grey
- Villi black

**Case Material**
- Models with black cover and integrated graphics: PC 50% GF + PC 20% CF (top), PPS (bottom)
- Models with black cover and discrete graphics: PC 50% GF + PC 20% CF (top), aluminium (bottom)
- Models with gery cover: aluminium (top), PPS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[1]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[2]

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**
No physical SIM card inbox
NFC

- Near Field Communication
- No support

Notes:

[1], [2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

**Standard Ports**

- 2x USB 3.2 Gen 1 (one Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 2.0)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Security keyhole

**Optional Ports**

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®. For more compatible docking solutions, please visit Docking for ThinkPad® P14s Gen 4 (Intel®).

SECURITY & PRIVACY

Security

**Security Chip**

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**

- Smart card reader
- No smart card reader

**Fingerprint Reader**

- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**

- NVMe® password
- Power-on password
- Self-healing BIOS
• Supervisor password

Other Security
• Camera privacy shutter (camera models)
• (Optional) IR camera for Windows® Hello (facial recognition)
• (Optional) Ultrasonic Human Presence Detection for IR camera
• Bottom cover tamper detection

MANAGEABILITY

System Management

System Management
• Intel® vPro® Enterprise
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to VGA Adapter

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® P14s Gen 4 (Intel®)

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).
ENVIRONMENTAL

Sustainability

Material[1]
98% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the battery
90% PCC recycled plastic used in standard and slim 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

Notes:
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications[2]

Green Certifications[2]
• ENERGY STAR® 8.0
• EPEAT™ Gold Registered[3]
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
• (Optional) Eyesafe® Certified 2.0
• (Optional) TÜV Rheinland® Eye Comfort Certification
• (Optional) TÜV Rheinland® Low Blue Light

ISV Certifications

ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>2</td>
<td>Nano-SIM card slot *</td>
</tr>
<tr>
<td>3</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>4</td>
<td>Ethernet (GbE RJ-45)</td>
</tr>
<tr>
<td>5</td>
<td>Kensington Nano Security Slot</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 PRO 8040HS Series Processor. Supports up to 8 cores; up to 5.1GHz; TDP ratings of up to 29W

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 8640HS</td>
<td>6</td>
<td>12</td>
<td>3.5GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 760M</td>
<td>AMD Ryzen™ AI</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 8840HS</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
<td>AMD Ryzen™ AI</td>
</tr>
</tbody>
</table>

Operating System

Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux[1]
- Ubuntu Linux LTS[2]
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](#))
- No preload operating system

Notes:
[1] Fedora Linux will be available after September 6th, 2024.
[2] Ubuntu Linux LTS will be available after August 12th, 2024.

NPU

NPU
AMD Ryzen™ AI integrated in AMD Ryzen™ PRO 8000 processor

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 760M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via 2x Thunderbolt™ 4 and 1x HDMI*). Max resolution for multiple display:
- 3x 3840x2160@60Hz (2x Thunderbolt™ 4 and 1x HDMI*)
Max resolution for single display:
- Thunderbolt™ 4 supports up to 7680x4320@60Hz (with DSC)
- HDMI* supports up to 3840x2160@60Hz

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
Up to 96GB (2x 48GB DDR5 SO-DIMM)

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR5-5600 non-ECC

**Storage**

**Storage Support**

One drive, up to 2TB M.2 2280 SSD

**Storage Slot**

One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**

No card reader

**Multi-Media**

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**

Stereo speakers, 2W x2, Dolby Audio™

**Microphone**

- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone (for special bid model)

**Camera**

- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- 5.0MP + IR with privacy shutter, fixed focus
- 5.0MP with privacy shutter, fixed focus

**Battery**

**Battery**

- Integrated Li-Polymer 39.3Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

**Power Adapter**

**Power Adapter**

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:


**DESIGN**

**Display**

**Display**
## ThinkPad P14s Gen 5 (AMD)

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>85.73% screen to body ratio, 3M™ Dual Brightness Enhancement Film 5, DC dimming</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>85.73% screen to body ratio, 3M™ Dual Brightness Enhancement Film 5, Eyesafe® Certified 2.0, DC dimming</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>85.73% screen to body ratio, ICC Template color calibration, Low power, Eyesafe® Certified 2.0, DC dimming</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>85.73% screen to body ratio, ThinkPad® Privacy Guard, DC dimming</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>120Hz</td>
<td>85°/85°/85°/85°</td>
<td>85.73% screen to body ratio, X-Rite® Pantone® Factory Color Calibration, Eyesafe® Certified 2.0, DisplayHDR™ True Black 500, Dolby Vision®, PWM dimming</td>
</tr>
</tbody>
</table>

**Color Calibration**
- ICC Template color calibration (low power display)
- X-Rite® factory color calibration (2.8K OLED display)
- No color calibration

**Touchscreen**
- On-cell multi-touch, supports 10-point touch (selected display)
- Non-touch
Input Device

Keyboard
- 6-row, spill-resistant, multimedia Fn keys

Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
- 3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch TrackPad, 61 x 115 mm (2.4 x 4.53 inches)

Mechanical

Dimensions (WxDxH) [1]
- 315.9 x 223.7 x 17.7 mm (12.44 x 8.81 x 0.70 inches)

Weight [2]
- Starting at 1.31 kg (2.89 lbs)

Case Color
- Black

Case Material [1]
- PC / 50% GF with 30% PCC + PC / 20% CF (top), PC / 40% GF with 45% PCC (bottom)
- PC / 50% GF with 30% PCC + PC / 20% CF (top), PC / 20% CF with 30% PCC (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
- Gigabit Ethernet, Realtek® RTL8111EPV, 1x RJ-45, supports Wake-on-LAN and AMD PRO Manageability

WLAN + Bluetooth® [1]
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

WWAN
- Wireless WAN upgradable to 4G (with antenna ready)
- Wireless WAN upgradable to 4G or 5G (with antenna ready)
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- Quectel RMS20N-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

SIM Card
- No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports [1]
Standard Ports

- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 1.4
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Security keyhole

Optional Ports

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:

[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Docking

Various docking solutions supported via side docking connector, Thunderbolt™ or USB-C®.

For more compatible docking solutions, please visit Docking for ThinkPad® P14s Gen 5 (AMD)

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks

Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader

- Smart card reader
- No smart card reader

Fingerprint Reader

- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security

- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security

- Camera privacy shutter (camera models)
- (Optional) IR camera for Windows® Hello (facial recognition)
- (Optional) Ultrasonic Human Presence Detection for IR camera
- Bottom cover tamper detection

MANAGEABILITY

System Management

System Management

AMD PRO Manageability

SERVICE

Warranty
**Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

**ACCESSORIES**

**Bundled Accessories**

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter

**OPERATING REQUIREMENTS**

**Operating Environment**

Temperature\(^1\)

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

**Altitude**

Maximum altitude (without pressurization): 3048 m (10,000 ft)

**Notes:**

- \(^1\) When you charge the battery, its temperature must be no lower than 10°C (50°F).

**ENVIRONMENTAL**

**Sustainability**

**Material**\(^1\)

- 85% PCC recycled plastic used in key caps
- 90% PCC recycled plastic used in speaker enclosure
- 97% PCC recycled plastic used in the battery
- 90% PCC recycled plastic used in 65W adapter

**CERTIFICATIONS**

**Green Certifications**\(^2\)

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

---

\(^1\) PCC: Post Consumer Content, recycled materials from customers.

\(^2\) FSC: Forest Stewardship Council.
Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

Other Certifications

MIL-Spec Test
MIL-STD-810H military test passed

Other Certifications
• (Optional) Eyesafe® Certified 2.0
• (Optional) TÜV Rheinland® Low Blue Light

ISV Certifications

ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.
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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Smart card reader *  
2. USB-A (USB 5Gbps)  
3. Ethernet (GbE RJ-45)  
4. Kensington Nano Security Slot  
5. HDMI  
6. 2x Thunderbolt 4  
7. USB-A (USB 5Gbps), Always On  
8. 3.5mm headphone jack

Notes:
- Items with * are only available on selected models
**PERFORMANCE**

**Processor**

**Processor Family**
Intel® H Series Core™ Ultra 5 / 7 / 9 Processor; supports up to 16 cores; up to 5.1GHz; TDP ratings of up to 50W

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125H</td>
<td>14</td>
<td>18</td>
<td>P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz</td>
<td>P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135H</td>
<td>14</td>
<td>18</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.6GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165H</td>
<td>16</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 5.0GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 9 185H</td>
<td>16</td>
<td>22</td>
<td>P-core 2.3GHz / E-core 1.8GHz / LPE-core 1GHz</td>
<td>P-core 5.1GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Arc™ graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Ubuntu Linux LTS[1]
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](https://www.redhat.com/certified-hardware))
- No preload operating system

Notes:

[1] Ubuntu Linux LTS will be available after August 6th, 2024.

**NPU**

**NPU**
Intel® AI Boost integrated in Intel® Core™ Ultra processor

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td></td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td></td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® RTX 500 Ada</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
</tbody>
</table>

---

[1] For detailed and latest information, please visit Red Hat Certified Hardware.
Notes:
[1] Intel® Arc™ graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

**Monitor Support**

**Monitor Support**
Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ 4 and HDMI®).
Max resolution for multiple external display:
• 3x 3840x2160@60Hz (Thunderbolt™ 4 and HDMI®)
Max resolution for single external display:
• Thunderbolt™ 4 supports up to 7680x4320@60Hz
• HDMI® supports up to 7680x4320@60Hz (with DSC)\[1\]

Notes:
[1] 8K (7680x4320@60Hz) support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

**Chipset**

**Chipset**
Intel® SoC (System on Chip) platform

**Memory**

Max Memory
Up to 96GB (2x 48GB DDR5 SO-DIMM)\[1\]

**Memory Slots**
Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**
DDR5-5600 non-ECC

Notes:
[1] 48GB memory module will be available in June 2024. Maximum memory at launch is 64GB (2x 32GB).

**Storage**

**Storage Support**\[1\]
One drive, up to 2TB M.2 2280 SSD

**Storage Slot**
One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**\[2\]

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek®, ALC3287 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™
Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera**
- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- 5.0MP + IR with privacy shutter, fixed focus
- 5.0MP with privacy shutter, fixed focus

Battery
Battery**
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 75Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Power Adapter
Power Adapter**[1]
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 135W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.5”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>87.8% screen to body ratio, Eyesafe® Certified 2.0, TÜV Low Blue Light, DC dimming</td>
</tr>
<tr>
<td>14.5”</td>
<td>3K (3072x1920)</td>
<td>None</td>
<td>IPS</td>
<td>430nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% DCI-P3</td>
<td>120Hz</td>
<td>89°/89°/89°/89°</td>
<td>87.8% screen to body ratio, Eyesafe® Certified 2.0, TÜV Low Blue Light, TCON Color Calibration, DC dimming</td>
</tr>
<tr>
<td>14.5”</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>350nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>90Hz</td>
<td>89°/89°/89°/89°</td>
<td>87.8% screen to body ratio, Eyesafe® Certified 2.0, TÜV Low Blue Light, X-Rite® Pantone® Factory Color</td>
</tr>
</tbody>
</table>
## Calibration, DC dimming

<table>
<thead>
<tr>
<th>14.5” WQXGA (2560x1600)</th>
<th>Add-on Film Touch</th>
<th>IPS</th>
<th>350nits</th>
<th>Anti-glare</th>
<th>16:10</th>
<th>1500:1</th>
<th>100% sRGB</th>
<th>90Hz</th>
<th>89°/89°/89°/89°</th>
</tr>
</thead>
<tbody>
<tr>
<td>87.8% screen to body ratio, Eyesafe® Certified 2.0, TÜV Low Blue Light, DC dimming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Color Calibration**
- TCON factory color calibration (3K display)
- X-Rite® factory color calibration (selected WQXGA display)
- No color calibration

### Touchscreen
- Add-on Film Touch, supports 10-point touch (selected WQXGA display)
- Non-touch

### Input Device

#### Keyboard
6-row, spill-resistant, multimedia Fn keys

#### Keyboard Backlight
LED backlight

#### UltraNav™
3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch TrackPad, 60 x 115 mm (2.36 x 4.53 inches)

### Mechanical

#### Dimensions (WxDxH)[1]
325.5 x 227.6 x 18.5 mm (12.81 x 8.96 x 0.73 inches)

#### Weight[2]
Starting at 1.61 kg (3.55 lbs)

#### Case Color
Black

#### Case Material
Aluminium (top), aluminium (bottom)

### Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

### CONNECTIVITY

#### Network

##### Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

##### WLAN + Bluetooth®
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[3]

##### WWAN
No support

##### SIM Card
No physical SIM card inbox
NFC
No support

Notes:
[1] Wi-Fi® 6E full features might be limited by country-level restrictions. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Standard Ports
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Security keyhole

Optional Ports
1x Smart card reader

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®. For more compatible docking solutions, please visit Docking for ThinkPad® P14s Gen 5 (Intel®)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader
- No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security
- NVMe® password
- Power-on password
- Self-healing BIOS
- Supervisor password
Other Security

- (Optional) IR camera for Windows® Hello (facial recognition)
- (Optional) Ultrasonic Human Presence Detection for IR camera
- Camera privacy shutter
- Bottom cover tamper detection

MANAGEABILITY

System Management

System Management

- Intel® vPro® Enterprise
- Non-vPro®

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter

OPERATING REQUIREMENTS

Operating Environment

Temperature\[1\]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

\[1\] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material\[1\]

- 85% PCC recycled plastic used in key caps
- 98% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the battery
90% PCC recycled plastic used in 100W and 135W adapters

Notes:
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

Green Certifications
[1]
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland® Low Blue Light

ISV Certifications

ISV Certifications

Please visit ISV certifications for Lenovo® Workstations

Feature with ** means that only one offering listed under the feature is configured on selected models.

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The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Headphone / microphone combo jack (3.5mm)  
2. SD card reader  
3. HDMI  
4. 2x USB 3.2 Gen 1  
5. Ethernet (RJ-45)  
6. Kensington Security Slot  
7. Power connector  
8. Thunderbolt 4  
9. Smart card reader *

Notes:
• Items with * are only available on selected models
• Nano-SIM card slot on the rear side (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
12th Generation H series Intel® Core™ i5 / i7 / i9 processor, supports up to 14 cores, up to 5.0GHz

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-12500H</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-12700H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.3GHz / E-core 1.7GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-12800H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i9-12900H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 5.0GHz / E-core 3.8GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 8.6 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000 LaptopGPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>35W</td>
<td>Dynamic Boost 2.0, DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® T1200 LaptopGPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® T600 LaptopGPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 3 independent displays (native display and 2 external monitors via HDMI® and Thunderbolt™)
- HDMI® supports up to 3840x2160@60Hz
- Thunderbolt™ supports up to 5120x3200@60Hz (Thunderbolt™ or USB-C® to DP)

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
Up to 64GB DDR5-4800

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-4800 non-ECC

Storage

Storage Support[1]
Up to two drives, 2x M.2 SSD
• M.2 2280 SSD up to 4TB, 2TB each
• RAID 0/1 support

Storage Slot
Two M.2 2280 PCIe® 4.0 x4 slots

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
RAID 0/1 support

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Optical
None

Card Reader
SD card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™ Premium

Microphone
• Dual-microphone array, far-field, Dolby Voice®
• No microphone

Camera**
• HD 720p + IR hybrid with privacy shutter, fixed focus
• HD 720p with privacy shutter, fixed focus
• No camera

Battery

Battery
Integrated Li-Polymer 68Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Power Adapter

Power Adapter[1]
• 135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
• No power adapter

Notes:

DESIGN
Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.6”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/-/-/-</td>
<td>DC dimming</td>
</tr>
<tr>
<td>15.6”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>85°/85°/-/-/-</td>
<td>DC dimming</td>
</tr>
<tr>
<td>15.6”</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/-/-/-</td>
<td>DC dimming</td>
</tr>
<tr>
<td>15.6”</td>
<td>UHD (3840x2160)</td>
<td>None</td>
<td>IPS</td>
<td>600nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1400:1</td>
<td>100% Adobe® RGB</td>
<td>85°/85°/-/-/-</td>
<td>Dolby Vision®, DisplayHDR™ 400, optional X-Rite® Factory Color Calibration, DC dimming</td>
</tr>
</tbody>
</table>

Color Calibration
- X-Rite® factory color calibration (UHD display)
- No color calibration

Touchscreen
- On-cell multi-touch, supports 10-point touch (selected FHD display)
- Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
3-button TrackPoint® pointing device and Mylar® surface multi-touch touchpad

Mechanical

Dimensions (WxDxH)[1]
366.5 x 250 x 22.7 mm (14.43 x 9.84 x 0.89 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with integrated graphics</td>
<td>Starting at 2.096 kg (4.62 lbs)</td>
</tr>
<tr>
<td>Models with discrete graphics</td>
<td>Starting at 2.226 kg (4.91 lbs)</td>
</tr>
</tbody>
</table>

Case Color
Black

Case Material
PC-ABS (top), PC-ABS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready)

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Fibocom L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card
- No support

**SIM Card**
- Gemalto eSIM card (physical)
- No physical SIM card inbox

**NFC**
- No support

---

**Notes:**

[1] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.

---

**Ports**

**Standard Ports**
- 2x USB 3.2 Gen 1 (one Always On)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x SD card reader
- 1x Power connector

**Optional Ports**
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

---

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] Power Delivery only supports power-out for charging peripherals.

---

**Docking**

**Docking**
Various docking solutions supported via Thunderbolt™, USB-C®, or USB-A.
For more compatible docking solutions, please visit [Docking for ThinkPad® P15v Gen 3 (Intel®)](#)

---

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified
Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Smart Card Reader
- Smart card reader
- No smart card reader

Fingerprint Reader
Touch style fingerprint reader on palm rest, match-on-chip

BIOS Security
- NVMe® password
- Power-on password
- Self-healing BIOS
- Supervisor password

Other Security
- Camera privacy shutter (camera models)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Bottom cover tamper detection

MANAGEABILITY

System Management
System Management**[^1]
- Intel® vPro® Enterprise
- Intel® vPro® Essentials
- Non-vPro®

Notes:
[^1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty
Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories
Bundled Accessories[^1]
- (Optional) Lenovo® HDMI® to VGA Monitor Adapter
- (Optional) Lenovo® USB-C® to DisplayPort™ Adapter
- (Optional) Lenovo® USB-C® to VGA Adapter

Notes:
[^1] For more compatible accessory solutions, please visit [Accessories for ThinkPad® P15v Gen 3 (Intel®)]

OPERATING REQUIREMENTS

Operating Environment
Temperature[^1]
- Operating: 5°C (41°F) to 35°C (95°F)
Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability
Material
90% recycled and/or sustainable packaging

Notes:
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Mil-Spec Test
MIL-STD-810H military test passed

ISV Certifications

Notes: Feature with ** means that only one offering listed under the feature is configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
# OVERVIEW

1. USB-A (USB 5Gbps), Always On
2. USB-C (USB 10Gbps), data transfer only
3. Headphone / microphone combo jack (3.5mm)
4. Nano-SIM card slot *
5. Smart card reader *
6. SD Express 7.0 card reader
7. USB-A (USB 5Gbps)
8. Kensington Nano Security Slot
9. Power connector
10. Thunderbolt 4
11. Thunderbolt 4
12. HDMI

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® HX series Core™ i5 / i7 / i9 (13th Gen) or Core™ i7 (14th Gen) processor; supports up to 24 cores; up to 5.6GHz.

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-13600HX</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i7-13700HX</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i7-13850HX</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 5.3GHz / E-core 3.8GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i9-13950HX</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.5GHz / E-core 4.0GHz</td>
<td>36MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i9-13980HX</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.6GHz / E-core 4.0GHz</td>
<td>36MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i7-14700HX</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 5.5GHz / E-core 3.9GHz</td>
<td>33MB</td>
<td>Intel® UHD Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux
- Ubuntu Linux LTS
- Ubuntu Linux with Data Science Preload
- Red Hat Enterprise Linux 9.3 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)[1]
- No preload operating system

Notes:

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® RTX 1000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>60W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 2000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>60W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 3500 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>12GB GDDR6 ECC</td>
<td>115W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 4000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>12GB GDDR6 ECC</td>
<td>115W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 5000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>16GB GDDR6 ECC</td>
<td>115W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX A1000 Laptop GPU</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>60W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
</tbody>
</table>
Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™). More external displays can be supported via docking or daisy chain.
- HDMI® supports up to 3840x2160@60Hz on integrated or Arc™ graphics models; 7680x4320@60Hz on NVIDIA® graphics models
- Thunderbolt™ supports up to 5120x3200@60Hz

Chipset

Intel® WM790 chipset

Memory

Max Memory
- Models with ECC memory: Up to 128GB (4x32GB SO-DIMM DDR5-5600 ECC)
- Models with Non-ECC memory: Up to 192GB (4x48GB SO-DIMM DDR5-5600 Non-ECC)

Memory Slots
Four DDR5 SO-DIMM slots, dual-channel capable

Memory Type
- DDR5-5600 ECC
- DDR5-5600 non-ECC

Memory Protection
ECC on models with ECC DIMMs and ECC capable processor (i5-13600HX / i7-13850HX / i9-13950HX)

Notes:
[1] System comes with DDR5-5600 memory and will run as lower speed due to platform limitations: 4x32GB / 4x48GB configurations run as DDR5-3600. Other configurations run as DDR5-4000.

Storage

Storage Support
Up to two drives, 2x M.2 SSD
- M.2 2280 SSD up to 8TB, 4TB each
- RAID 0/1 support

Storage Slot
Two M.2 2280 PCIe® 4.0 x4 slots

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
RAID 0/1 support

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
SD Express 7.0 card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®

Microphone
- Dual-microphone array, far-field, Dolby Voice®
- No microphone

Camera**
- FHD 1080p + IR hybrid with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- FHD 1080p with privacy shutter, fixed focus

Battery

Battery
Integrated Li-Polymer 94Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 230W AC adapter

Power Adapter

Power Adapter**[1]
- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0, Low Blue Light, X-Rite® Factory Color Calibration, 83.4% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>83.9% screen to body ratio, TÜV Low Blue Light, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS[2]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>165Hz</td>
<td>89°/89°/89°/89°</td>
<td>Eyesafe® Certified 2.0, Low Blue Light, X-Rite® Factory Color Calibration, 83.4% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (3840x2400)</td>
<td>None</td>
<td>IPS[3]</td>
<td>800nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% DCI-P3</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0, TÜV Low Blue Light, DC dimming</td>
</tr>
</tbody>
</table>
## Color Calibration

X-Rite® factory color calibration

## Touchscreen

- OGM (One Glass Metal mesh) multi-touch, supports 10-point touch (OLED display)
- Non-touch

Notes:

[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

## Input Device

### Pen

- Lenovo® Precision Pen 2 with built-in rechargeable battery, 4096 levels of pressure sensitivity, tilt detection, supports WGP, AES 2.0 and MPP 2.0 protocols. For more information, please read [Lenovo® Precision Pen 2](#).
- No pen (purchase separately)
- No support

### Keyboard

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

### Keyboard Backlight

LED backlight

### UltraNav™

3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch Trackpad, 67.6 x 115 mm (2.66 x 4.53 inches)

## Mechanical

### Dimensions (WxDxH)<sup>1</sup>

364 x 266 x 30.23 mm (14.3 x 10.5 x 1.2 inches)

### Weight<sup>2</sup>

Starting at 2.95 kg (6.5 lbs)

### Case Color

Storm grey (top), villi black (bottom)

### Case Material

AL5052 (97.25% aluminium, 2.5% magnesium, and 0.25% chromium; top), PPS + 50% GF (bottom)

---

Notes:
The system dimensions may vary depending on configurations. The system weight is approximate and based on results in Lenovo lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
No onboard Ethernet\(^1\)

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3\(^2\)
- No WLAN and Bluetooth®

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**
No physical SIM card inbox

**NFC**
- Near Field Communication
- No support

Notes:
\(^1\) Ethernet support via optional docking or Lenovo® USB-C® to Ethernet Adapter, up to 2.5GbE.
\(^2\) Wi-Fi® 6E full features might be limited by country-level restrictions.

6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](#).

**Ports\(^1\)**

**Standard Ports\(^2\)**
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 3.0
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- Models with NVIDIA® graphics: 1x HDMI® 2.1, up to 8K/60Hz
- Models with integrated or Intel® Arc™ graphics: 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD Express 7.0 card reader

**Optional Ports\(^3\)**
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
\(^1\) The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower than the theoretical speed.

\(^2\) Power Delivery only supports power-out for charging peripherals.

**Docking**

**Docking**
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® P16 Gen 2](#).
SECURITY & PRIVACY

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader
• No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security
• NVMe® password
• Power-on password
• Self-healing BIOS
• Supervisor password

Other Security
• Camera privacy shutter (camera models)
• (Optional) IR camera for Windows® Hello (facial recognition)
• (Optional) Ultrasonic Human Presence Detection for IR camera
• Bottom cover tamper detection

MANAGEABILITY

System Management
System Management
• Intel® vPro® Enterprise
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty
Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories
Bundled Accessories
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (2.5Gbps)
• Lenovo® USB-C® to VGA Adapter

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® P16 Gen 2
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

CERTIFICATIONS

Green Certifications[1]
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[1]
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Eyesafe® Certified 2.0
- TÜV Rheinland® Low Blue Light

ISV Certifications

ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>2</td>
<td>USB4</td>
</tr>
<tr>
<td>3</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>4</td>
<td>HDMI</td>
</tr>
<tr>
<td>5</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>6</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>7</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>8</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>9</td>
<td>Security keyhole</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 PRO 7040U Series Processor, supports up to 8 cores, up to 5.1GHz

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 7540U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 7545U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7840U</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
</tr>
</tbody>
</table>

Operating System

Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.1 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
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</thead>
<tbody>
<tr>
<td>AMD Radeon™ 740M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® 3.2 Gen 2 and USB4®)
- HDMI® supports up to 3840x2160@60Hz
- USB-C® 3.2 Gen 2 and USB4® support up to 5120x2880@60Hz (USB-C® to DP)

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
- Models with 16GB LPDDR5x: 16GB soldered memory, not upgradable
- Models with 32GB LPDDR5x: 32GB soldered memory, not upgradable
- Models with 64GB LPDDR5x: 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDR5x-7500 non-ECC

Notes:
[1] System comes with LPDDR5x-7500 DIMMs and will run as LPDDR5x-6400 due to platform limitations.

Storage

Storage Support
One drive, up to 2TB M.2 2280 SSD

**Storage Slot**

One M.2 2280 PCIe® 4.0 x4 slot

### Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
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<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
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<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**Notes:**

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

### Removable Storage

**Card Reader**

No card reader

### Multi-Media

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**

Stereo speakers, 2W x2, Dolby Audio™

**Microphone**

Dual-microphone array, far-field, Dolby Voice®

**Camera****

- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- FHD 1080p + IR hybrid with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- HD 720p with privacy shutter, fixed focus

### Battery

**Battery****

- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 86Wh battery

### Power Adapter

**Power Adapter****[1]**

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

**Notes:**


### DESIGN

### Display

**Display****

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
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<tbody>
<tr>
<td>16”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>85.4% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16”</td>
<td>WUXGA</td>
<td>Multi</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45%</td>
<td>85°/85°/85°/85°</td>
<td>85.4% screen to body ratio, DC dimming</td>
</tr>
</tbody>
</table>
## ThinkPad P16s Gen 2 (AMD)

<table>
<thead>
<tr>
<th></th>
<th>(1920x1200)</th>
<th>touch</th>
<th>NTSC</th>
<th>body ratio, DC dimming</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot; WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[3] 400nits Anti-glare 16:10 1000:1 100% sRGB 85°/85°/85°/85°</td>
<td>ICC Template color calibration, Low power, Low Blue Light, Eyesafe® Certified 2.0, 85.4% screen to body ratio, DC dimming</td>
<td></td>
</tr>
<tr>
<td>16&quot; WUXGA (1920x1200)</td>
<td>Multi-touch IPS 500nits Anti-glare 16:10 1000:1 100% sRGB 85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16&quot; WQUXGA (3840x2400)</td>
<td>None</td>
<td>OLED 400nits Anti-reflection, anti-smudge 16:10 100,000:1 100% DCI-P3 85°/85°/85°/85°</td>
<td>X-Rite® Factory Color Calibration, Low Blue Light, Eyesafe® Certified 2.0, DisplayHDR™ 400, Dolby Vision®, 85.4% screen to body ratio</td>
<td></td>
</tr>
</tbody>
</table>

### Color Calibration**
- ICC Template color calibration (low power display)
- X-Rite® factory color calibration (OLED display)
- No color calibration

### Touchscreen
- On-cell multi-touch, supports 10-point touch (selected FHD display)
- Non-touch

Notes:
[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

### Input Device

#### Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

#### Keyboard Backlight
- LED backlight
- Non-backlight

#### UltraNav™
3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 67 x 115 mm (2.64 x 4.53 inches)

### Mechanical

#### Dimensions (WxDxH)[8]
361.98 x 255.5 x 20.5 mm (14.25 x 10.06 x 0.81 inches)

#### Weight[2]
<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with black cover</td>
<td>Starting at 1.70 kg (3.76 lbs)</td>
</tr>
<tr>
<td>Models with grey cover</td>
<td>Starting at 1.74 kg (3.85 lbs)</td>
</tr>
</tbody>
</table>

#### Case Color**
- Storm grey
- Villi black

#### Case Material**
- Models with black cover: PC 50% GF + PC 20% CF (top), PPS (bottom)
Connectivity

Network

Ethernet
Gigabit Ethernet, Realtek RTL8111EPV, 1x RJ-45, supports Wake-on-LAN and AMD PRO Manageability

WLAN + Bluetooth®**
- Qualcomm Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[1]
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[2]

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1], [2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports[1]

Standard Ports
- 2x USB 3.2 Gen 1 (one Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Security keyhole

Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit
Docking for ThinkPad® P16s Gen 2 (AMD)

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0 (TCG certified) and Microsoft® Pluton TPM 2.0, one enabled at one time[1]

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
  • Smart card reader
  • No smart card reader

Fingerprint Reader
  • Touch style fingerprint reader integrated in power button, match-on-chip
  • No fingerprint reader

BIOS Security
  • NVMe® password
  • Power-on password
  • Self-healing BIOS
  • Supervisor password

Other Security
  • Camera privacy shutter (camera models)
  • (Optional) IR camera for Windows® Hello (facial recognition)
  • (Optional) Ultrasonic Human Presence Detection for IR camera
  • Bottom cover tamper detection

Notes:
[1] Microsoft® Pluton TPM 2.0 is only applicable on Windows® 11.

MANAGEABILITY

System Management

SERVICE

Warranty
Base Warranty**
  • 1-year courier or carry-in service
  • 1-year courier or carry-in with 2-year system board service (Korea only)
  • 1-year limited onsite service
  • 3-year (1-yr battery) courier or carry-in service
  • 3-year (1-yr battery) limited onsite service
  • No base warranty

ACCESSORIES

Bundled Accessories
Bundled Accessories[2]
OPERATING REQUIREMENTS

Operating Environment

Temperature[^1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[^1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material[^1]
- 85% PCC recycled plastic used in key caps (backlight)
- 70% PCC recycled plastic used in key caps (non-backlight)
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery
- 90% PCC recycled plastic used in 65W adapter
- 90% recycled and/or sustainable packaging

Notes:
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications[^1]

Green Certifications[^2]
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Notes:
[^1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[^2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
• (Optional) Eyesafe® Certified 2.0
• (Optional) TÜV Rheinland® Low Blue Light

ISV Certifications
ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Ethernet (RJ-45)  
2. Thunderbolt 4  
3. Thunderbolt 4  
4. HDMI  
5. USB 3.2 Gen 1 (Always On)  
6. Headphone / microphone combo jack (3.5mm)  
7. Smart card reader *  
8. USB 3.2 Gen 1  
9. Security keyhole

Notes:  
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation P series Intel® Core™ i5 / i7 processor, supports up to 14 cores, up to 5.2GHz

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1350P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1370P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.1 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)[1]
- No preload operating system

Notes:

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® RTX A500 Laptop GPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>30W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
- HDMI® supports up to 3840x2160@60Hz
- Thunderbolt™ supports up to 7680x4320@60Hz

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory
Models with 16GB LPDDR5x: 16GB soldered memory, not upgradable
Models with 32GB LPDDR5x: 32GB soldered memory, not upgradable
Models with 64GB LPDDR5x: 64GB soldered memory, not upgradable
Models with DDR5 memory: up to 48GB (16GB soldered + 32GB SO-DIMM)

Memory Slots
- Models with DDR5 memory: one memory soldered to system board, one DDR5 SO-DIMM slot, dual-channel capable
- Models with LPDDR5x memory: memory soldered to system board, no slots, dual-channel

Memory Type
- DDR5-5600 non-ECC (models with integrated graphics)
- LPDDR5x-7500 non-ECC (models with discrete graphics)

Notes:
1. System comes with DDR5-5600 memory and will run as DDR5-5200 due to platform limitations.
2. System comes with LPDDR5x-7500 memory and will run as LPDDR5x-4800 due to platform limitations.

Storage

Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
1. The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera
- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- FHD 1080p + IR hybrid with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- HD 720p with privacy shutter, fixed focus

Battery

Battery
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 86Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 135W AC adapter

Power Adapter

Power Adapter
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
**ThinkPad P16s Gen 2 (Intel)**

- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 135W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

---

Notes:


**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>85.4% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>85.4% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>ICC Template color calibration, Low power, Low Blue Light, Eyesafe® Certified 2.0, 85.4% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[4]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
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<tr>
<td>16&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
<td>X-Rite® Factory Color Calibration, Low Blue Light, Eyesafe® Certified 2.0, DisplayHDR™ 400, Dolby Vision®, 85.4% screen to body ratio</td>
</tr>
</tbody>
</table>

**Color Calibration**

- ICC Template color calibration (low power display)
- X-Rite® factory color calibration (OLED display)
- No color calibration

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

---

Notes:

[1], [2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

**Keyboard Backlight**

- LED backlight
- Non-backlight
UltraNav™
3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 67 x 115 mm (2.64 x 4.53 inches)

Mechanical
Dimensions (WxDxH)\[^1\]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® graphics models</td>
<td>361.9 x 255.5 x 21.1 mm (14.25 x 10.06 x 0.83 inches)</td>
</tr>
<tr>
<td>Integrated graphics models</td>
<td>361.98 x 255.5 x 20.5 mm (14.25 x 10.06 x 0.81 inches)</td>
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</table>

Weight\[^2\]

<table>
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<th>Models</th>
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<td>Starting at 1.70 kg (3.76 lbs)</td>
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<tr>
<td>Models with grey cover</td>
<td>Starting at 1.73 kg (3.83 lbs)</td>
</tr>
</tbody>
</table>

Case Color**
- Storm grey
- Villi black

Case Material**
- Models with black cover: PC 50% GF + PC 20% CF (top), PPS (bottom)
- Models with grey cover: aluminium (top), PPS (bottom)

Notes:
\[^1\] The system dimensions may vary depending on configurations.
\[^2\] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3\[^1\]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3\[^2\]

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom LB60-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
\[^1\], \[^2\] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
**Ports**

**Standard Ports**
- 2x USB 3.2 Gen 1 (one Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 2.0)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Security keyhole

**Optional Ports**
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

---

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® P16s Gen 2 (Intel®)](Docking for ThinkPad® P16s Gen 2 (Intel®))

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**
Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**
- Smart card reader
- No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**
- NVMe® password
- Power-on password
- Self-healing BIOS
- Supervisor password

**Other Security**
- Camera privacy shutter (camera models)
- (Optional) IR camera for Windows® Hello (facial recognition)
- (Optional) Ultrasonic Human Presence Detection for IR camera
- Bottom cover tamper detection

**MANAGEABILITY**

**System Management**
System Management
• Intel® vPro® Enterprise[1]
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty
Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories
Bundled Accessories[1]
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to VGA Adapter

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® P16s Gen 2 (Intel®)

OPERATING REQUIREMENTS

Operating Environment
Temperature[1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability
Material[1]
85% PCC recycled plastic used in key caps (backlight)
70% PCC recycled plastic used in key caps (non-backlight)
98% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the battery
90% PCC recycled plastic used in 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

Notes:
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light

ISV Certifications

ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.
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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Smart card reader * 6. HDMI
2. Nano-SIM card slot * 7. 2x Thunderbolt 4
3. USB-A (USB 5Gbps) 8. USB-A (USB 5Gbps), Always On
4. Ethernet (GbE RJ-45) 9. 3.5mm headphone jack
5. Kensington Nano Security Slot

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® H Series Core™ Ultra 5 / 7 / 9 Processor; supports up to 16 cores; up to 5.1GHz; TDP ratings of up to 55W

Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.2GHz / E-core 700MHz</td>
<td>P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.6GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 5.0GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 9 185H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 2.3GHz / E-core 1.8GHz / LPE-core 1GHz</td>
<td>P-core 5.1GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Arc™ graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

Operating System

Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Ubuntu Linux LTS[1]
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

Notes:
[1] Ubuntu Linux LTS will be available after August 6th, 2024.

NPU

NPU
Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® RTX 500 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
</tbody>
</table>
Notes:
[1] Intel® Arc™ graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ 4 and HDMI®). Max resolution for multiple external display:
• 3x 3840x2160@60Hz (Thunderbolt™ 4 and HDMI®)
Max resolution for single external display:
• Thunderbolt™ 4 supports up to 7680x4320@60Hz
• HDMI® supports up to 7680x4320@60Hz (with DSC)[1]

Notes:
[1] 8K (7680x4320@60Hz) support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
Up to 96GB (2x 48GB DDR5 SO-DIMM)
Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable
Memory Type
DDR5-5600 non-ECC

Storage

Storage Support[1]
One drive, up to 2TB M.2 2280 SSD
Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

<table>
<thead>
<tr>
<th>Storage Type*</th>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td></td>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec
Speakers
Stereo speakers, 2W x2, Dolby Audio™
Microphone
Dual-microphone array, far-field, Dolby Voice®
Camera**
### Battery
- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 75Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

### Power Adapter
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 135W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

### DESIGN

#### Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>88% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>On-cell multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>88% screen to body ratio, Eyesafe® Certified 2.0, TÜV Low Blue Light, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>88% screen to body ratio, Eyesafe® Certified 2.0, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>88% screen to body ratio, Eyesafe® Certified 2.0, TÜV Low Blue Light, Dolby Vision®, DisplayHDR™ True Black 500, X-Rite® Factory Color Calibration, PWM</td>
</tr>
</tbody>
</table>
Color Calibration
- X-Rite® factory color calibration (WQUXGA display)
- No color calibration

Touchscreen
- On-cell multi-touch, supports 10-point touch (selected WUXGA display)
- Non-touch

Input Device
Keyboard
6-row, spill-resistant, multimedia Fn keys, numeric keypad

Keyboard Backlight
LED backlight

UltraNav™
3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch TrackPad, 67.6 x 115 mm (2.66 x 4.53 inches)

Mechanical
Dimensions (WxDxH)\[1\]
361.5 x 248.6 x 21.13 mm (14.24 x 9.79 x 0.83 inches)

Weight\[2\]
Starting at 1.82 kg (4.01 lbs)

Case Color
Black

Case Material
Aluminium (top), aluminium (bottom)

Notes:
\[1\] The system dimensions may vary depending on configurations.
\[2\] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[\[3\]]

WWAN
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
No support

Notes:
[3] Wi-Fi® 6E full features might be limited by country-level restrictions.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information
on Microsoft®.

Ports

Standard Ports
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Security keyhole

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® P16s Gen 3

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader
- No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security
- Supervisor password
- Power-on password
- NVMe® password
- Self-healing BIOS

Other Security
- (Optional) IR camera for Windows® Hello (facial recognition)
- (Optional) Ultrasonic Human Presence Detection for IR camera
- Camera privacy shutter
- Bottom cover tamper detection

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise
- Non-vPro®
SERVICE

Warranty

Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to VGA Adapter

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
• 85% PCC recycled plastic used in key caps
• 98% PCC recycled plastic used in speaker enclosure
• 97% PCC recycled plastic used in the battery
• 90% PCC recycled plastic used in 100W and 135W adapters

Notes:
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® 8.0
• EPEAT™ Gold Registered
Notes:
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Other Certifications
Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
• (Optional) Eyesafe® Certified 2.0
• TÜV Rheinland® Low Blue Light

ISV Certifications
ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

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OVERVIEW

1. Nano-SIM card slot *
2. Headphone (3.5mm)
3. USB 3.2 Gen 1 (Always On)
4. USB 3.2 Gen 1
5. Kensington Nano Security Slot
6. HDMI
7. SD Express 7.0 card reader
8. Smart card reader *
9. USB4
10. USB4
11. Power-in (Slim Tip)

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Up to AMD Ryzen™ PRO 7040HS Series Processor, supports up to 8 cores, up to 5.2GHz

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 7640HS</td>
<td>6</td>
<td>12</td>
<td>4.3GHz</td>
<td>5.0GHz</td>
<td>6MB L2 / 16MB L3</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 7840HS</td>
<td>8</td>
<td>16</td>
<td>3.8GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7840HS</td>
<td>8</td>
<td>16</td>
<td>3.8GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
</tr>
<tr>
<td>AMD Ryzen™ 9 PRO 7940HS</td>
<td>8</td>
<td>16</td>
<td>4.0GHz</td>
<td>5.2GHz</td>
<td>8MB L2 / 16MB L3</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](#))
- No preload operating system

Notes:

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 760M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® RTX 2000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX A1000 Laptop GPU</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX A500 Laptop GPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB4*)
- HDMI® supports up to 7680x4320@60Hz
- USB4* supports up to 5120x3200@60Hz (USB-C* to DP)

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
Up to 64GB (2x 32GB DDR5 SO-DIMM)

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR5-5600 non-ECC

**Storage**

Storage Support
Up to two drives, 2x M.2 SSD
- M.2 2280 SSD up to 4TB, 2TB each

**Storage Slot**
Two M.2 2280 PCIe® 4.0 x4 slots

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**RAID**
RAID 0/1 support

**Notes:**
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

Card Reader
SD Express 7.0 card reader

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, far-field, Dolby Voice®
- No microphone

Camera**
- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- FHD 1080p with privacy shutter, fixed focus
- No camera

**Battery**

Battery
Integrated Li-Polymer 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

**Power Adapter**

Power Adapter**[1]
- 135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

**Notes:**

**DESIGN**

**Display**
## Color Calibration
- X-Rite® factory color calibration (WQUXGA display)
- No color calibration

## Touchscreen
- On-cell multi-touch, supports 10-point touch (selected FHD display)
- Non-touch

### Input Device

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

**Keyboard Backlight**
LED backlight

**UltraNav™**
3-button TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 67.6 x 115 mm (2.66 x 4.53 inches)

### Mechanical

**Dimensions (WxDxH)**
365 x 262 x 24.66 mm (14.37 x 10.32 x 0.97 inches)

**Weight**
Starting at 2.2 kg (4.85 lbs)

**Case Color**
Thunder black

**Case Material**
PC-ABS (top), PC-ABS (bottom)

### Notes:
- **[1]** IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**CONNECTIVITY**
Network

Ethernet
No onboard Ethernet

WLAN + Bluetooth®
Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

WWAN**
• Wireless WAN upgradable to 4G (with antenna ready)
• Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
• No support

SIM Card
No physical SIM card inbox

NFC
• Near Field Communication
• No support

Notes:
[1] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Standard Ports
• 2x USB 3.2 Gen 1 (one Always On)
• 2x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)[2]
• 1x HDMI® 2.1, up to 8K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x SD Express 7.0 card reader
• 1x Security keyhole

Optional Ports
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Power Delivery only supports power-out for charging peripherals.

Docking

Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® P16v Gen 1 (AMD)

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0 (TCG certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader
• No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security
• NVMe® password
• Power-on password
• Self-healing BIOS
• Supervisor password

Other Security
• Camera privacy shutter (camera models)
• (Optional) IR camera for Windows® Hello (facial recognition)
• (Optional) Ultrasonic Human Presence Detection for IR camera
• Bottom cover tamper detection

MANAGEABILITY

System Management

SERVICE

Warranty
Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories[
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to VGA Adapter

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® P16v Gen 1 (AMD)

OPERATING REQUIREMENTS

Operating Environment
Temperature[
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
1. When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability
Material
- 85% PCC recycled plastic used in key caps
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery
- 30% PCC recycled plastic used in 135W and 170W adapters
- 90% recycled and/or sustainable packaging

Notes:
1. PCC: Post Consumer Content, recycled materials from customers.
2. FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Notes:
1. The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
2. EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
3. EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
MIL-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Eyesafe® Certified
- (Optional) TÜV Rheinland® Low Blue Light

ISV Certifications

ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

- Feature with ** means that only one offering listed under the feature is configured on selected models.
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<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nano-SIM card slot *</td>
</tr>
<tr>
<td>2</td>
<td>Headphone (3.5mm)</td>
</tr>
<tr>
<td>3</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>4</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>5</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>6</td>
<td>HDMI</td>
</tr>
<tr>
<td>7</td>
<td>SD Express 7.0 card reader</td>
</tr>
<tr>
<td>8</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>9</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>10</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>11</td>
<td>Power-in (Slim Tip)</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation H series Intel® Core™ i5 / i7 / i9 processor, supports up to 14 cores, up to 5.4GHz

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-13500H</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>18MB</td>
</tr>
<tr>
<td>Core™ i7-13700H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
</tr>
<tr>
<td>Core™ i7-13800H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 5.2GHz / E-core 4.0GHz</td>
<td>24MB</td>
</tr>
<tr>
<td>Core™ i9-13900H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 5.4GHz / E-core 4.1GHz</td>
<td>24MB</td>
</tr>
</tbody>
</table>

Operating System

<table>
<thead>
<tr>
<th>Operating System**</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Windows® 11 Pro</td>
</tr>
<tr>
<td>- Windows® 11 Home</td>
</tr>
<tr>
<td>- Windows® 11 Home Single Language</td>
</tr>
<tr>
<td>- Windows® 11 DG Windows® 10 Pro 64</td>
</tr>
<tr>
<td>- Ubuntu Linux LTS[1]</td>
</tr>
<tr>
<td>- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)[2]</td>
</tr>
<tr>
<td>- No preload operating system</td>
</tr>
</tbody>
</table>

Notes:

[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.


Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® RTX 2000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX A1000 Laptop GPU</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX A500 Laptop GPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

<table>
<thead>
<tr>
<th>Monitor Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™™)</td>
</tr>
<tr>
<td>- HDMI® supports up to 7680x4320@60Hz</td>
</tr>
<tr>
<td>- Thunderbolt™™ supports up to 5120x3200@60Hz (Thunderbolt™™ or USB-C® to DP)</td>
</tr>
</tbody>
</table>

Chipset
Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory
Up to 64GB (2x 32GB DDR5 SO-DIMM)

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-5600 non-ECC

Notes:
[1] System comes with DDR5-5600 memory and will run as DDR5-5200 due to platform limitations.

Storage

Storage Support

Up to two drives, 2x M.2 SSD
• M.2 2280 SSD up to 4TB, 2TB each

Storage Slot
Two M.2 2280 PCIe® 4.0 x4 slots

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID

RAID 0/1 support

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
SD Express 7.0 card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers

Stereo speakers, 2W x2, Dolby Audio™ Premium

Microphone

• Dual-microphone array, far-field, Dolby Voice®
• No microphone

Camera

• 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
• FHD 1080p with privacy shutter, fixed focus
• No camera

Battery

Battery
Integrated Li-Polymer 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Power Adapter

Power Adapter
ThinkPad P16v Gen 1 (Intel)

- 135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>83.9% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light, 83.9% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>83.9% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>None</td>
<td>IPS</td>
<td>800nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™ 400, Dolby Vision®, Eyesafe® Certified 2.0, TÜV Low Blue Light, X-Rite® Factory Color Calibration, 83.9% screen to body ratio, DC dimming</td>
</tr>
</tbody>
</table>

**Color Calibration**
- X-Rite® factory color calibration (WQUXGA display)
- No color calibration

**Touchscreen**
- On-cell multi-touch, supports 10-point touch (selected FHD display)
- Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

**Keyboard Backlight**
LED backlight on optional keyboard

**UltraNav™**
3-button TrackPoint® pointing device and Mylar® surface multi-touch touchpad, 67.6 x 115 mm (2.66 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**
365 x 262 x 24.66 mm (14.37 x 10.32 x 0.97 inches)

**Weight**
Starting at 2.2 kg (4.85 lbs)

**Case Color**
Thunder black

Case Material
PC-ABS (top), PC-ABS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
No onboard Ethernet[1]

WLAN + Bluetooth®
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[2]

WWAN**
• Wireless WAN upgradable to 4G (with antenna ready)
• Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
• No support

SIM Card
No physical SIM card inbox

NFC
• Near Field Communication
• No support

Notes:
[1] Ethernet support via optional docking or Lenovo® USB-C® to Ethernet Adapter.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports[1]

Standard Ports
• 2x USB 3.2 Gen 1 (one Always On)
• 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)[2]
• 1x HDMI® 2.1, up to 8K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x SD Express 7.0 card reader
• 1x Security keyhole

Optional Ports
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
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USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] Power Delivery only supports power-out for charging peripherals.

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® P16v Gen 1 (Intel®)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader
• No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• Camera privacy shutter (camera models)
• (Optional) IR camera for Windows® Hello (facial recognition)
• (Optional) Ultrasonic Human Presence Detection for IR camera
• Bottom cover tamper detection

MANAGEABILITY

System Management

System Management
• Intel® vPro® Enterprise[1]
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service

ACCESSORIES
Bundled Accessories

Bundled Accessories

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® P16v Gen 1 (Intel)

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

- 85% PCC recycled plastic used in key caps
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery
- 30% PCC recycled plastic used in SIM tray
- 30% PCC recycled plastic used in 135W and 170W adapters
- 90% recycled and/or sustainable packaging

Notes:
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
  • (Optional) Eyesafe® Certified 2.0
  • (Optional) TÜV Rheinland® Low Blue Light

ISV Certifications

ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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OVERVIEW

1. Nano-SIM card slot *
2. Headphone / microphone combo jack (3.5mm)
3. Thunderbolt 4
4. USB-A (USB 5Gbps), Always On
5. Kensington Nano Security Slot
6. HDMI
7. SD Express 7.0 card reader
8. Smart card reader *
9. Ethernet (GbE RJ-45)
10. Thunderbolt 4
11. Power connector

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® H Series Core™ Ultra 7 / 9 Processor; supports up to 16 cores; up to 5.1GHz; TDP ratings of up to 45W

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 5.0GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 9 185H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 2.3GHz / E-core 1.8GHz / LPE-core 1GHz</td>
<td>P-core 5.1GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Arc™ graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](https://www.redhat.com/certified-hardware))

- No preload operating system

Notes:
[1] Red Hat Enterprise Linux 9.2 certification will be available after June 28th, 2024.

NPU

NPU
Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® RTX 500 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 1000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 2000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
<tr>
<td>NVIDIA® RTX 3000 Ada Generation Laptop GPU</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>35W</td>
<td>DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager</td>
</tr>
</tbody>
</table>
Notes:

[1] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

**Monitor Support**

**Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ 4 and HDMI®).

Max resolution for multiple external display:
- 3x 3840x2160@60Hz (Thunderbolt™ 4 and HDMI®)

Max resolution for single external display:
- Thunderbolt™ 4 supports up to 7680x4320@60Hz
- HDMI® supports up to 7680x4320@60Hz

**Chipset**

**Chipset**

Intel® SoC (System on Chip) platform

**Memory**

**Max Memory**

Up to 96GB (2x 48GB DDR5 SO-DIMM)

**Memory Slots**

Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR5-5600 non-ECC

**Storage**

**Storage Support**

Up to two drives, 2x M.2 SSD
- M.2 2280 SSD up to 4TB, 2TB each

**Storage Slot**

Two M.2 2280 PCIe® 4.0 x4 slots

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**RAID**

RAID 0/1 support

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**

SD Express 7.0 card reader

**Multi-Media**

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**

Stereo speakers, 2W x2, Dolby Audio™ Premium

**Microphone**

- Dual-microphone array, far-field, Dolby Voice®
- No microphone
**Camera**
- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- FHD 1080p with privacy shutter, fixed focus
- No camera

**Battery**
Integrated Li-Polymer 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

**Power Adapter**
- 135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>83.9% screen to body ratio, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>On-cell touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>83.9% screen to body ratio, Eyesafe® Certified 2.0, TÜV Low Blue Light, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>83.9% screen to body ratio, TÜV Low Blue Light, DC dimming</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>None</td>
<td>IPS</td>
<td>800nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% DCI-P3</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>83.9% screen to body ratio, DisplayHDR™ 400, Dolby Vision®, Eyesafe® Certified 2.0, TÜV Low Blue Light, X-Rite® Factory Color Calibration, DC dimming</td>
</tr>
</tbody>
</table>

**Color Calibration**
- X-Rite® factory color calibration (WQUXGA display)
- No color calibration

**Touchscreen**
- On-cell multi-touch, supports 10-point touch (selected FHD display)
- Non-touch
Input Device

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

Keyboard Backlight
LED backlight

UltraNav™
3-button TrackPoint® pointing device and Mylar® surface multi-touch Trackpad, 67.6 x 115 mm (2.66 x 4.53 inches)

Mechanical

Dimensions (WxDxH)[1]
365 x 262 x 24.66 mm (14.37 x 10.32 x 0.97 inches)

Weight[2]
Starting at 2.22 kg (4.90 lbs)

Case Color
Black

Case Material
PC-ABS (top), PC-ABS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[3]

WWAN**
- Wireless WAN upgradable to 4G or 5G (with antenna ready)
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- Quectel RM520N-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports[1]

Standard Ports
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
• 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
• 1x HDMI® 2.1, up to 8K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)
• 1x SD Express 7.0 card reader
• 1x Security keyhole

Optional Ports
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
[2] Power Delivery only supports power-out for charging peripherals.

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® P16v Gen 2

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
Smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security
• Supervisor password
• Power-on password
• NVMe® password
• Self-healing BIOS

Other Security
• Camera privacy shutter (camera models)
• (Optional) IR camera for Windows® Hello (facial recognition)
• (Optional) Ultrasonic Human Presence Detection for IR camera

MANAGEABILITY

System Management

System Management
• Intel® vPro® Enterprise
• Non-vPro®

SERVICE

Warranty

Base Warranty**
• 1-year courier or carry-in service
1-year courier or carry-in with 2-year system board service (Korea only)
1-year limited onsite service
3-year (1-yr battery) courier or carry-in service
3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to VGA Adapter

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 85% PCC recycled plastic used in key caps
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery
- 30% PCC recycled plastic used in SIM tray
- 30% PCC recycled plastic used in 135W and 170W adapters
- Plastic free packaging with 90% recycled and/or FSC certified content (retail / standard / bluk packaging)

Notes:
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

• (Optional) Eyesafe® Certified 2.0
• (Optional) TÜV Rheinland® Low Blue Light

ISV Certifications

ISV Certifications

Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
### OVERVIEW

1. Smart card reader *  
2. USB 3.2 Gen 1  
3. Kensington Nano Security Slot  
4. Ethernet (RJ-45)  
5. USB-C 3.2 Gen 2  
6. USB-C 3.2 Gen 2  
7. HDMI  
8. USB 3.2 Gen 1 (Always On)  
9. Headphone / microphone combo jack (3.5mm)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>2</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>4</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>5</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>6</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>7</td>
<td>HDMI</td>
</tr>
<tr>
<td>8</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>9</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
- Optional nano-SIM card slot on the rear side (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 6650U</td>
<td>6</td>
<td>12</td>
<td>2.9GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 6850U</td>
<td>8</td>
<td>16</td>
<td>2.7GHz</td>
<td>4.7GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux[1]
- Linux[2]
- No preload operating system

Notes:
[1], [2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 660M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 680M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory

- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots

Memory soldered to systemboard, no slots, dual-channel

Memory Type

LPDDR5-6400

Storage

Storage Support[3]

One drive, up to 2TB M.2 2280 SSD
Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, far-field, Dolby Voice®
- No microphone

Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera

Notes:
[1] No microphone is for special bid only.

Battery

Battery**
- Integrated Li-Polymer 39.3Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 2018: up to 14.6 hr with 595 performance score @200nits
MobileMark® 25: up to 13.5 hr with 513 performance score @250nits
JEITA 2.0: up to 21.1 hr @150nits
Local video playback: up to 18.1 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 13.3 hr with 694 performance score @200nits
MobileMark® 25: up to 12.6 hr with 548 performance score @250nits
JEITA 2.0: up to 16.5 hr @150nits
Local video playback: up to 14.8 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 10.1 hr with 662 performance score @200nits
MobileMark® 25: up to 6.0 hr with 541 performance score @250nits
JEITA 2.0: up to 13.2 hr @150nits
Local video playback: up to 10.4 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA Low Power (non-touch), AMD Ryzen™ 7 PRO 6850U, 16GB LPDDR5, Win 11,
ThinkPad T14 Gen 3 (AMD)

52.5Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA 300nits (touch), AMD Ryzen™ 5 PRO 6650U, 16GB LPDDR5, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 3: WQUXGA (touch), AMD Ryzen™ 5 PRO 6650U, 32GB LPDDR5, Win 11, 52.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter[2]

Notes:
[2] No power adapter is for special bid only.

DESIGN

Display

Display**[1]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
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<td>IPS</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>Add-on Film touch</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
</tr>
</tbody>
</table>

Touchscreen**
- Add-on Film Touch, supports 10-point touch
- On-cell multi-touch, supports 10-point touch
- Non-touch
Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with black cover</td>
<td>317.7 x 226.9 x 17.9 mm (12.51 x 8.93 x 0.70 inches)</td>
</tr>
<tr>
<td>Models with storm grey cover</td>
<td>317.7 x 227.36 x 17.9 mm (12.51 x 8.95 x 0.70 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with thunder black cover and 39.3Wh battery</td>
<td>Starting at 1.406 kg (3.10 lbs)</td>
</tr>
<tr>
<td>Models with thunder black cover and 52.5Wh battery</td>
<td>Starting at 1.498 kg (3.30 lbs)</td>
</tr>
<tr>
<td>Models with storm grey cover and 39.3Wh battery</td>
<td>Starting at 1.501 kg (3.31 lbs)</td>
</tr>
<tr>
<td>Models with storm grey cover and 52.5Wh battery</td>
<td>Starting at 1.540 kg (3.39 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
- Storm grey
- Thunder black

**Surface Treatment**
Not anti-microbial surface treatment

**Case Material**
- Storm grey models: aluminium (top), PPS (bottom)
- Thunder black models: PC + 20% CF + 50% GF (top), PPS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Realtek® RTL8111EPV (DASH models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Realtek® RTL8111HN (non-DASH models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- MediaTek Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
**SIM Card**

- Gemalto eSIM card (physical)
- No physical SIM card inbox

**NFC**

- Near Field Communication
- No support

**Notes:**

[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2], [3] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

**Ports**

**Standard Ports**

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

**Optional Ports**

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® T14 Gen 3 (AMD)]

**SECURITY & PRIVACY**

**Security**

**Security Chip**

Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

**Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**

- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**

- Touch style fingerprint reader integrated in power button, match-on-chip
ThinkPad T14 Gen 3 (AMD)

- No fingerprint reader

**BIOS Security**
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**
- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®

**MANAGEABILITY**

**System Management**

**SERVICE**

**Warranty**

- **Base Warranty**
  - 1-year courier or carry-in service
  - 1-year courier or carry-in with 2-year system board service (Korea only)
  - 1-year limited onsite service
  - 3-year (1-yr battery) courier or carry-in service
  - 3-year (1-yr battery) limited onsite service
  - No base warranty

**Notes:**

[1] No base warranty is for special bid only.

**ACCESSORIES**

**Bundled Accessories**

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

**Notes:**


**OPERATING REQUIREMENTS**

**Operating Environment**

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)
**Relative Humidity**
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

**Altitude**
Maximum altitude (without pressurization): 3048 m (10,000 ft)

**Notes:**
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

---

**ENVIRONMENTAL**

**Sustainability**

**Material**
- 97% PCC recycled plastic used in speaker enclosure
- 97% PCC recycled plastic used in the 52.5Wh battery frame
- 25-30% PCC recycled plastic used in the 39.3Wh battery frame
- 95% PCC recycled plastic used in standard 65W adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging

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**CERTIFICATIONS**

**Green Certifications**

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

**Notes:**
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit [epeat.net](http://epeat.net) and [energystar.gov](http://energystar.gov) for more information.
[3] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

**Other Certifications**

**Mil-Spec Test**
- MIL-STD-810H military test passed

**Other Certifications**
- (Optional) Eyesafe® Certified
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

---

Feature with ** means that only one offering listed under the feature is configured on selected models.

Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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The specifications on this page may not be available in all regions, and may be changed or updated without notice.
# OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>2</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>4</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>5</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>6</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>7</td>
<td>HDMI</td>
</tr>
<tr>
<td>8</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>9</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>10</td>
<td>Nano-SIM card slot *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
**PERFORMANCE**

**Processor**

**Processor Family**

12th Generation Intel® Core™ i5 / i7 Processor

**Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1250P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1270P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1280P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

**Operating System**

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:

[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

**Graphics**

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® GeForce MX550</td>
<td>Discrete</td>
<td>2GB GDDR6</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:
Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

**Monitor Support**

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)

- Thunderbolt™ supports up to 5K@60Hz
- HDMI® supports up to 4K@60Hz

Notes:

[1] Refresh rates >60hz also supported, however max resolution will be limited.

**Chipset**

Chipset

Intel® SoC (System on Chip) platform

**Memory**

Max Memory

- Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200
- Up to 48GB (16GB soldered + 32GB SO-DIMM) DDR4-3200

Memory Slots

One memory soldered to systemboard, one DDR4 SO-DIMM slot, dual-channel capable

Memory Type

DDR4-3200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

Storage Support

One drive, up to 2TB M.2 2280 SSD

Storage Slot

One M.2 2280 PCIe® 4.0 x4 slot

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® x4[2]</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

[2] PCIe® x4 may be PCIe® 3.0x4 or PCIe® 4.0x4 as substitution.

**Removable Storage**

Card Reader

No card reader

**Multi-Media**

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers

Stereo speakers, 2W x2, Dolby Audio™

Microphone

- Dual-microphone array, far-field, Dolby Voice®
- No microphone[3]
Camera
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera

Notes:
[1] No microphone is for special bid only.
[2] Only HD 720p camera and FHD 1080p + IR hybrid camera are available in EMEA.

Battery
Battery
- Integrated Li-Polymer 39.3Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life
Configuration 1 (max battery life)
MobileMark® 2018: up to 10.0 hr with 791 performance score @200nits
MobileMark® 25: up to 8.2 hr with 601 performance score @250nits
JEITA 2.0: up to 19.9 hr @150nits
Local video playback: up to 15.1 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 9.4 hr with 930 performance score @200nits
MobileMark® 25: up to 6.5 hr with 653 performance score @250nits
JEITA 2.0: up to 12.0 hr @150nits
Local video playback: up to 10.1 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 7.4 hr with 1055 performance score @200nits
MobileMark® 25: up to 4.8 hr with 712 performance score @250nits
JEITA 2.0: up to 11.0 hr @150nits
Local video playback: up to 9.1 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® i5-1240P, 8GB soldered DDR4-3200, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® i5-1250P, 16GB (8GB soldered + 8GB SO-DIMM) DDR4-3200, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 3: WQUXGA (touch), Intel® i7-1280P, 32GB (16GB soldered + 16GB SO-DIMM) DDR4-3200, NVIDIA® GeForce MX550, Win 11, 52.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter
Power Adapter
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:
[2] 45W USB-C® AC adapter is ONLY available for the models with integrated graphics. 45W USB-C® AC adapter and 65W USB-C® slim AC adapter are NOT available in EMEA.

[3] No power adapter is for special bid only.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>700:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>On-cell touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>700:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>On-cell touch</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>14”</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified</td>
</tr>
<tr>
<td>14”</td>
<td>WQUXGA (3840x2400)</td>
<td>Add-on Film</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™ 400, Dolby Vision®, Eyesafe® Certified</td>
</tr>
</tbody>
</table>

**Touchscreen**

- Add-on Film Touch, supports 10-point touch
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
[2] 2.2K display is NOT available in EMEA.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

Notes:

[1] Non-backlit keyboard is only available for the models with thunder black cover.

**Mechanical**

**Dimensions (WxDxH)**

317.7 x 226.9 x 17.9 mm (12.51 x 8.93 x 0.70 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### CONNECTIVITY

#### Network

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- No support

**SIM Card**
- Gemalto eSIM card (physical)
- No physical SIM card inbox

**NFC**
- Near Field Communication
- No support

---

Notes:

1. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
2. Wi-Fi® 6E full features might be limited by country-level restrictions.
3. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
4. Wireless WAN upgradable to 4G is ONLY available in EMEA.
5. Fibocom L860-GL CAT16 is special bid only in EMEA.
NFC is NOT available for storm grey models.
NFC is special bid only in EMEA.

**Ports**

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

**Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

- Various docking solutions supported via Thunderbolt™ / USB-C®.
- For more compatible docking solutions, please visit [Docking for ThinkPad® T14 Gen 3 (Intel®)](https://www.lenovo.com)

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**
Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**
- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Human Presence Detection (software)
Notes:
[1] Smart card reader is mutually exclusive with RFID reader.
[2] Fingerprint reader is standard on storm grey models and optional on thunder black models.
[3] RFID reader is NOT available on storm grey models and is mutually exclusive with smart card reader.

MANAGEABILITY

System Management

**Intel® vPro® Enterprise**
• Intel® vPro® Essentials
• Non-vPro*

Notes:
[1], [2] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

**Lenovo® HDMI® to VGA Monitor Adapter**
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to VGA Adapter
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14 Gen 3 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
When you charge the battery, its temperature must be no lower than 10°C (50°F).

**ENVIRONMENTAL**

**Sustainability**

**Material**
- 97% PCC recycled plastic used in speaker enclosure
- 97% PCC recycled plastic used in the 52.5Wh battery frame
- 25-30% PCC recycled plastic used in the 39.3Wh battery frame
- 95% PCC recycled plastic used in standard 65W adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging

**CERTIFICATIONS**

**Green Certifications**

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

**Other Certifications**

**Mil-Spec Test**
- MIL-STD-810H military test passed

**Other Certifications**

(Optional) Eyesafe® Certified

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Smart card reader *
2. USB 3.2 Gen 1
3. Kensington Nano Security Slot
4. Ethernet (RJ-45)
5. USB 3.2 Gen 1 (Always On)
6. USB-C 3.2 Gen 2
7. HDMI
8. USB 3.2 Gen 1 (Always On)
9. Headphone / microphone combo jack (3.5mm)
10. Nano-SIM card slot *

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor
Processor Family
AMD Ryzen™ 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 7540U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7840U</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
</tr>
</tbody>
</table>

Operating System
Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux[1]
- Linux[2]
- No preload operating system

Notes:
[1], [2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics
Graphics
<p>|</p>
<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 740M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support
Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and USB4®)
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)
- USB4® supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)

Chipset
Chipset
AMD SoC (System on Chip) platform

Memory
Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
- LPDDR5-6400 (8GB)
- LPDDR5x-6400 (16GB or 32GB)[1]
Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

**Storage**

**Storage Support**
One drive, up to 2TB M.2 2280 SSD

**Storage Slot**
One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™

**Microphone**
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone[1]

**Camera**
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera[2]

Notes:

[1] No microphone is for special bid only.
[2] No camera is for special bid only.

**Battery**

**Battery**
- Integrated Li-Polymer 39.3Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 25: up to 14.3 hr with 692 performance score @250nits
JEITA 2.0: up to 22.0 hr @150nits
Local video playback: up to 17.6 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 10.3 hr with 647 performance score @250nits
JEITA 2.0: up to 16.1 hr @150nits
Local video playback: up to 14.1 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 5.0 hr with 645 performance score @250nits
JEITA 2.0: up to 7.4 hr @150nits
Local video playback: up to 7.6 hr @150nits
Notes:

[1] Configuration 1 (max battery life): WUXGA Low Power (non-touch), AMD Ryzen™ 7 PRO 7840U, 16GB LPDDR5x, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA 300nits (touch), AMD Ryzen™ 5 PRO 7540U, 16GB LPDDR5x, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 3: 2.8K OLED (non-touch), AMD Ryzen™ 5 PRO 7540U, 32GB LPDDR5x, Win 11, 39.3Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter*[^1]

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter[^2]

Notes:

[2] No power adapter is for special bid only.

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[^1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>700:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[^2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>700:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[^3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[^4]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14”</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS[^5]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14”</td>
<td>2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
</tr>
</tbody>
</table>

Touchscreen

- On-cell multi-touch, supports 10-point touch
- Non-touch
Notes:
[1], [2], [3], [4], [5] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device
Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

Mechanical
Dimensions (WxDxH)\(^1\)
317.7 x 226.9 x 17.9 mm (12.51 x 8.93 x 0.70 inches)

Weight\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with thunder black cover and 39.3Wh battery</td>
<td>Starting at 1.35 kg (2.96 lbs)</td>
</tr>
<tr>
<td>Models with storm grey cover and 39.3Wh battery</td>
<td>Starting at 1.38 kg (3.05 lbs)</td>
</tr>
<tr>
<td>Models with thunder black cover and 52.5Wh battery</td>
<td>Starting at 1.39 kg (3.05 lbs)</td>
</tr>
<tr>
<td>Models with storm grey cover and 52.5Wh battery</td>
<td>Starting at 1.42 kg (3.13 lbs)</td>
</tr>
</tbody>
</table>

Case Color**
- Storm grey
- Thunder black

Case Material**
- Storm grey models: aluminium (top), aluminium (bottom)
- Thunder black models: carbon fiber hybrid (top), PPS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Gigabit Ethernet, Realtek® RTL8111EPV, 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®\(^*\)\(^1\)
- MediaTek Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support
Notes:

[1] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® T14 Gen 4 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS
Other Security

- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Ultrasonic Human Presence Detection (IR camera models)

Notes:
[1] Fingerprint reader is standard on storm grey models and optional on thunder black models.

MANAGEABILITY

System Management

SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty[1]

Notes:
[1] No base warranty is for special bid only.

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14 Gen 4 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)
Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
50% recycled aluminium on storm grey top cover
55% recycled aluminium on storm grey bottom cover
90% recycled magnesium on keyboard frame
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the 39.3Wh and 52.5Wh battery enclosure
90% PCC recycled plastic used in standard 45W and 65W adapters
Low-temperature solder
Standard packaging: 90% plastic free packaging
Bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) Eyesafe® Certified 2.0

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Smart card reader *
2. USB 3.2 Gen 1
3. Kensington Nano Security Slot
4. Ethernet (RJ-45)
5. Thunderbolt 4
6. Thunderbolt 4
7. HDMI
8. USB 3.2 Gen 1 (Always On)
9. Headphone / microphone combo jack (3.5mm)
10. Nano-SIM card slot *

Notes:
• Items with * are only available on selected models
**PERFORMANCE**

**Processor**

**Processor Family**

13th Generation Intel® U or P Series Core™ i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1350P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1370P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics. Intel® P series processors are for special bid only.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:

[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with...
single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

[2] Discrete graphics is available only with Intel® P series processors.

**Monitor Support**

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)
- Thunderbolt™ supports up to 5K@60Hz
- HDMI® supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

**Chipset**

Chipset

Intel® SoC (System on Chip) platform

**Memory**

Max Memory

- Models with DDR4 memory: up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200
- Models with DDR5 memory: up to 32GB (16GB soldered + 16GB SO-DIMM) DDR5-5200
- Models with 16GB LPDDR5x: 16GB soldered memory, not upgradable
- Models with 32GB LPDDR5x: 32GB soldered memory, not upgradable

Memory Slots

- Models with DDR4 memory: one memory soldered to system board, one DDR4 SO-DIMM slot, dual-channel capable
- Models with DDR5 memory: one memory soldered to system board, one DDR5 SO-DIMM slot, dual-channel capable
- Models with LPDDR5x memory: memory soldered to system board, no slots, dual-channel

Memory Type

- DDR4-3200 (models with integrated graphics)
- DDR5-5200 (models with integrated graphics)
- LPDDR5x-4800 (models with discrete graphics)

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR5-5600 but run as DDR5-5200 due to platform limitation.
[3] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-4800 due to platform limitation.

**Storage**

Storage Support

One drive, up to 2TB M.2 2280 SSD

Storage Slot

One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

Card Reader

No card reader

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone

Camera
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera

Notes:
[1] No microphone is for special bid only.
[2] No camera is for special bid only.

Battery

Battery
- Integrated Li-Polymer 39.3Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life
Configuration 1 (max battery life)
MobileMark® 25: up to 9.5 hr @250nits
JEITA 2.0: up to 21.7 hr @150nits
Local video playback: up to 17.5 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 9.2 hr @250nits
JEITA 2.0: up to 20.3 hr @150nits
Local video playback: up to 17.0 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 7.2 hr @250nits
JEITA 2.0: up to 12.9 hr @150nits
Local video playback: up to 11.7 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA low power (non-touch), Intel® i5-1335U, 16GB soldered DDR5, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA low power (non-touch), Intel® i5-1340P, 16GB soldered DDR5, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), Intel® i5-1350P, 16GB soldered DDR5, Win 11, 52.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• No power adapter[2]

Notes:
[2] No power adapter is for special bid only.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>700:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>700:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[4]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS[5]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

**Touchscreen**

• On-cell multi-touch, supports 10-point touch
• Non-touch

Notes:
[1], [2], [3], [4], [5] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**

• LED backlight
• Non-backlight

**UltraNav™**

TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

317.7 x 226.9 x 17.9 mm (12.51 x 8.93 x 0.70 inches)

**Weight**[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with thunder black cover, integrated graphics and 39.3Wh battery</td>
<td>Starting at 1.32 kg (2.92 lbs)</td>
</tr>
<tr>
<td>Models with storm grey cover and 39.3Wh battery</td>
<td>Starting at 1.36 kg (3.0 lbs)</td>
</tr>
<tr>
<td>Models with thunder black cover, integrated graphics and 52.5Wh battery</td>
<td>Starting at 1.37 kg (3.01 lbs)</td>
</tr>
<tr>
<td>Models with thunder black cover, discrete graphics and 39.3Wh battery</td>
<td>Starting at 1.38 kg (3.05 lbs)</td>
</tr>
</tbody>
</table>
Models with storm grey cover and 52.5Wh battery  
Starting at 1.40 kg (3.09 lbs)

Models with thunder black cover, discrete graphics and 52.5Wh battery  
Starting at 1.42 kg (3.14 lbs)

**Case Color**
- Storm grey
- Thunder black

**Case Material**
- Storm grey models: aluminium (top), PPS (bottom)
- Thunder black models: carbon fiber hybrid (top), PPS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**
- No physical SIM card inbox

**NFC**
- No support

Notes:
[1] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](https://www.microsoft.com/en-us/support).  

**Ports**

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

**Optional Ports**
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)
The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2×2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® T14 Gen 4 (Intel)](#)

## SECURİTY & PRIVACY

### Security

**Security Chip**

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**[1]

- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**[2]

- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**

- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**

- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Ultrasonic Human Presence Detection (IR camera models)
- (Optional) RFID reader[3]

Notes:

[1] Smart card reader is mutually exclusive with RFID reader.
[2] Fingerprint reader is standard on storm grey models and optional on thunder black models.
[3] RFID reader is mutually exclusive with smart card reader.

## MANAGEABILITY

### System Management

**System Management**[4]

- Intel® vPro® Enterprise[5]
- Intel® vPro® Essentials[6]
- Non-vPro®
Notes:

[1], [2] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**

• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to VGA Adapter
• None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14 Gen 4 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

55% recycled aluminium on storm grey top cover
90% recycled magnesium on keyboard frame
98% PCC recycled plastic used in speaker enclosure
Up to 30% PCC recycled plastic used in the 39.3Wh and 97% in 52.5Wh battery enclosure
90% PCC recycled plastic used in standard 45W and 65W adapters
Low-temperature solder
Standard packaging: 90% plastic free packaging
Bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[3]
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

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<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

1. Smart card reader *  
2. Nano-SIM card slot *  
3. USB-A (USB 5Gbps)  
4. Ethernet (RJ-45)  
5. Kensington Nano Security Slot  
6. 2x USB-C (USB4 40Gbps), USB PD 3.0 & DP 1.4a  
7. HDMI  
8. USB-A (USB 5Gbps), Always On  
9. Headphone / microphone combo jack (3.5mm)

**Notes:**  
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
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<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 8540U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 8840U</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
<td>AMD Ryzen™ AI</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:
[1], [2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

NPU

NPU

- AMD Ryzen™ AI integrated in AMD Ryzen™ PRO 8000 processor[1]
- None

Notes:
[1] AMD Ryzen™ AI is only integrated in select processors, please see the details in processor section.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 740M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 5K@60Hz

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
Up to 64GB DDR5-5600
Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-5600

Storage
Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
• Dual-microphone array, 360° far-field, Dolby Voice®
• No microphone

Camera
• 5.0MP + IR discrete, with privacy shutter, fixed focus
• 5.0MP, with privacy shutter, fixed focus
• No camera

Notes:
[1] No camera is for special bid only.

Battery
Battery
• Integrated Li-Polymer 39.3Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
• Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life
Configuration 1 (max battery life)
MobileMark® 25: up to 13.6 hr with 707 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 10.20 hr / 21.62 hr @200nits
Local video playback: up to 16.98 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 12.25 hr with 704 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 9.23 hr / 16.75 hr @200nits
Local video playback: up to 15.28 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 9.25 hr with 687 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 7.88 hr / 12.20 hr @200nits 
Local video playback: up to 12.37 hr @150nits

Notes:
[1] 39.3Wh battery is for special bid only.
[2] Configuration 1 (max battery life): WUXGA Low Power (non-touch), AMD Ryzen™ 7 PRO 8840U, 16GB (2x 8GB) DDR5-5600, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 PRO 8540U, 16GB (2x 8GB) DDR5-5600, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), AMD Ryzen™ 5 PRO 8540U, 16GB (2x 8GB) DDR5-5600, Win 11, 39.3Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[6]

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>85.73% screen to body ratio, 3M™ DBEF5</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Eyesafe® Certified 2.0, 85.73% screen to body ratio, 3M™ DBEF5</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0, 85.73% screen to body ratio</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>ThinkPad® Privacy Guard, 85.73% screen to body ratio</td>
</tr>
<tr>
<td>14”</td>
<td>2.8K</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100%</td>
<td>120Hz</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™</td>
</tr>
</tbody>
</table>
## Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1], [2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

## Input Device
### Keyboard
6-row, spill-resistant, multimedia Fn keys
### Keyboard Backlight
- LED backlight
- Non-backlight
### UltraNav™
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

## Mechanical
### Dimensions (WxDxH)
315.9 x 223.7 x 17.7 mm (12.44 x 8.81 x 0.7 inches)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with grey cover and 39.3Wh battery</td>
<td>Starting at 1.37 kg (3.02 lbs)</td>
</tr>
<tr>
<td>Models with black cover and 52.5Wh battery</td>
<td>Starting at 1.39 kg (3.06 lbs)</td>
</tr>
<tr>
<td>Models with black cover and 39.3Wh battery</td>
<td>Starting at 1.31 kg (2.89 lbs)</td>
</tr>
<tr>
<td>Models with grey cover and 52.5Wh battery</td>
<td>Starting at 1.43 kg (3.15 lbs)</td>
</tr>
</tbody>
</table>

### Case Color**
- Black
- Grey

### Case Material**
- Models with black cover: PC + 20% CF (top), PC + 20% CF (bottom)
- Models with grey cover: aluminium (top), PC + 20% CF (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

## CONNECTIVITY
### Network
#### Ethernet
Gigabit Ethernet, Realtek® RTL8111EPV, 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**

---

*ThinkPad T14 Gen 5 (AMD) - June 24, 2024*
Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[2]
Qualcomm® Wi-Fi® 7 NCM825, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)[3]

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Wireless WAN upgradable to 4G or 5G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- Quectel RM520N-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC[4]
- Near Field Communication
- No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
[3] Wi-Fi® 7 is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
[4] NFC is NOT available for grey models.

Ports[1]

Standard Ports
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® T14 Gen 5 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Ultrasonic Human Presence Detection (IR camera models)

Notes:
[1] Fingerprint reader is standard on grey models and optional on black models.

MANAGEABILITY

System Management
DASH

SERVICE

Warranty
Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty[^]

Notes:
[1] No base warranty is for special bid only.

ACCESSORIES

Bundled Accessories
Bundled Accessories**[^1]
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14 Gen 5 (AMD).
OPERATING REQUIREMENTS

Operating Environment

Temperature [1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 30% recycled carbon fiber on black top cover
- 50% recycled aluminium on grey top cover
- 45% PCC recycled plastic on bottom cover of WWAN models
- 30% PCC recycled plastic on bottom cover of non-WWAN models
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery frame
- 85% PCC recycled plastic for backlit keycaps
- 70% PCC recycled plastic for non-backlit keycaps
- 90% PCC recycled plastic used in 65W and 65W slim adapters
- Plastic free recycled standard packaging

CERTIFICATIONS

Green Certifications [1]

Green Certifications [2]
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered [3]
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) Eyesafe® Certified 2.0

* Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>2</td>
<td>Nano-SIM card slot *</td>
</tr>
<tr>
<td>3</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>4</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>5</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>6</td>
<td>2x Thunderbolt 4</td>
</tr>
<tr>
<td>7</td>
<td>HDMI</td>
</tr>
<tr>
<td>8</td>
<td>USB-A (USB 5Gbps), Always On</td>
</tr>
<tr>
<td>9</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
## PERFORMANCE

### Processor

**Processor Family**

Intel® U or H Series Core™ Ultra 5 / 7 Processor (Series 1)

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz</td>
<td>P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.6GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 5.0GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Notes:

[1], [2], [3], [4] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

### Operating System

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- Linux
- No preload operating system

Notes:

[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

### NPU

**NPU**

Intel® AI Boost integrated in Intel® Core™ Ultra processor
### Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

### Monitor Support

**Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™):
- HDMI® supports up to 4K@60Hz
- Thunderbolt™ supports up to 8K@60Hz

Notes:

[1] Refresh rates >60hz also supported, however max resolution will be limited.
[2] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

### Chipset

**Chipset**

Intel® SoC (System on Chip) platform

### Memory

**Max Memory**

Up to 64GB DDR5-5600

**Memory Slots**

Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR5-5600

### Storage

**Storage Support**

One drive, up to 2TB M.2 2280 SSD

**Storage Slot**

One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

### Removable Storage

**Card Reader**

No card reader

### Multi-Media

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone

Camera
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- 5.0MP, with privacy shutter, fixed focus
- No camera

Notes:
[1] No camera is for special bid only.

Battery

Battery**
- Integrated Li-Polymer 39.3Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life

Configuration 1 (max battery life)
MobileMark® 25: up to 11.5 hr with 600 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 10.7 hr / 24.8 hr @200nits
Local video playback: up to 20.7 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 11.2 hr with 666 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 10.9 hr / 24.1 hr @200nits
Local video playback: up to 20.0 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 10.5 hr with 637 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 8.9 hr / 19.8 hr @200nits
Local video playback: up to 18.1 hr @150nits

Notes:
[1] 39.3Wh battery is for special bid only.
[2] Configuration 1 (max battery life): WUXGA low power (non-touch), Intel® Core™ Ultra 5 125U, 8GB DDR5, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA low power (non-touch), Intel® Core™ Ultra 5 125H, 8GB DDR5, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (non-touch), Intel® Core™ Ultra 5 135U, 16GB DDR5, Win 11, 52.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
Notes:


**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
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<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[2]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>85.73% screen to body ratio, 3M™ DBEF5</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Eyesafe® Certified 2.0, 85.73% screen to body ratio, 3M™ DBEF5</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[4]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0, 85.73% screen to body ratio</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[5]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>ThinkPad® Privacy Guard, 85.73% screen to body ratio</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS[6]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Hardware Solution), 85.73% screen to body ratio</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>120Hz</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0, 85.73% screen to body ratio</td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:

[1] 3M™ DBEF5 (Dual Brightness Enhancement Film) improves the experience with higher brightness and lower energy.

[2], [3], [4], [5], [6] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys
Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

Mechanical

Dimensions (WxDxH): 315.9 x 223.7 x 17.7 mm (12.44 x 8.81 x 0.7 inches)

Weight:

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with black cover and 39.3Wh battery</td>
<td>Starting at 1.31 kg (2.89 lbs)</td>
</tr>
<tr>
<td>Models with grey cover and 39.3Wh battery</td>
<td>Starting at 1.36 kg (2.99 lbs)</td>
</tr>
<tr>
<td>Models with black cover and 52.5Wh battery</td>
<td>Starting at 1.38 kg (3.05 lbs)</td>
</tr>
<tr>
<td>Models with grey cover and 52.5Wh battery</td>
<td>Starting at 1.43 kg (3.15 lbs)</td>
</tr>
</tbody>
</table>

Case Color
- Black
- Grey

Case Material
- Models with black cover: PC + 20% CF (top), PC + 20% CF (bottom)
- Models with grey cover: aluminium (top), PC + 20% CF (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet™:
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®:
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)

WWAN:
- Wireless WAN upgradable to 4G (with antenna ready)
- Wireless WAN upgradable to 4G or 5G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- Quectel RM520N-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC:
- Near Field Communication
- No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system,
driver, etc.

[2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

[3] Wi-Fi® 7 is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

[4] NFC is NOT available for grey models.

**Ports**

**Standard Ports**
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

**Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

---

**Notes:**

[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

**Docking**

**Docking**

Various docking solutions supported via Thunderbolt™ / USB-C®. For more compatible docking solutions, please visit Docking for ThinkPad® T14 Gen 5 (Intel®)

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**
Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**
Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- (Optional) Ultrasonic Human Presence Detection

Notes:
[1] Fingerprint reader is standard on grey models and optional on black models.

MANAGEABILITY

System Management

Intel® vPro® Enterprise

[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14 Gen 5 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)
Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
30% PCC recycled plastic on black top cover
50% recycled aluminium on grey top cover
90% recycled magnesium on keyboard frame
45% PCC recycled plastic on bottom cover of WWAN models
30% PCC recycled plastic on bottom cover of non-WWAN models
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery frame
85% PCC recycled plastic for backlit keycaps
70% PCC recycled plastic for non-backlit keycaps
90% PCC recycled plastic used in 65W and 65W slim adapters
Plastic free recycled standard packaging

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) Eyesafe® Certified 2.0

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without
notice.
OVERVIEW

1. Smart card reader *
2. USB 3.2 Gen 1
3. Kensington Nano Security Slot
4. USB4
5. USB-C 3.2 Gen 2
6. HDMI
7. USB 3.2 Gen 1 (Always On)
8. Headphone / microphone combo jack (3.5mm)

Notes:
- Items with * are only available on selected models
- Optional nano-SIM card slot on the rear side (not shown on the sample product above)
**PERFORMANCE**

**Processor**

**Processor Family**
AMD Ryzen™ 5 / 7 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 6650U</td>
<td>6</td>
<td>12</td>
<td>2.9GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 6850U</td>
<td>8</td>
<td>16</td>
<td>2.7GHz</td>
<td>4.7GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M</td>
</tr>
</tbody>
</table>

**Operating System**

**Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux
- Linux
- No preload operating system

Notes:

[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

**Graphics**

**Graphics**

<table>
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<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 660M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 680M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

**Monitor Support**

**Monitor Support**
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)

**Chipset**

**Chipset**
AMD SoC (System on Chip) platform

**Memory**

**Max Memory**
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

**Memory Slots**
Memory soldered to systemboard, no slots, dual-channel

**Memory Type**
LPDDR5-6400

**Storage**

**Storage Support**
ThinkPad T14s Gen 3 (AMD)

One drive, up to 2TB M.2 2280 SSD

**Storage Slot**
One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
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<th>Disk Type</th>
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Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™

**Microphone**
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone

**Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera

**Battery**

**Battery**
Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 2018: up to 19.52 hr with 707 performance score @200nits
MobileMark® 25: up to 18.18 hr with 564 performance score @250nits
JEITA 2.0: up to 22.98 hr @150nits
Local video playback: up to 22.1 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 14.68 hr with 698 performance score @200nits
MobileMark® 25: up to 13.47 hr with 553 performance score @250nits
JEITA 2.0: up to 20.22 hr @150nits
Local video playback: up to 18.1 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 10.68 hr with 806 performance score @200nits
MobileMark® 25: up to 9.78 hr with 539 performance score @250nits
JEITA 2.0: up to 12.75 hr @150nits
Local video playback: up to 10.5 hr @150nits

Notes:

[1] Configuration 1 (max battery life): WUXGA Low Power (non-touch), AMD Ryzen™ 7 PRO 6850U, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA 300nits (touch), AMD Ryzen™ 5 PRO 6650U, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: 2.8K OLED, AMD Ryzen™ 5 PRO 6650U, 32GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode
efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter*[1]

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter*[2]

Notes:
[2] No power adapter is for special bid only.

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<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Hardware Solution)</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS[5]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
</tbody>
</table>

Touchscreen

- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1], [2], [3], [4], [5] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

Mechanical
Dimensions (WxDxH)
317.5 x 226.9 x 16.9 mm (12.5 x 8.93 x 0.67 inches)

Weight
Starting at 1.23 kg (2.71 lbs)

Case Color
- Storm grey
- Thunder black

Case Material
- Storm grey models: aluminium (top), aluminium (bottom)
- Thunder black models: carbon fiber hybrid (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
No onboard Ethernet

WLAN + Bluetooth®
- MediaTek Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)

WWAN
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

SIM Card
- Gemalto eSIM card (physical)
- No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3], [4] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Ports

Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® T14s Gen 3 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- Camera privacy shutter (camera models)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- (Optional) Human Presence Detection

MANAGEABILITY
**System Management**

**SERVICE**

**Warranty**

**Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

**ACCESSORIES**

**Bundled Accessories**

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for ThinkPad® T14s Gen 3 (AMD)].

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

**Relative Humidity**

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

**Altitude**

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

**ENVIRONMENTAL**

**Sustainability**

**Material**

- 97% PCC recycled plastic used in speaker enclosure
- 97% recycled plastic used in the 57Wh battery frame
- 95% PCC recycled plastic used in standard 65W adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging
CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- Mil-Spec Test
  MIL-STD-810H military test passed

Other Certifications

- (Optional) Eyesafe® Certified
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Smart card reader *</td>
<td><strong>6.</strong> HDMI</td>
</tr>
<tr>
<td><strong>2.</strong> USB 3.2 Gen 1</td>
<td><strong>7.</strong> USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td><strong>3.</strong> Kensington Nano Security Slot</td>
<td><strong>8.</strong> Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td><strong>4.</strong> Thunderbolt 4</td>
<td><strong>9.</strong> Nano-SIM card slot *</td>
</tr>
<tr>
<td><strong>5.</strong> Thunderbolt 4</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
12th Generation Intel® Core™ i5 / i7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1250P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1270P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1280P[1]</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] For special bid only in EMEA.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:
[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support[1]

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)
• Thunderbolt™ supports up to 5K@60Hz
• HDMI® supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset
Chipset
Intel® SoC (System on Chip) platform

Memory
Max Memory
• 8GB soldered memory, not upgradable
• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots, dual-channel

Memory Type
LPDDR5-4800

Notes:
[1] Installed memory is actually LPDDR5-6400 but run as LPDDR5-4800 due to platform limitation.

Storage
Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe® , PCIe® x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] 2TB SSD is special bid only in EMEA.
[3] PCIe® x4 may be PCIe® 3.0x4 or PCIe® 4.0x4 as substitution.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
• Dual-microphone array, far-field, Dolby Voice®
• No microphone

Camera
• FHD 1080p + IR hybrid, with privacy shutter, fixed focus
• FHD 1080p, with privacy shutter, fixed focus
• HD 720p, with privacy shutter, fixed focus
• No camera

**Battery**

Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**[1]

Configuration 1 (max battery life)

MobileMark® 2018: up to 13.6 hr with 978 performance score @200nits
MobileMark® 25: up to 10.8 hr with 669 performance score @250nits
JEITA 2.0: up to 24.0 hr @150nits
Local video playback: up to 18.1 hr @150nits

Alternate configuration 2

MobileMark® 2018: up to 10.0 hr with 1066 performance score @200nits
MobileMark® 25: up to 7.2 hr with 712 performance score @250nits
JEITA 2.0: up to 15.3 hr @150nits
Local video playback: up to 14.8 hr @150nits

Alternate configuration 3

MobileMark® 2018: up to 8.2 hr with 936 performance score @200nits
MobileMark® 25: up to 6.3 hr with 750 performance score @250nits
JEITA 2.0: up to 12.3 hr @150nits
Local video playback: up to 11.8 hr @150nits

---

Notes:

[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® i5-1235U, 8GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® i5-1250P, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: 2.8K OLED, Intel® i5-1245U, 8GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.

Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

---

**Power Adapter**

**Power Adapter**[2]

• 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• No power adapter[2]

---

Notes:

[2] No power adapter is for special bid only.

---

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
</table>

ThinkPad T14s Gen 3 (Intel) - July 19 2023
## ThinkPad T14s Gen 3 (Intel)

<table>
<thead>
<tr>
<th>Display</th>
<th>Resolution</th>
<th>Touchscreen</th>
<th>Color</th>
<th>Brightness</th>
<th>Contrast</th>
<th>Viewing Angle</th>
<th>Color</th>
<th>Peak Brightness</th>
<th>Other Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch IPS</td>
<td>300nits Anti-glare</td>
<td>16:10</td>
<td>600:1</td>
<td>45% NTSC</td>
<td>NTSC</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None IPS</td>
<td>300nits Anti-glare</td>
<td>16:10</td>
<td>600:1</td>
<td>45% NTSC</td>
<td>NTSC</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Hardware Solution)</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None IPS</td>
<td>400nits Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>100% sRGB</td>
<td>sRGB</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
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<td>WUXGA (1920x1200)</td>
<td>Multi-touch IPS</td>
<td>500nits Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>100% sRGB</td>
<td>sRGB</td>
<td>85°/85°/85°/85°</td>
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<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>sRGB</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.8K (2880x1800)</td>
<td>None OLED</td>
<td>400nits Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>DCI-P3</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
</tbody>
</table>

### Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

### Input Device
**Keyboard**
- 6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

### Mechanical
**Dimensions (WxDxH)**
317.5 x 226.9 x 16.9 mm (12.5 x 8.93 x 0.67 inches)

**Weight**
<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thunder black models</td>
<td>Starting at 1.21 kg (2.67 lbs)</td>
</tr>
<tr>
<td>Storm grey models</td>
<td>Starting at 1.45 kg (3.19 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
- Storm grey
- Thunder black

**Case Material**
- Storm grey models: aluminium (top), aluminium (bottom)
- Thunder black models: carbon fiber hybrid (top), aluminium (bottom)

### Notes:
1. The system dimensions may vary depending on configurations.
2. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of the input data.

---

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
[2] Non-backlit keyboard is only available for the models with thunder black cover.
[3] The system dimensions may vary depending on configurations.
[4] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of the input data.
component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

[3] Storm grey case is NOT available in EMEA.

**CONNECTIVITY**

### Network

**Ethernet**

No onboard Ethernet

**WLAN + Bluetooth**

- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)

**WWAN**

- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**

- Gemalto eSIM card (physical)
- No physical SIM card inbox

**NFC**

- Near Field Communication
- No support

Notes:

[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

### Ports

**Standard Ports**

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 2.0)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports***

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

### Docking

Docking
Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® T14s Gen 3 (Intel®)

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified
Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm
Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader
Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader
BIOS Security
• Supervisor password
• Power-on password
• System management password
• NVMe® password
• Certificate based BIOS authentication
• FIDO (Fast Identity Online) authentication
• Self-healing BIOS
Other Security
• Camera privacy shutter (camera models)
• Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
• (Optional) IR camera for Windows® Hello (facial recognition)
• Glance by Mirametrix®
• (Optional) Human Presence Detection
• Tile ready

MANAGEABILITY

System Management
System Management
• Intel® vPro® Enterprise
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty
Base Warranty
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories
Bundled Accessories

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14s Gen 3 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

97% PCC recycled plastic used in speaker enclosure
97% recycled plastic used in the 57Wh battery frame
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed
Other Certifications

- (Optional) Intel® Evo™ Platform
- (Optional) Eyesafe® Certified
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
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**OVERVIEW**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>2.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3.</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>4.</td>
<td>USB4</td>
</tr>
<tr>
<td>5.</td>
<td>USB4</td>
</tr>
<tr>
<td>6.</td>
<td>HDMI</td>
</tr>
<tr>
<td>7.</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>8.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>9.</td>
<td>Nano-SIM card slot *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor
Processor Family
AMD Ryzen™ 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 7540U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7840U</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
</tr>
</tbody>
</table>

Operating System

Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux
- Linux
- No preload operating system

Notes:
[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 740M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
- Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB4®)
- HDMI® supports up to 4K@60Hz
- USB4® supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)

Notes:
[1] Refresh rates >60Hz also supported, however max resolution will be limited.

Chipset

Chipset
- AMD SoC (System on Chip) platform

Memory

Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
- Memory soldered to system board, no slots, dual-channel

Memory Type
- LPDDR5x-6400
Notes:

[1] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

Storage

Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone[1]

Camera
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- No camera[2]

Notes:

[1] No microphone is for special bid only.
[2] No camera is for special bid only.

Battery

Battery
Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life[1]

Configuration 1 (max battery life)
MobileMark® 25: up to 15.67 hr with 707 performance score @250nits
JEITA 2.0: up to 23.1 hr @150nits
Local video playback: up to 18.7 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 12.3 hr with 667 performance score @250nits
JEITA 2.0: up to 18.8 hr @150nits
Local video playback: up to 16.13 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 7.66 hr with 664 performance score @250nits
JEITA 2.0: up to 10.96 hr @150nits
Local video playback: up to 11.27 hr @150nits
Notes:
[1] Configuration 1 (max battery life): WUXGA 300nits (non-touch), AMD Ryzen™ 7 PRO 7840U, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA 300nits (touch), AMD Ryzen™ 5 PRO 7540U, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: 2.8K OLED (non-touch), AMD Ryzen™ 5 PRO 7540U, 32GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter*[^1]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter[^2]

Notes:
[^2] No power adapter is for special bid only.

DESIGN

Display

Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[^1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>600:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[^2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>600:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[^3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[^4]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>14”</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS[^5]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Hardware Solution)</td>
</tr>
<tr>
<td>14”</td>
<td>2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch
Non-touch

Notes:
[1], [2], [3], [4], [5] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device
Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
• LED backlight
• Non-backlight

UltraNav™
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

Mechanical
Dimensions (WxDxH)
317.5 x 226.9 x 16.9 mm (12.5 x 8.93 x 0.67 inches)

Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep black models</td>
<td>Starting at 1.26 kg (2.77 lbs)</td>
</tr>
<tr>
<td>Storm grey models</td>
<td>Starting at 1.49 kg (3.28 lbs)</td>
</tr>
</tbody>
</table>

Case Color
• Deep black
• Storm grey

Case Material
• Deep black models: carbon fiber hybrid (top), aluminium (bottom)
• Storm grey models: aluminium (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
No onboard Ethernet

WLAN + Bluetooth®
• MediaTek Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
• Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

WWAN
• Wireless WAN upgradable to 4G (with antenna ready)
• Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
• Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
• Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
• No support

SIM Card
No physical SIM card inbox

NFC
• Near Field Communication
• No support
Notes:

[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

[2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

[3] Wireless WAN upgradable to 4G is ONLY available in EMEA.

Ports

Standard Ports

• 1x USB 3.2 Gen 1
• 1x USB 3.2 Gen 1 (Always On)
• 2x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)

Optional Ports

• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via USB-C®.

For more compatible docking solutions, please visit Docking for ThinkPad® T14s Gen 4 (AMD)

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks

Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader

• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader

• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security

• Supervisor password
• Power-on password
• System management password
• NVMe® password
• Certificate based BIOS authentication
• FIDO (Fast Identity Online) authentication
• Self-healing BIOS
Other Security

- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Ultrasonic Human Presence Detection (IR camera models)

Notes:

[1] Fingerprint reader is standard on storm grey models and optional on deep black models.

MANAGEABILITY

System Management

System Management

- DASH
- Non-DASH

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14s Gen 4 (AMD).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
50% recycled aluminium on storm grey top cover and keyboard frame
55% recycled aluminium on storm grey bottom cover
22% recycled carbon fiber hybrid on deep black top cover
90% recycled magnesium on deep black keyboard frame
55% recycled aluminium on deep black bottom cover
98% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the 57Wh battery enclosure
90% PCC recycled plastic used in standard 45W and 65W adapters
Low-temperature solder
Retail or standard packaging: plastic free packaging
Bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
• EPEAT™ Gold Registered
• ErP Lot 6/26
• RoHS compliant
• TCO Certified 9.0

Notes:
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Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
• (Optional) Eyesafe® Certified 2.0
• (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

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</tr>
<tr>
<td>4</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>5</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>6</td>
<td>HDMI</td>
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**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation Intel® U or P Series Core™ i5 / i7 Processor

Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1370P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® P series processors are for special bid only.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:
[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support[1]

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI™)
- Thunderbolt™ supports up to 5K@60Hz
- HDMI™ supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.
ThinkPad T14s Gen 4 (Intel)

**Chipset**

Intel® SoC (System on Chip) platform

**Memory**

Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDR5x-4800

Notes:
[1] Installed memory is actually LPDDR5x-6400 but run as LPDDR5x-4800 due to platform limitation.

**Storage**

Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

Card Reader
No card reader

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone[2]

Camera
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- No camera[2]

Notes:
[1] No microphone is for special bid only.
[2] No camera is for special bid only.

**Battery**

Battery
Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
Battery Life

Configuration 1 (max battery life)
MobileMark® 25: up to 12.4 hr @250nits
JEITA 2.0: up to 24.5 hr @150nits
Local video playback: up to 19.6 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 12.0 hr @250nits
JEITA 2.0: up to 18.0 hr @150nits
Local video playback: up to 16.5 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 11.2 hr @250nits
JEITA 2.0: up to 24.1 hr @150nits
Local video playback: up to 18.6 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA low power (non-touch), Intel® i5-1335U, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® i5-1345U, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA low power (non-touch), Intel® i5-1340P, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter[2]

Notes:
[2] No power adapter is for special bid only.

DESIGN

Display

Display**[1]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>600:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>600:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[2]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
</tbody>
</table>
ThinkPad T14s Gen 4 (Intel)

<table>
<thead>
<tr>
<th>Display</th>
<th>Resolution</th>
<th>Multi-touch</th>
<th>Brightness</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>sRGB</th>
<th>Refresh Rate</th>
<th>Viewing Angles</th>
<th>Additional Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot; WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>500nits</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>14&quot; 2.2K (2240x1400)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Hardware Solution)</td>
</tr>
<tr>
<td>14&quot; 2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCIP3</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
</tr>
</tbody>
</table>

**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**
1. 2.2K display is NOT available in EMEA.
2. IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
LED backlight

**UltraNav™**
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**
317.5 x 226.9 x 16.9 mm (12.5 x 8.93 x 0.67 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep black models</td>
<td>Starting at 1.25 kg (2.76 lbs)</td>
</tr>
<tr>
<td>Storm grey models</td>
<td>Starting at 1.48 kg (3.26 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
- Deep black
- Storm grey

**Case Material**
- Deep black models: carbon fiber hybrid (top), aluminium (bottom)
- Storm grey models: aluminium (top), aluminium (bottom)

**Notes:**
1. The system dimensions may vary depending on configurations.
2. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
No onboard Ethernet

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ThinkPad T14s Gen 4 (Intel) - December 29 2023
WLAN + Bluetooth®
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

WWAN
• Wireless WAN upgradable to 4G (with antenna ready)
• Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
• Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
• Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
• No support

SIM Card
No physical SIM card inbox

NFC
• Near Field Communication
• No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
[3] Wireless WAN upgradable to 4G is ONLY available in EMEA.

Ports

Standard Ports
• 1x USB 3.2 Gen 1
• 1x USB 3.2 Gen 1 (Always On)
• 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 2.0)
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)

Optional Ports
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® T14s Gen 4 (Intel®)

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Ultrasonic Human Presence Detection (IR camera models)

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14s Gen 4 (Intel®).

OPERATING REQUIREMENTS
Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 22% recycled carbon fiber hybrid or 55% recycled aluminium on top cover
- 55% recycled aluminum on bottom cover
- 98% PCC recycled plastic used in speaker enclosure
- 97% recycled plastic used in the 57Wh battery frame
- 90% PCC recycled plastic used in standard 45W and 65W adapter
- Low-temperature solder
- Standard packaging: 90% plastic free packaging
- Bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Other Certifications
- MIL-Spec Test
- MIL-STD-810H military test passed
- (Optional) Intel® Evo™ Platform
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Smart card reader *  
2. USB-A (USB 5Gbps) 
3. USB-A (USB 5Gbps), Always On 
4. Kensington Nano Security Slot 
5. 2x Thunderbolt 4 
6. HDMI 
7. Headphone / microphone combo jack (3.5mm) 
8. Nano-SIM card slot *

Notes: 
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® U or H Series Core™ Ultra 5 / 7 Processor (Series 1)

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 5.0GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:

[1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

NPU

NPU
Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support[1]
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™️)
ThinkPad T14s Gen 5

- HDMI® supports up to 4K@60Hz
- Thunderbolt™ supports up to 8K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.
[2] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable
- 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDR5x-7467

Notes:
[1] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-7467 due to platform limitation.
For the memory operating at the speed of LPDDR5x-6400 at publish, please make sure all system updates have been installed to get to LPDDR5x-7467.

Storage

Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone

Camera
- 5.0MP + IR discrete, with privacy shutter, fixed focus
• 5.0MP, with privacy shutter, fixed focus
• No camera

Notes:
[1] No microphone is for special bid only.
[2] No camera is for special bid only.

Battery

Integrated Li-Polymer 58Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life

Configuration 1 (max battery life)
MobileMark® 25: up to 15.2 hr with 746 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 14.5 hr / 33.4 hr @200nits
Local video playback: up to 21.4 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 14.5 hr with 663 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 14.2 hr / 33.6 hr @200nits
Local video playback: up to 22.2 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 14.3 hr with 664 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 12.0 hr / 25.2 hr @200nits
Local video playback: up to 20.4 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA low power (non-touch), Intel® Core™ Ultra 7 155H, 16GB LPDDR5x, Win 11, 58Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA low power (non-touch), Intel® Core™ Ultra 5 135U, 16GB LPDDR5x, Win 11, 58Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (non-touch), Intel® Core™ Ultra 5 135U, 16GB LPDDR5x, Win 11, 58Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter

• 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect</th>
<th>Contrast</th>
<th>Color</th>
<th>Refresh</th>
<th>Viewing Angle</th>
<th>Key Features</th>
</tr>
</thead>
</table>

ThinkPad T14s Gen 5 - July 04 2024
## Ratio Ratio Gamut Rate (L/R/U/D)

<table>
<thead>
<tr>
<th>Model</th>
<th>Resolution</th>
<th>Touchscreen Type</th>
<th>Brightness</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle</th>
<th>Screen to Body Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>14” IPS</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>400nits</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>88% screen to body ratio, 3M™ DBEF5</td>
</tr>
<tr>
<td>14” Multi-touch IPS</td>
<td>WUXGA (1920x1200)</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0, 88% screen to body ratio, 3M™ DBEF5</td>
</tr>
<tr>
<td>14” IPS</td>
<td>WUXGA (1920x1200)</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, 88% screen to body ratio</td>
</tr>
<tr>
<td>14” Multi-touch IPS</td>
<td>WUXGA (1920x1200)</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>ThinkPad® Privacy Guard, 88% screen to body ratio</td>
</tr>
<tr>
<td>14” 2.8K</td>
<td>2880x1800</td>
<td>None</td>
<td>OLED 400nits</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>120Hz</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0, 88% screen to body ratio</td>
</tr>
</tbody>
</table>

**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**
[1] 3M™ DBEF5 (Dual Brightness Enhancement Film) improves the experience with higher brightness and lower energy.
[2], [3], [4], [5] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
- 6-row, spill-resistant, multimedia Fn keys

**Keyboard Backlight**
- LED backlight

**UltraNav™**
- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
- Glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with grey cover</td>
<td>313.6 x 219.4 x 16.6 mm (12.35 x 8.64 x 0.65 inches)</td>
</tr>
<tr>
<td>Models with black cover</td>
<td>313.6 x 219.4 x 16.9 mm (12.35 x 8.64 x 0.67 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with grey cover</td>
<td>Starting at 1.45 kg (3.19 lbs)</td>
</tr>
<tr>
<td>Models with black cover</td>
<td>Starting at 1.24 kg (2.73 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
**Case Material**

- Grey models: aluminium (top), aluminium (bottom)
- Black models: carbon fiber hybrid (top), aluminium (bottom)

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**

No onboard Ethernet

**WLAN + Bluetooth®**

- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)

**WWAN**

- Wireless WAN upgradable to 4G (with antenna ready)
- Wireless WAN upgradable to 4G or 5G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- Quectel RM520N-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**

No physical SIM card inbox

**NFC**

- Near Field Communication
- No support

**Notes:**

[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[3] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

[4] Wi-Fi® 7 is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

**Ports**

**Standard Ports**

- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports**

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)
Notes:

[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® T14s Gen 5

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• System management password
• NVMe® password
• Certificate based BIOS authentication
• FIDO (Fast Identity Online) authentication
• Self-healing BIOS

Other Security
• Camera privacy shutter (camera models)
• Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
• (Optional) IR camera for Windows® Hello (facial recognition)
• Ultrasonic Human Presence Detection (IR camera models)[1]

Notes:

[1] Ultrasonic HPD is disabled by default.

MANAGEABILITY

System Management

System Management
• Intel® vPro® Enterprise[1]
• Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**
1-year courier or carry-in service
1-year courier or carry-in with 2-year system board service (Korea only)
1-year limited onsite service
3-year (1-yr battery) courier or carry-in service
3-year (1-yr battery) limited onsite service
No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14s Gen 5.

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- Carbon fiber plate (50% PIC foam core) + PC / GF (30% recycled) or 50% recycled aluminum on top cover
- 90% recycled magnesium on keyboard frame
- 55% recycled aluminum on bottom cover
- 85% PCC recycled plastic used in backlit keycaps
- 90% PCC recycled plastic used in speaker enclosure
- 90% recycled plastic used in the 58Wh battery frame
- 90% PCC recycled plastic used in standard 45W and 65W adapter
- 95% PCC recycled plastic used in cable holders
- Plastic free packaging with FSC certified paper

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14s Gen 5.
ThinkPad T14s Gen 5

- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

---

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit [epeat.net](https://epeat.net) and [energystar.gov](https://energystar.gov) for more information.

[3] EPEAT™ is registered where applicable, please visit [epeat.net](https://epeat.net) for registration status by country.

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

Other Certifications

- (Optional) Intel® Evo™ Platform
- (Optional) Eyesafe® Certified 2.0

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- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nano-SIM card slot *</td>
<td>5</td>
<td>2x Thunderbolt 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>USB-A (USB 5Gbps)</td>
<td>6</td>
<td>HDMI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>USB-A (USB 5Gbps), Always On</td>
<td>7</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Kensington Nano Security Slot</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor
Processor Family
Snapdragon® X Elite

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snapdragon® X1E-78-100</td>
<td>12</td>
<td>3.4GHz</td>
<td>42MB Total</td>
<td>Qualcomm® Adreno™ GPU</td>
<td>Qualcomm® Hexagon™ NPU, up to 45 TOPS</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro (on ARM)
- Windows® 11 Home (on ARM)

NPU

NPU
Qualcomm® Hexagon™ NPU integrated in Snapdragon® X Elite, up to 45 TOPS

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualcomm® Adreno™ GPU</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support[1]
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
- HDMI® supports up to 4K@60Hz
- Thunderbolt™ supports up to 5K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Chipset
Qualcomm® SoC (System on Chip) platform

Memory

Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable
- 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDR5x-8448[1]

Notes:
[1] Installed memory is actually LPDDR5x-8533 but run as LPDDR5x-8448 due to platform limitation.

Storage

Storage Support[1]
One drive, up to 1TB M.2 2242 SSD
Storage Slot
One M.2 2242 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
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<th>Offering</th>
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</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Qualcomm® WCD9385 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
Dual-microphone array, 360° far-field

Camera
FHD 1080p + IR discrete, with privacy shutter, MIPI, fixed focus, Always On Computer Vision

Battery

Battery
Integrated Li-Polymer 58Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Battery Life*[1]
Configuration 1 (max battery life)
JEITA-BAT 3.0 (Video/Idle): up to 19.32 hr / 37.37 hr @200nits
Local video playback: up to 34.9 hr @150nits

Alternate configuration 2
JEITA-BAT 3.0 (Video/Idle): up to 16.98 hr / 26.56 hr @200nits
Local video playback: up to 30.4 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA low power (non-touch), Snapdragon® X1E-78-100, 32GB LPDDR5x, Win 11, 58Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Snapdragon® X1E-78-100, 32GB LPDDR5x, Win 11, 58Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using JEITA 3.0 and continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[2]
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim GaN (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim GaN (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
### DESIGN

#### Display

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<tr>
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<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14”</td>
<td>WUXGA</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified 2.0, 87.5% screen to body ratio, 3M™ DBEF5</td>
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<tr>
<td>14”</td>
<td>WUXGA</td>
<td>None</td>
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<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
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</tr>
<tr>
<td>14”</td>
<td>2.8K</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>120Hz</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0, 87.5% screen to body ratio</td>
</tr>
</tbody>
</table>

#### Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

#### Input Device

**Keyboard**
- 6-row, spill-resistant, multimedia Fn keys

**Keyboard Backlight**
- LED backlight

**UltraNav™**
- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
- Glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

#### Mechanical

**Dimensions (WxDxH)**
- 313.6 x 219.4 x 16.9 mm (12.35 x 8.64 x 0.67 inches)

**Weight**
- Starting at 1.24 kg (2.72 lbs)

**Case Color**
- Black

**Case Material**
- CFRP (top), aluminium (bottom)
Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
No onboard Ethernet

**WLAN + Bluetooth®**
Qualcomm® Wi-Fi® 7 NCM825A, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)

**WWAN**
- Quectel RMS20N-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**
No physical SIM card inbox

**NFC**
No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3] 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country.

**Ports**

**Standard Ports**
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 1.4a
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports**
1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

**Docking**

**Docking**
Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® T14s Gen 6 (Snapdragon)]

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

**Physical Locks**
Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**
No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button, match-on-chip

**BIOS Security**
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**
- Computer Vision-based User Presence Sensing including lock on leave
- IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter

**SERVICE**

**Warranty**

**Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

**ACCESSORIES**

**Bundled Accessories**

**Bundled Accessories**
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T14s Gen 6 (Snapdragon®).

**OPERATING REQUIREMENTS**

**Operating Environment**

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

**ENVIRONMENTAL**
**Sustainability**

**Material**
- 50% recycled CFRP and 30% recycled resin on top cover
- 90% recycled magnesium on keyboard frame
- 55% recycled aluminum on bottom cover
- 85% PCC recycled plastic used in keycaps
- 90% PCC recycled plastic used in speaker enclosure
- 90% recycled plastic used in the 58Wh battery frame
- 90% PCC recycled plastic used in standard 65W adapter
- 95% PCC recycled plastic used in standard 65W adapter
- FSC certified Plastic free packaging

**CERTIFICATIONS**

**Green Certifications**

**Green Certifications**
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

**Notes:**
- The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
- EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit [epeat.net](http://epeat.net) and [energystar.gov](http://energystar.gov) for more information.
- EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

**Other Certifications**

**Mil-Spec Test**
- MIL-STD-810H military test passed

**Eyesafe® Certified 2.0**

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>2</td>
<td>SD card reader</td>
</tr>
<tr>
<td>3</td>
<td>HDMI</td>
</tr>
<tr>
<td>4</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>5</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>6</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>7</td>
<td>Power connector</td>
</tr>
<tr>
<td>8</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>9</td>
<td>Smart card reader *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
- Nano-SIM card slot on the rear side (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
12th Generation H series Intel® Core™ i7 processor, supports up to 14 cores, up to 4.8GHz

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i7-12700H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.3GHz / E-core 1.7GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>24MB</td>
</tr>
<tr>
<td>Core™ i7-12800H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.7GHz</td>
<td>24MB</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System
• Windows® 11 Pro
• Windows® 11 Home
• Windows® 11 Home Single Language
• Windows® 11 DG Windows® 10 Pro 64
• Ubuntu Linux LTS
• No preload operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® GeForce RTX™ 3050 Laptop GPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>35W</td>
<td>Dynamic Boost 2.0, DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 3 independent displays (native display and 2 external monitors via HDMI® and Thunderbolt™)
• HDMI® supports up to 3840x2160@60Hz
• Thunderbolt™ supports up to 5120x3200@60Hz (Thunderbolt™ or USB-C® to DP)

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
Up to 64GB DDR5-4800

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-4800 non-ECC

Storage

Storage Support
Up to two drives, 2x M.2 SSD
• M.2 2280 SSD up to 4TB, 2TB each
• RAID 0/1 support

Storage Slot
Two M.2 2280 PCIe® 4.0 x4 slots
## Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

### RAID
RAID 0/1 support

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo storage offerings.

## Removable Storage

### Optical
None

### Card Reader
SD card reader

## Multi-Media

### Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

### Speakers
Stereo speakers, 2W x2, Dolby Audio™ Premium

### Microphone
- Dual Microphone array, far-field, Dolby Voice®
- No microphone

### Camera
- HD 720p + IR hybrid with privacy shutter, fixed focus
- HD 720p with privacy shutter, fixed focus
- No camera

## Battery

### Battery
Integrated Li-Polymer 68Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

## Power Adapter

### Power Adapter
135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

## DESIGN

### Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.6”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/-/-/-</td>
<td>DC dimming</td>
</tr>
<tr>
<td>15.6”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>85°/85°/-/-/-</td>
<td>DC dimming</td>
</tr>
<tr>
<td>15.6”</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/-/-/-</td>
<td>DC dimming</td>
</tr>
</tbody>
</table>

---

ThinkPad T15p Gen 3 - May 06 2024
**ThinkPad T15p Gen 3**

<table>
<thead>
<tr>
<th>15.6” UHD (3840x2160)</th>
<th>None</th>
<th>IPS</th>
<th>600nits</th>
<th>Anti-glare</th>
<th>16:9</th>
<th>1400:1</th>
<th>100% Adobe® RGB</th>
<th>85°/85°/-/-</th>
<th>Dolby Vision®, DisplayHDR™ 400, DC dimming</th>
</tr>
</thead>
</table>

**Touchscreen**
- On-cell multi-touch, supports 10-point touch (selected FHD display)
- Non-touch

**Notes:**
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
3-button TrackPoint® pointing device and Mylar® surface multi-touch touchpad

**Mechanical**

**Dimensions (WxDxH)**
366.5 x 250 x 22.7 mm (14.43 x 9.84 x 0.89 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with discrete graphics</td>
<td>Starting at 2.226 kg (4.91 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
Black

**Case Material**
PC-ABS (top), PC-ABS (bottom)

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready)

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Fibocom L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card
- No support

**SIM Card**
- Gemalto eSIM card (physical)
- No physical SIM card inbox

**NFC**
No support
Notes:
[1] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.

Ports

Standard Ports
- 2x USB 3.2 Gen 1 (one Always On)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x SD card reader
- 1x Power connector

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Power Delivery only supports power-out for charging peripherals.

Docking

Docking
Various docking solutions supported via Thunderbolt™, USB-C®, or USB-A.
For more compatible docking solutions, please visit Docking for ThinkPad® T15p Gen 3

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Smart Card Reader
- Smart card reader
- No smart card reader

Fingerprint Reader
Touch style fingerprint reader on palm rest, match-on-chip

BIOS Security
- NVMe® password
- Power-on password
- Self-healing BIOS
- Supervisor password

Other Security
- Camera privacy shutter (camera models)
- (Optional) IR camera for Windows® Hello (facial recognition)

MANAGEABILITY
System Management

System Management

- Intel® vPro® Enterprise
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories

- (Optional) Lenovo® HDMI® to VGA Monitor Adapter
- (Optional) Lenovo® USB-C® to DisplayPort™ Adapter
- (Optional) Lenovo® USB-C® to VGA Adapter

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T15p Gen 3

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

90% recycled / sustainable packaging

CERTIFICATIONS
Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
RoHS compliant

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit [epeat.net](http://epeat.net) and [energystar.gov](http://energystar.gov) for more information.

[3] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

ISV Certifications

Please visit [ISV certifications for Lenovo Workstations](http://www.lenovo.com)

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Smart card reader *
2. USB 3.2 Gen 1
3. Kensington Nano Security Slot
4. Ethernet (RJ-45)
5. USB-C 3.2 Gen 2
6. USB-C 3.2 Gen 2
7. HDMI
8. USB 3.2 Gen 1 (Always On)
9. Headphone / microphone combo jack (3.5mm)
10. Nano-SIM card slot *

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 6650U</td>
<td>6</td>
<td>12</td>
<td>2.9GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 6850U</td>
<td>8</td>
<td>16</td>
<td>2.7GHz</td>
<td>4.7GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux[1]
- Linux[2]
- No preload operating system

Notes:
[1], [2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 660M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 680M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)
- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory

- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots

Memory soldered to systemboard, no slots, dual-channel

Memory Type

LPDDR5-6400

Storage

Storage Support

One drive, up to 2TB M.2 2280 SSD
Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, far-field, Dolby Voice®
- No microphone[1]

Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera

Notes:
[1] No microphone is for special bid only.

Battery

Battery**
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 86Wh battery

Battery Life[1]

Configuration 1 (max battery life)
MobileMark® 2018: up to 24.4 hr with 629 performance score @200nits
MobileMark® 25: up to 23.2 hr with 532 performance score @250nits
JEITA 2.0: up to 35.0 hr @150nits
Local video playback: up to 29.7 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 11.1 hr with 795 performance score @200nits
MobileMark® 25: up to 11.4 hr with 535 performance score @250nits
JEITA 2.0: up to 18.3 hr @150nits
Local video playback: up to 16.2 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 12.1 hr with 687 performance score @200nits
MobileMark® 25: up to 11.3 hr with 542 performance score @250nits
JEITA 2.0: up to 15.5 hr @150nits
Local video playback: up to 14.0 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA Low Power (non-touch), AMD Ryzen™ 7 PRO 6850U, 16GB LPDDR5, Win 10,
86Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 PRO 6650U, 16GB LPDDR5, Win 10, 52.5Wh battery, best power efficiency power mode
Alternate configuration 3: WQXGA (non-touch), AMD Ryzen™ 5 PRO 6650U, 32GB LPDDR5, Win 10, 52.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter[2]

Notes:
[2] No power adapter is for special bid only.

DESIGN

Display

Display**[1]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td>Dolby Vision®, TÜV Rheinland® Low Blue Light (Hardware Solution)</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device
Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 67.7 x 115 mm (2.67 x 4.53 inches)

Mechanical

Dimensions (WxDxH)\(^1\)
361.9 x 255.5 x 20.5 mm (14.25 x 10.06 x 0.81 inches)

Weight\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with storm grey cover</td>
<td>Starting at 1.738 kg (3.83 lbs)</td>
</tr>
<tr>
<td>Models with thunder black cover</td>
<td>Starting at 1.810 kg (3.99 lbs)</td>
</tr>
</tbody>
</table>

Case Color\(^*\)
- Storm grey
- Thunder black

Case Material\(^*\)
- Storm grey models: aluminium (top), PPS (bottom)
- Thunder black models: PC + 20% CF + 50% GF (top), PPS (bottom)

Notes:
\(^1\) The system dimensions may vary depending on configurations.
\(^2\) The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet\(^*\)
- Gigabit Ethernet, Realtek® RTL8111EPV (DASH models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Realtek® RTL8111HN (non-DASH models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®\(^*\)\(^1\)\(^2\)
- MediaTek Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)\(^2\)
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)\(^3\)

WWAN\(^*\)
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- No support

SIM Card
- Gemalto eSIM card (physical)
- No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
\[^1\] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
\[^2\], \[^3\] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

**Ports**

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

**Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® T16 Gen 1 (AMD)

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

**Physical Locks**
Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**
- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
Notes:
[1] Fingerprint reader is standard on storm grey models and optional on thunder black models.

**MANAGEABILITY**

**System Management**

**System Management**
- DASH
- Non-DASH

**SERVICE**

**Warranty**

**Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty[1]

Notes:
[1] No base warranty is for special bid only.

**ACCESSORIES**

**Bundled Accessories**

**Bundled Accessories**[1]
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T16 Gen 1 (AMD).

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

**Relative Humidity**
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

**Altitude**
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

**ENVIRONMENTAL**
Sustainability

Material
97% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the 52.5Wh battery frame
25-30% PCC recycled plastic used in the 86Wh battery frame
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 3
RoHS compliant
TCO Certified 9.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

(Optional) Eyesafe® Certified
( Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Smart card reader *  
2. USB 3.2 Gen 1  
3. Kensington Nano Security Slot  
4. Ethernet (RJ-45)  
5. Thunderbolt 4  
6. Thunderbolt 4  
7. HDMI  
8. USB 3.2 Gen 1 (Always On)  
9. Headphone / microphone combo jack (3.5mm)  
10. Nano-SIM card slot *

Notes:
- Items with * are only available on selected models
## PERFORMANCE

### Processor

**Processor Family**
12th Generation Intel® Core™ i5 / i7 Processor

### Processor**\(^{[1]}\)

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1250P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1270P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1280P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
\(^{[1]}\) Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

### Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021\(^{[1]}\)
- Ubuntu Linux\(^{[2]}\)
- Linux\(^{[3]}\)
- No preload operating system

Notes:
\(^{[1]}\) Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
\(^{[2]}, \[3]\) Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

### Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics(^{[1]})</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>NVIDIA® GeForce MX550</td>
<td>Discrete</td>
<td>2GB GDDR6</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:

---

ThinkPad T16 Gen 1 (Intel) - July 19 2023
Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)
- Thunderbolt™ supports up to 5K@60Hz
- HDMI® supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
- Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200
- Up to 48GB (16GB soldered + 32GB SO-DIMM) DDR4-3200

Memory Slots
One memory soldered to systemboard, one DDR4 SO-DIMM slot, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® x4</td>
<td>Performance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>512GB / 1TB / 2TB</td>
<td></td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] PCIe® x4 may be PCIe® 3.0x4 or PCIe® 4.0x4 as substitution.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, far-field, Dolby Voice®
- No microphone

**Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera

**Notes:**
1. No microphone is for special bid only.
2. Only HD 720p and FHD 1080p + IR hybrid are available in EMEA.

**Battery**

**Battery**
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 135W AC adapter
- Integrated Li-Polymer 86Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 135W AC adapter

**Battery Life**

Configuration 1 (max battery life)
- MobileMark® 2018: up to 10.1 hr with 786 performance score @200nits
- MobileMark® 25: up to 8.5 hr with 617 performance score @250nits
- JEITA 2.0: up to 17.1 hr @150nits
- Local video playback: up to 16.5 hr @150nits

Alternate configuration 2
- MobileMark® 2018: up to 9.4 hr with 911 performance score @200nits
- MobileMark® 25: up to 6.6 hr with 655 performance score @250nits
- JEITA 2.0: up to 12.0 hr @150nits
- Local video playback: up to 10.1 hr @150nits

Alternate configuration 3
- MobileMark® 2018: up to 7.5 hr with 1101 performance score @200nits
- MobileMark® 25: up to 5.0 hr with 722 performance score @250nits
- JEITA 2.0: up to 8.6 hr @150nits
- Local video playback: up to 7.4 hr @150nits

**Notes:**
1. Configuration 1 (max battery life): WUXGA (non-touch), Intel® i5-1240P, 8GB soldered DDR4-3200, Win 11, 52.5Wh battery, best power efficiency power mode
2. Alternate configuration 2: WUXGA (touch), Intel® i5-1250P, 16GB (8GB soldered + 8GB SO-DIMM) DDR4-3200, Win 11, 52.5Wh battery, best power efficiency power mode
3. Alternate configuration 3: WQXGA, Intel® i7-1280P, 32GB (16GB soldered + 16GB SO-DIMM) DDR4-3200, NVIDIA® GeForce MX550, Win 11, 52.5Wh battery, best power efficiency power mode

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**Power Adapter**

**Power Adapter**
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 135W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

**Notes:**
AC adapter offerings depend on the country.

45W USB-C® AC adapter is ONLY available for the models with integrated graphics. 45W USB-C® AC adapter and 65W USB-C® slim AC adapter are NOT available in EMEA.

No power adapter is for special bid only.

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<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td></td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>-</td>
<td>85°/85°/85°/85°</td>
<td>Eyesafe® Certified</td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

[2] Low power display is NOT available in EMEA.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 67.7 x 115 mm (2.67 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated graphics models</td>
<td>361.9 x 255.5 x 20.5 mm (14.25 x 10.06 x 0.81 inches)</td>
</tr>
<tr>
<td>Discrete graphics models</td>
<td>361.9 x 255.5 x 21.1 mm (14.25 x 10.06 x 0.83 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with thunder black cover and integrated graphics</td>
<td>Starting at 1.769 kg (3.9 lbs)</td>
</tr>
<tr>
<td>Models with storm grey cover</td>
<td>Starting at 1.803 kg (3.97 lbs)</td>
</tr>
<tr>
<td>Models with thunder black cover and discrete graphics</td>
<td>Starting at 1.842 kg (4.06 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**

---

ThinkPad T16 Gen 1 (Intel) - July 19 2023 5 of 10
• Storm grey
• Thunder black

Case Material
• Storm grey models: aluminium (top), PPS (bottom)
• Thunder black models: PC + 20% CF + 50% GF (top), PPS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] Storm grey cover is ONLY available for the models with integrated graphics.
Storm grey cover is ONLY available with backlit keyboard.
Storm grey cover is NOT available in EMEA.

CONNECTIVITY

Network

Ethernet**
• Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
• Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**(1)
• Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)(2)
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)(3)

WWAN**
• Wireless WAN upgradable to 4G (with antenna ready)(4)
• Quectel EM05-G, 4G LTE CAT4, M.2 card
• Fibocom L860-GL-16, 4G LTE CAT16, M.2 card(5)
• No support

SIM Card
• Gemalto eSIM card (physical)
• No physical SIM card inbox

NFC(6)
• Near Field Communication
• No support

Notes:
[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2], [3] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
[4] Wireless WAN upgradable to 4G is ONLY available in EMEA.
[5] Fibocom L860-GL CAT16 is special bid only in EMEA.
[6] NFC is NOT available for storm grey models.
NFC is special bid only in EMEA.

Ports**(1)

Standard Ports
• 1x USB 3.2 Gen 1
• 1x USB 3.2 Gen 1 (Always On)
• 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)

Optional Ports***
ThinkPad T16 Gen 1 (Intel)

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® T16 Gen 1 (Intel®)](#).

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Human Presence Detection (software)

Notes:
[1] Fingerprint reader is standard on storm grey models and optional on thunder black models.

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise
- Non-vPro®
Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**

• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty[1]

Notes:
[1] No base warranty is for special bid only.

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to VGA Adapter
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T16 Gen 1 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

97% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the 52.5Wh battery frame
25-30% PCC recycled plastic used in the 86Wh battery frame
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) Eyesafe® Certified

- Feature with ** means that only one offering listed under the feature is configured on selected models.

- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
### OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Feature</th>
<th></th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Smart card reader *</td>
<td>6</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>2</td>
<td>USB 3.2 Gen 1</td>
<td>7</td>
<td>HDMI</td>
</tr>
<tr>
<td>3</td>
<td>Kensington Nano Security Slot</td>
<td>8</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>4</td>
<td>Ethernet (RJ-45)</td>
<td>9</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5</td>
<td>USB4 40Gbps</td>
<td>10</td>
<td>Nano-SIM card slot *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 7540U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 7545U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7840U</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
</tr>
</tbody>
</table>

Operating System

Operating System
• Windows® 11 Pro
• Windows® 11 Home
• Windows® 11 Home Single Language
• Windows® 11 DG Windows® 10 Pro 64
• Ubuntu Linux\(^1\)
• Linux\(^2\)
• No preload operating system

Notes:
\(^1\), \(^2\) Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 740M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and USB4*)
• HDMI® supports up to 4K@60Hz
• USB-C® supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)
• USB4* supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
• 8GB soldered memory, not upgradable
• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable
• 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots, dual-channel

Memory Type

<table>
<thead>
<tr>
<th>Memory Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPDDR5-6400 (8GB)</td>
</tr>
<tr>
<td>LPDDR5x-6400 (16GB, 32GB or 64GB)(^{(1)})</td>
</tr>
</tbody>
</table>
Notes:

[1] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

Storage

Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone

- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone

Camera

- 5.0MP + IR discrete, with privacy shutter, fixed focus
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera

Notes:

[1] No microphone is for special bid only.
[2] No camera is for special bid only.

Battery

Battery

- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 86Wh battery

Battery Life

Configuration 1 (max battery life)
MobileMark® 25: up to 21.6 hr with 701 performance score @250nits
JEITA 2.0: up to 30.8 hr @150nits
Local video playback: up to 26.1 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 15.3 hr with 654 performance score @250nits
JEITA 2.0: up to 23.0 hr @150nits
Local video playback: up to 21.2 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 5.7 hr with 640 performance score @250nits
JEITA 2.0: up to 9.2 hr @150nits
Local video playback: up to 8.6 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA Low Power (non-touch), AMD Ryzen™ 7 PRO 7840U, 16GB LPDDR5x, Win 11, 86Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 PRO 7540U, 16GB LPDDR5x, Win 11, 86Wh battery, best power efficiency power mode
Alternate configuration 3: WQUXGA OLED (non-touch), AMD Ryzen™ 5 PRO 7540U, 32GB LPDDR5x, Win 11, 52.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:
[2] No power adapter is for special bid only.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-grease</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>16”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-grease</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>16”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-grease</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>16”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[4]</td>
<td>500nits</td>
<td>Anti-grease</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>16”</td>
<td>WQUXGA (3840x2400)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>87.5°/87.5°/87.5°/87.5°</td>
<td>DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch
Notes:

[1], [2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 67.7 x 115 mm (2.67 x 4.53 inches)

Mechanical

Dimensions (WxDxH)[1]
361.9 x 255.5 x 20.5 mm (14.25 x 10.06 x 0.81 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with thunder black cover and 52.5Wh battery</td>
<td>Starting at 1.71 kg (3.76 lbs)</td>
</tr>
<tr>
<td>Models with storm grey cover and 52.5Wh battery</td>
<td>Starting at 1.75 kg (3.84 lbs)</td>
</tr>
<tr>
<td>Models with thunder black cover and 86Wh battery</td>
<td>Starting at 1.83 kg (4.02 lbs)</td>
</tr>
<tr>
<td>Models with storm grey cover and 86Wh battery</td>
<td>Starting at 1.85 kg (4.08 lbs)</td>
</tr>
</tbody>
</table>

Case Color**
- Storm grey
- Thunder black

Case Material**
- Storm grey models: aluminium (top), aluminium (bottom)
- Thunder black models: carbon fiber hybrid (top), PPS (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
Gigabit Ethernet, Realtek® RTL8111EPV, 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®*[^1]
- MediaTek Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
• No support

Notes:

[1] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Standard Ports
• 1x USB 3.2 Gen 1
• 1x USB 3.2 Gen 1 (Always On)
• 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
• 1x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)

Optional Ports
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® T16 Gen 2 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• System management password
• NVMe® password
• Certificate based BIOS authentication
FIDO (Fast Identity Online) authentication
Self-healing BIOS

Other Security
- Camera privacy shutter (camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Ultrasonic Human Presence Detection (IR camera models)

Notes:
[1] Fingerprint reader is standard on storm grey models and optional on thunder black models.

MANAGEABILITY

System Management

SERVICE

Warranty
Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty[1]

Notes:
[1] No base warranty is for special bid only.

ACCESSORIES

Bundled Accessories
Bundled Accessories***[1]
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T16 Gen 2 (AMD).

OPERATING REQUIREMENTS

Operating Environment
Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)
Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
50% recycled aluminium on storm grey top cover
55% recycled aluminium on storm grey bottom cover
90% recycled magnesium on keyboard frame
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the 52.5Wh and 86Wh battery frame
90% PCC recycled plastic used in standard 65W and 100W adapters
Low-temperature solder
Standard packaging: 90% plastic free packaging
Bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) Eyesafe® Certified 2.0
• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Smart card reader *</td>
</tr>
<tr>
<td>2</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>4</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>5</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>6</td>
<td>Thunderbolt 4</td>
</tr>
<tr>
<td>7</td>
<td>HDMI</td>
</tr>
<tr>
<td>8</td>
<td>USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td>9</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>10</td>
<td>Nano-SIM card slot *</td>
</tr>
</tbody>
</table>

Notes:

- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation Intel® U or P Series Core™ i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1350P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1370P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:
[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with...
single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

[2] Discrete graphics is available only with Intel® P series processors.

**Monitor Support**

- Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)
  - Thunderbolt™ supports up to 5K@60Hz
  - HDMI® supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

**Chipset**

Intel® SoC (System on Chip) platform

**Memory**

- **Max Memory**
  - Models with DDR4 memory: up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200
  - Models with DDR5 memory: up to 32GB (16GB soldered + 16GB SO-DIMM) DDR5-5200
  - Models with 16GB LPDDR5x: 16GB soldered memory, not upgradable
  - Models with 32GB LPDDR5x: 32GB soldered memory, not upgradable

- **Memory Slots**
  - Models with DDR4 memory: one memory soldered to system board, one DDR4 SO-DIMM slot, dual-channel capable
  - Models with DDR5 memory: one memory soldered to system board, one DDR5 SO-DIMM slot, dual-channel capable
  - Models with LPDDR5x memory: memory soldered to system board, no slots, dual-channel

- **Memory Type**
  - DDR4-3200 (models with integrated graphics)
  - DDR5-5200 (models with integrated graphics)[2]
  - LPDDR5x-4800 (models with discrete graphics)[3]

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR5-5600 but run as DDR5-5200 due to platform limitation.
[3] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-4800 due to platform limitation.

**Storage**

- **Storage Support**
  - One drive, up to 2TB M.2 2280 SSD

- **Storage Slot**
  - One M.2 2280 PCIe® 4.0 x4 slot

- **Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

- **Card Reader**
  - No card reader

**Multi-Media**

- **Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone[1]

Camera
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera[2]

Notes:
[1] No microphone is for special bid only.
[2] No camera is for special bid only.

Battery

Battery**
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 135W AC adapter
- Integrated Li-Polymer 86Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 135W AC adapter

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 25: up to 10.0 hr @250nits
JEITA 2.0: up to 18.5 hr @150nits
Local video playback: up to 16.9 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 9.2 hr @250nits
JEITA 2.0: up to 19.5 hr @150nits
Local video playback: up to 17.1 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 7.0 hr @250nits
JEITA 2.0: up to 13.0 hr @150nits
Local video playback: up to 12.3 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® i5-1340P, 16GB soldered DDR5, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA low power (non-touch), Intel® i5-1335U, 16GB soldered DDR5, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), Intel® i5-1350P, 16GB soldered DDR5, Win 11, 52.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
135W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:
[2] No power adapter is for special bid only.

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[^1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[^2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[^3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0, ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[^4]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>87.5°/87.5°/87.5°/87.5°</td>
<td>-</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[^1],[^2],[^3],[^4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, numeric keypad

Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 67.7 x 115 mm (2.67 x 4.53 inches)

Mechanical
Dimensions (WxDxH)[^1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated graphics models</td>
<td>361.9 x 255.5 x 20.5 mm (14.25 x 10.06 x 0.81 inches)</td>
</tr>
<tr>
<td>Discrete graphics models</td>
<td>361.9 x 255.5 x 21.1 mm (14.25 x 10.06 x 0.83 inches)</td>
</tr>
</tbody>
</table>

Weight[^2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with thunder black cover and integrated graphics</td>
<td>Starting at 1.68 kg (3.70 lbs)</td>
</tr>
</tbody>
</table>
Models with storm grey cover and integrated graphics  Starting at 1.71 kg (3.75 lbs)
Models with discrete graphics  Starting at 1.74 kg (3.84 lbs)

**Case Color**
- Storm grey
- Thunder black

**Case Material**
- Storm grey models: aluminium (top), aluminium (bottom)
- Thunder black models: carbon fiber hybrid (top), PPS (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**
- No physical SIM card inbox

**NFC**
- No support

Notes:
[1] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

**Ports**

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

**Optional Ports**
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)
Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® T16 Gen 2 (Intel®)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• System management password
• NVMe® password
• Certificate based BIOS authentication
• FIDO (Fast Identity Online) authentication
• Self-healing BIOS

Other Security
• Camera privacy shutter (camera models)
• Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
• (Optional) IR camera for Windows® Hello (facial recognition)
• Glance by Mirametrix®
• Ultrasonic Human Presence Detection (IR camera models)

MANAGEABILITY

System Management

System Management**
• Intel® vPro® Enterprise[3]
• Intel® vPro® Essentials[2]
• Non-vPro®

Notes:

[1], [2] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE
Warranty

Base Warranty**

• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories*[(1)]

• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to VGA Adapter
• None

Notes:
[(1)] For more compatible accessory solutions, please visit Accessories for ThinkPad® T16 Gen 2 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[(1)]

• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[(1)] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
50% recycled aluminium on storm grey top cover
55% recycled aluminium on storm grey bottom cover
90% recycled magnesium on keyboard frame
95% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the 52.5Wh and 86Wh battery frame
90% PCC recycled plastic used in standard 45W, 65W and 135W adapters
Low-temperature solder
Standard packaging: 90% plastic free packaging
Bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications[(1)]
Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
(Optional) Eyesafe® Certified 2.0

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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## OVERVIEW

<table>
<thead>
<tr>
<th>No</th>
<th>Feature</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Smart card reader *</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Nano-SIM card slot *</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>USB-A (USB 5Gbps)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ethernet (RJ-45)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Kensington Nano Security Slot</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2x Thunderbolt 4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>HDMI</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>USB-A (USB 5Gbps), Always On</td>
<td></td>
</tr>
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<td>9</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
<td></td>
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</tbody>
</table>

**Notes:**

- Items with * are only available on selected models
## PERFORMANCE

### Processor

**Processor Family**
Intel® U or H Series Core™ Ultra 5 / 7 Processor (Series 1)

### Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz</td>
<td>P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
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<td>Intel® AI Boost</td>
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<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
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<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
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Notes:
[1], [2], [3], [4] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

### Operating System

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64[^1]
- Ubuntu Linux[^2]
- Linux[^3]
- No preload operating system

Notes:
[^1] Windows® 11 DG Windows® 10 Pro 64 is for special bid only.
[^2], [^3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

### NPU

**NPU**

Intel® AI Boost integrated in Intel® Core™ Ultra processor
ThinkPad T16 Gen 3

**Graphics**

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics</td>
<td>Integrated</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Arc™ Graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

**Monitor Support**

**Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
- HDMI® supports up to 4K@60Hz
- Thunderbolt™ supports up to 8K@60Hz

Notes:
[1] Refresh rates >60Hz also supported, however max resolution will be limited.
[2] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

**Chipset**

**Chipset**

Intel® SoC (System on Chip) platform

**Memory**

**Max Memory**

Up to 64GB DDR5-5600

**Memory Slots**

Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR5-5600

**Storage**

**Storage Support**

One drive, up to 2TB M.2 2280 SSD

**Storage Slot**

One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone

Camera**
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- 5.0MP, with privacy shutter, fixed focus
- No camera[1]

Notes:
[1] No camera is for special bid only.

Battery

Battery**
- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 100W AC adapter
- Integrated Li-Polymer 86Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 100W AC adapter

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 25: up to 11.3 hr with 610 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 10.6 hr / 23.2 hr @200nits
Local video playback: up to 22.6 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 10.8 hr with 651 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 10.2 hr / 22.1 hr @200nits
Local video playback: up to 18.6 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 9.2 hr with 633 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 8.8 hr / 16.2 hr @200nits
Local video playback: up to 15.9 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA low power (non-touch), Intel® Core™ Ultra 5 125U, 8GB DDR5, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA low power (non-touch), Intel® Core™ Ultra 5 125H, 8GB DDR5, Win 11, 52.5Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (non-touch), Intel® Core™ Ultra 5 135U, 16GB DDR5, Win 11, 52.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter*[1]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
Notes:

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>80°/80°/80°/80°</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>45% NTSC</td>
<td>60Hz</td>
<td>80°/80°/80°/80°</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>80°/80°/80°/80°</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[4]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>16&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>60Hz</td>
<td>87.5° / 87.5° / 87.5° / 87.5°</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1], [2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
6-row, spill-resistant, multimedia Fn keys, numeric keypad

Keyboard Backlight
- LED backlight
- Non-backlight

UltraNav™
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Glass-like Mylar® surface multi-touch touchpad, 67.7 x 115 mm (2.67 x 4.53 inches)

Mechanical
Dimensions (WxDxH)
### CONNECTIVITY

#### Network

**Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Wireless WAN upgradable to 4G or 5G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- Quectel RM520N-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**
- No physical SIM card inbox

**NFC**
- Near Field Communication
- No support

Notes:
- [1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
- [2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
- [3] Wi-Fi® 7 is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
- Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](https://support.microsoft.com).

#### Ports

**Standard Ports**
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)
• 1x Ethernet (RJ-45)

Optional Ports***
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking
Docking
Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® T16 Gen 3

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• System management password
• NVMe® password
• Certificate based BIOS authentication
• FIDO (Fast Identity Online) authentication
• Self-healing BIOS

Other Security
• Camera privacy shutter (camera models)
• Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
• (Optional) IR camera for Windows® Hello (facial recognition)
• Ultrasonic Human Presence Detection (IR camera models)

MANAGEABILITY

System Management
System Management
• Intel® vPro® Enterprise[^1]
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE
Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories**[1]**
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T16 Gen 3.

OPERATING REQUIREMENTS

Operating Environment

Temperature**[1]**
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 30% PCC recycled plastic on top cover
- 90% recycled magnesium on keyboard frame
- 30% PCC recycled plastic on bottom cover
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery frame
- 85% PCC recycled plastic for backlit keycaps
- 70% PCC recycled plastic for non-backlit keycaps
- 90% PCC recycled plastic used in 65W and 65W slim adapters
- Plastic free packaging

CERTIFICATIONS

Green Certifications**[1]**
Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

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**Processor**

**Processor Family**

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<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux\(^1\)
- Linux\(^2\)
- No preload operating system

Notes:

\(^1\), \(^2\) Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

**NPU**

**NPU**

Intel® AI Boost integrated in Intel® Core™ Ultra processor

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
</tr>
</tbody>
</table>

**Monitor Support**

**Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)

- HDMI® supports up to 4K@60Hz
- Thunderbolt™ supports up to 8K@60Hz\(^2\)

Notes:

\(^1\) Refresh rates >60hz also supported, however max resolution will be limited.

\(^2\) 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

**Chipset**
Chipset
Intel® SoC (System on Chip) platform

Memory
Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable
- 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots, dual-channel

Memory Type
LPDDR5x-6400

Notes:
[1] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

Storage
Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™ Premium

Microphone
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone

Camera
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- 5.0MP, with privacy shutter, fixed focus
- No camera

Battery

Battery
- Integrated Li-Polymer 41Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 54.7Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life
Configuration 1 (max battery life)
MobileMark® 25: up to 14.0 hr with 657 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 10.0 hr / 29.9 hr @200nits
Local video playback: up to 21.1 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 12.7 hr with 672 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 12.1 hr / 23.3 hr @200nits
Local video playback: up to 17.1 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA low power (touch), Intel® Core™ Ultra 5 125U, 16GB LPDDR5x, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® Core™ Ultra 5 135U, 16GB LPDDR5x, Win 11, 54.7Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

DESIGN

Display

Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

Touchscreen
OGS (One Glass Solution) multi-touch, supports 10-point touch

Notes:
[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Multi-mode

Multi-mode
Laptop, tent, stand, and tablet modes supported by 360° hinge

**Input Device**

**Pen**
- Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and rechargeable
- No pen (purchase separately)

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
LED backlight

**UltraNav™**
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu

Glass-like Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**[^1]
301.7 x 214.6 x 16.4 mm (11.88 x 8.45 x 0.65 inches)

**Weight**[^2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with 41Wh battery and grey top cover</td>
<td>Starting at 1.22 kg (2.69 lbs)</td>
</tr>
<tr>
<td>Models with 41Wh battery and black top cover</td>
<td>Starting at 1.20 kg (2.65 lbs)</td>
</tr>
<tr>
<td>Models with 54.7Wh battery and black top cover</td>
<td>Starting at 1.25 kg (2.76 lbs)</td>
</tr>
<tr>
<td>Models with 54.7Wh battery and grey top cover</td>
<td>Starting at 1.26 kg (2.78 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**[^3]
- Black
- Grey

**Case Material**
Magnesium (top), magnesium (bottom)

---

**Notes:**
[^1] The system dimensions may vary depending on configurations.
[^2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
No onboard Ethernet[^1]

**WLAN + Bluetooth**[^2]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[^3]
- Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)[^4]

**WWAN**[^5]
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

**SIM Card**
No physical SIM card inbox

**NFC**
- Near Field Communication
• No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
[4] Wi-Fi® 7 is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
[5] Wireless WAN upgradable to 4G is only available in EMEA.

Ports

Standard Ports
• 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
• 1x USB-A (USB 5Gbps / USB 3.2 Gen 1, Always On)
• 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)

Optional Ports***
• 1x Smart card reader
• 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Docking
Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® X13 2-in-1 Gen 5

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
• Smart card reader, supports ISO 7816 and EMV
• No smart card reader

Fingerprint Reader
• Touch style fingerprint reader integrated in power button, match-on-chip
• No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• System management password
• NVMe® password
• Certificate based BIOS authentication
• FIDO (Fast Identity Online) authentication
• Self-healing BIOS

Other Security
• Camera privacy shutter (camera models)
• (Optional) IR camera for Windows® Hello (facial recognition)
• Ultrasonic Human Presence Detection (IR camera models)

MANAGEABILITY
System Management
• Intel® vPro® Enterprise[^1]
• Non-vPro®

Notes:
[^1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE
Warranty
Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES
Bundled Accessories
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to DisplayPort™ Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to VGA Adapter
• None

Notes:
[^1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X13 2-in-1 Gen 5.

OPERATING REQUIREMENTS
Operating Environment
Temperature[^1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
90% recycled magnesium on top cover
90% recycled magnesium on keyboard frame
55% recycled magnesium on bottom cover
85% PCC recycled plastic used in keycaps
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery enclosure
90% PCC recycled plastic used in standard 45W and 65W adapters
Plastic free packaging with FSC certified

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 6/26
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Notes:
• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Smart card reader *
2. USB 3.2 Gen 1
3. Kensington Nano Security Slot
4. USB4
5. USB-C 3.2 Gen 2
6. HDMI
7. USB 3.2 Gen 1 (Always On)
8. Headphone / microphone combo jack (3.5mm)
9. Nano-SIM card slot *

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 6650U</td>
<td>6</td>
<td>12</td>
<td>2.9GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 6850U</td>
<td>8</td>
<td>16</td>
<td>2.7GHz</td>
<td>4.7GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M</td>
</tr>
</tbody>
</table>

Operating System

Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021[^1]
- Ubuntu Linux[^2]
- Linux[^3]
- No preload operating system

Notes:
[^1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[^2],[^3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 660M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 680M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C™)
- HDMI® supports up to 4K@60Hz
- USB-C™ supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDR5-6400

Storage

Storage Support[^4]
ThinkPad X13 Gen 3 (AMD)

One drive, up to 2TB M.2 2280 SSD

**Storage Slot**
One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™

**Microphone**
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone

**Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera

**Battery**

**Battery**
- Integrated Li-Polymer 41Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 54.7Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 2018: up to 15.68 hr with 868 performance score @200nits
MobileMark® 25: up to 13.7 hr with 531 performance score @250nits
JEITA 2.0: up to 20.28 hr @150nits
Local video playback: up to 17.3 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 15.67 hr with 724 performance score @200nits
MobileMark® 25: up to 14.47 hr with 669 performance score @250nits
JEITA 2.0: up to 21.58 hr @150nits
Local video playback: up to 18 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 10.8 hr with 702 performance score @200nits
MobileMark® 25: up to 9.36 hr with 542 performance score @250nits
JEITA 2.0: up to 13.66 hr @150nits
Local video playback: up to 12.3 hr @150nits

Notes:

[1] Configuration 1 (max battery life): WQXGA (non-touch), AMD Ryzen™ 7 PRO 6850U, 16GB LPDDR5, Win 10, 54.7Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 PRO 6650U, 16GB LPDDR5, Win 10, 54.7Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA 300nits (non-touch), AMD Ryzen™ 5 PRO 6650U, 32GB LPDDR5, Win 10, 41Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**[1]

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter[2]

Notes:
[2] No power adapter is for special bid only.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3” WUXGA (1920x1200)</td>
<td>None IPS 300nits Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.3” WUXGA (1920x1200)</td>
<td>Multi-touch IPS 300nits Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.3” WUXGA (1920x1200)</td>
<td>None IPS 500nits Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.3” WQXGA (2560x1600)</td>
<td>None IPS 400nits Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Dolby Vision®, TÜV Low Blue Light (Hardware Solution)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with PPS top cover</td>
<td>305.8 x 217.56 x 18.10 mm (12.04 x 8.57 x 0.71 inches)</td>
</tr>
<tr>
<td>Models with CF /GF hybrid top cover</td>
<td>305.8 x 217.89 x 18.25 mm (12.04 x 8.58 x 0.72 inches)</td>
</tr>
<tr>
<td>Models with aluminium top cover</td>
<td>305.8 x 218.39 x 18.10 mm (12.04 x 8.60 x 0.71 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with WUXGA display, 41Wh battery, and black carbon fiber top cover</td>
<td>Starting at 1.19 kg (2.62 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 41Wh battery, and black PPS top cover</td>
<td>Starting at 1.25 kg (2.77 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 54.7Wh battery, and black carbon fiber top cover</td>
<td>Starting at 1.26 kg (2.77 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 54.7Wh battery, and black PPS top cover</td>
<td>Starting at 1.31 kg (2.88 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 41Wh battery, and storm grey top cover</td>
<td>Starting at 1.33 kg (2.93 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 54.7Wh battery, and storm grey top cover</td>
<td>Starting at 1.38 kg (3.04 lbs)</td>
</tr>
<tr>
<td>Models with WQXGA display, 41Wh battery, and black PPS top cover</td>
<td>Starting at 1.21 kg (2.67 lbs)</td>
</tr>
<tr>
<td>Models with WQXGA display, 54.7Wh battery, and black PPS top cover</td>
<td>Starting at 1.26 kg (2.78 lbs)</td>
</tr>
<tr>
<td>Models with WQXGA display, 41Wh battery, and storm grey top cover</td>
<td>Starting at 1.28 kg (2.82 lbs)</td>
</tr>
<tr>
<td>Models with WQXGA display, 54.7Wh battery, and storm grey top cover</td>
<td>Starting at 1.34 kg (2.94 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**

- Storm grey
- Thunder black

**Case Material**

- Storm grey models: aluminium (top), aluminium (bottom)
- Thunder black models: carbon fiber hybrid or PPS (top), aluminium (bottom)

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
No onboard Ethernet

**WLAN + Bluetooth®**
- MediaTek Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**
- Gemalto eSIM card (physical)
- No physical SIM card inbox
NFC
- Near Field Communication
- No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3], [4] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Ports

Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® X13 Gen 3 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
System management password
• NVMe® password
• Certificate based BIOS authentication
• FIDO (Fast Identity Online) authentication

Other Security
• Camera privacy shutter (camera models)
• (Optional) IR camera for Windows® Hello (facial recognition)
• Glance by Mirametrix®
• (Optional) Human Presence Detection

MANAGEABILITY

System Management

SERVICE

Warranty
Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

OPERATING REQUIREMENTS

Operating Environment
Temperature\(^{[1]}\)
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X13 Gen 3 (AMD).
When you charge the battery, its temperature must be no lower than 10°C (50°F).

**ENVIRONMENTAL**

**Sustainability**

**Material**
- 97% PCC recycled plastic used in speaker enclosure
- 25% PCC recycled plastic used in the 54.7Wh battery frame
- 95% PCC recycled plastic used in standard 65W adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging

**CERTIFICATIONS**

**Green Certifications**

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

**Other Certifications**

- **Mil-Spec Test**
  - MIL-STD-810H military test passed

- **Other Certifications**
  - (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
# OVERVIEW

1. Smart card reader *
2. USB 3.2 Gen 1
3. Kensington Nano Security Slot
4. Thunderbolt 4
5. Thunderbolt 4
6. HDMI
7. USB 3.2 Gen 1 (Always On)
8. Headphone / microphone combo jack (3.5mm)
9. Nano-SIM card slot *

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
12th Generation Intel® Core™ i3 / i5 / i7 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1250P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1270P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1280P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:

[1] i3-1215U, i7-1255U, i7-1265U and i7-1280P are NOT available in EMEA.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux
- Linux
- No preload operating system

Notes:

[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.

[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>
Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)
• Thunderbolt™ supports up to 5K@60Hz
• HDMI® supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory
• 8GB soldered memory, not upgradable
• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable[1]

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDR5-4800[2]

Notes:
[1] In EMEA, 32GB memory is only available for i7 models.
[2] Installed memory is actually LPDDR5-6400 but run as LPDDR5-4800 due to platform limitation.

Storage

Storage Support[3]
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type[4]

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® x4 x4 Performance</td>
<td>512GB / 1TB / 2TB[2]</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® x4[3]</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] 2TB SSD is special bid only in EMEA.
[3] PCIe® x4 may be PCIe® 3.0x4 or PCIe® 4.0x4 as substitution.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™

Microphone
• Dual-microphone array, far-field, Dolby Voice®
**Camera**
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera

**Battery**

**Battery**
- Integrated Li-Polymer 41Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 54.7Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 2018: up to 11.8 hr with 872 performance score @200nits
MobileMark® 25: up to 9.7 hr with 618 performance score @250nits
JEITA 2.0: up to 19.8 hr @150nits
Local video playback: up to 15.7 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 11.3 hr with 982 performance score @200nits
MobileMark® 25: up to 9.7 hr with 791 performance score @250nits
JEITA 2.0: up to 19.5 hr @150nits
Local video playback: up to 15.2 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 8.4 hr with 1243 performance score @200nits
MobileMark® 25: up to 5.9 hr with 711 performance score @250nits
JEITA 2.0: up to 14.1 hr @150nits
Local video playback: up to 14 hr @150nits

**Notes:**
[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® i5-1240P, 8GB LPDDR5, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® i5-1245U, 16GB LPDDR5, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 3: WQXGA, Intel® i7-1280U, 32GB LPDDR5, Win 11, 54.7Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.

Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

**Notes:**
[2] No power adapter is for special bid only.
**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
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<td>ThinkPad® Privacy Guard</td>
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<tr>
<td>13.3”</td>
<td>WQXGA (2560x1600) [2]</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
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**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
[2] WQXGA display is NOT available in EMEA.

**Input Device**

**Keyboard**
- 6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
- LED backlight
- Non-backlight[3]

**UltraNav™**
- TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

**Notes:**

[1] Non-backlit keyboard is only available for the models with thunder black cover.

**Mechanical**

**Dimensions (WxDxH)[2]**

<table>
<thead>
<tr>
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<td>305.8 x 218.39 x 18.10 mm (12.04 x 8.60 x 0.71 inches)</td>
</tr>
</tbody>
</table>

**Weight[2]**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with WUXGA display, 41Wh battery, and black carbon fiber top cover</td>
<td>Starting at 1.20 kg (2.65 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 54.7Wh battery, and black carbon fiber top cover</td>
<td>Starting at 1.24 kg (2.74 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 41Wh battery, and black PPS top cover</td>
<td>Starting at 1.25 kg (2.77 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 41Wh battery, and storm grey top cover</td>
<td>Starting at 1.28 kg (2.83 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 54.7Wh battery, and black PPS top cover</td>
<td>Starting at 1.29 kg (2.85 lbs)</td>
</tr>
<tr>
<td>Models with WUXGA display, 54.7Wh battery, and storm grey top cover</td>
<td>Starting at 1.32 kg (2.91 lbs)</td>
</tr>
<tr>
<td>Models with WQXGA display, 41Wh battery, and black PPS top cover</td>
<td>Starting at 1.23 kg (2.71 lbs)</td>
</tr>
</tbody>
</table>
Models with WQXGA display, 54.7Wh battery, and black PPS top cover
Starting at 1.26 kg (2.78 lbs)

Case Color**
- Storm grey[3]
- Thunder black

Case Material**
- Storm grey models: aluminium (top), aluminium (bottom)
- Thunder black models: carbon fiber hybrid or PPS (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] Storm grey case is NOT available in EMEA.

CONNECTIVITY

Network

Ethernet
No onboard Ethernet[1]

WLAN + Bluetooth®[2]
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)[3]

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

SIM Card
- Gemalto eSIM card (physical)
- No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Ports[1]

Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 2.0)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® X13 Gen 3 (Intel)](https://www.lenovo.com).

### SECURITY & PRIVACY

**Security**

- **Security Chip**
  - Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

- **Physical Locks**
  - Kensington® Nano Security Slot™, 2.5 x 6 mm

- **Smart Card Reader**
  - Smart card reader, supports ISO 7816 and EMV
  - No smart card reader

- **Fingerprint Reader**
  - Touch style fingerprint reader integrated in power button, match-on-chip
  - No fingerprint reader

- **BIOS Security**
  - Supervisor password
  - Power-on password
  - System management password
  - NVMe® password
  - Certificate based BIOS authentication
  - FIDO (Fast Identity Online) authentication
  - Self-healing BIOS

- **Other Security**
  - Camera privacy shutter (camera models)
  - Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
  - (Optional) IR camera for Windows® Hello (facial recognition)
  - Glance by Mirametrix®
  - (Optional) Human Presence Detection
  - Tile ready

### MANAGEABILITY

**System Management**

- Intel® vPro® Enterprise
- Intel® vPro® Essentials
- Non-vPro®

Notes:

[1], [2] Intel® vPro® offers a superset of DASH’s defined capabilities.

### SERVICE
Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X13 Gen 3 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

- 97% PCC recycled plastic used in speaker enclosure
- 25% PCC recycled plastic used in the 54.7Wh battery frame
- 95% PCC recycled plastic used in standard 65W adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications[2]

Green Certifications[2]

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[3]
• ErP Lot 3
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
• (Optional) Intel® Evo™ Platform
• (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. USB4
2. USB4
3. USB 3.2 Gen 1 (Always On)
4. Headphone / microphone combo jack (3.5mm)
5. Smart card reader *
6. Nano-SIM card slot *
7. USB 3.2 Gen 1
8. HDMI
9. Kensington Nano Security Slot

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 7540U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 7545U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7840U</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
</tr>
</tbody>
</table>

Operating System

Operating System

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux
- Linux
- No preload operating system

Notes:
[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 740M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB4*)
- HDMI® supports up to 4K@60Hz
- USB4* supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory

- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots

Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDR5x-6400\[1\]

Notes:

[1] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

Storage

Storage Support\[8\]

One drive, up to 2TB M.2 2280 SSD

Storage Slot

One M.2 2280 PCIe® 4.0 x4 slot

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers

Stereo speakers, 2W x2, Dolby Audio™

Microphone

- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone\[1\]

Camera**

- 5.0MP + IR discrete, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus
- No camera\[2\]

Notes:

[1] No microphone is for special bid only.
[2] No camera is for special bid only.

Battery

Battery**

- Integrated Li-Polymer 41Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 54.7Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life\[1\]

Configuration 1 (max battery life)
MobileMark® 25: up to 15.3 hr with 692 performance score @250nits
JEITA 2.0: up to 22.29 hr @150nits
Local video playback: up to 18.9 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 12.31 hr with 682 performance score @250nits
JEITA 2.0: up to 21.66 hr @150nits
Local video playback: up to 16.26 hr @150nits
Alternate configuration 3
MobileMark® 25: up to 11.46 hr with 699 performance score @250nits
JEITA 2.0: up to 16.7 hr @150nits
Local video playback: up to 14.16 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA low power (non-touch), AMD Ryzen™ 7 PRO 7840U, 16GB LPDDR5x, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 PRO 7540U, 16GB LPDDR5x, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA low power (non-touch), AMD Ryzen™ 7 PRO 7840U, 16GB LPDDR5x, Win 11, 41Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[2]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:
[2] No power adapter is for special bid only.

DESIGN

Display

Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device
Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
- LED backlight
- Non-backlight[1]

UltraNav™
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

Notes:
[1] Non-backlit keyboard is only available for the models with deep black cover.

Mechanical

Dimensions (WxDxH)[1]
301.7 x 214.8 x 15.95 mm (11.88 x 8.46 x 0.63 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with deep black CFRP top cover</td>
<td>Starting at 1.14 kg (2.51 lbs)</td>
</tr>
<tr>
<td>Models with carbon fiber hybrid top cover</td>
<td>Starting at 1.19 kg (2.63 lbs)</td>
</tr>
<tr>
<td>Models with aluminium top cover</td>
<td>Starting at 1.30 kg (2.87 lbs)</td>
</tr>
</tbody>
</table>

Case Color**
- Deep black
- Storm grey

Case Material**
- Deep black models: carbon fiber hybrid or CFRP (top), aluminium (bottom)
- Storm grey models: aluminium (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
No onboard Ethernet[1]

WLAN + Bluetooth®**[2]
- MediaTek Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)[3]
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom LB60-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC[4]
- Near Field Communication
- No support

Notes:
Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

[2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

[3] Wireless WAN upgradable to 4G is ONLY available in EMEA.

[4] NFC is mutually exclusive with smart card reader.

Ports

Standard Ports
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;

Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® X13 Gen 4 (AMD)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS
Other Security
- Camera privacy shutter (camera models)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Ultrasonic Human Presence Detection (IR camera models)

Notes:
[1] Smart card reader is mutually exclusive with NFC.

MANAGEABILITY

System Management
- DASH
- Non-DASH

SERVICE

Warranty
Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories
Bundled Accessories***[1]
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X13 Gen 4 (AMD).

OPERATING REQUIREMENTS

Operating Environment
Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).
ENVIRONMENTAL

Sustainability

Material
50% recycled aluminium on storm grey top cover
50% recycled aluminium or 90% recycled magnesium on keyboard frame
55% recycled aluminium on bottom cover
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery enclosure
90% PCC recycled plastic used in standard 45W and 65W adapters
Low-temperature solder
Retail packaging: plastic free packaging with 100% bamboo sugarcane fiber
Standard or bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

( Optional ) Eyesafe® Certified 2.0

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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OVERVIEW

1. Nano-SIM card slot *
2. USB 3.2 Gen 1
3. HDMI
4. Kensington Nano Security Slot
5. Thunderbolt 4
6. Thunderbolt 4
7. USB 3.2 Gen 1 (Always On)
8. Headphone / microphone combo jack (3.5mm)
9. Smart card reader *

Notes:
* Items with * are only available on selected models
**PERFORMANCE**

**Processor**

**Processor Family**

13th Generation Intel® U or P Series Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1315U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1350P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1370P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® P series processors are for special bid only.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux
- Linux
- No preload operating system

Notes:

[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.

[2, 3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

**Monitor Support**

**Monitor Support**

---

ThinkPad X13 Gen 4 (Intel) - February 04 2024
Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)
• Thunderbolt™ supports up to 5K@60Hz
• HDMI® supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
• 8GB soldered memory, not upgradable
• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDR5-4800

Notes:
[1] Installed memory is actually LPDDR5-6400 but run as LPDDR5-4800 due to platform limitation.

Storage

Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™ Premium

Microphone
• Dual-microphone array, 360° far-field, Dolby Voice®
• No microphone

Camera
• 5.0MP + IR discrete, with privacy shutter, fixed focus
• FHD 1080p, with privacy shutter, fixed focus
• HD 720p, with privacy shutter, fixed focus
• No camera

ThinkPad X13 Gen 4 (Intel) - February 04 2024
Notes:
[1] No camera is for special bid only.

**Battery**

Integrated Li-Polymer 41Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
Integrated Li-Polymer 54.7Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**[1]

Configuration 1 (max battery life)
MobileMark® 25: up to 12.2 hr with 822 performance score @250nits
JEITA 2.0: up to 22.9 hr @150nits
Local video playback: up to 19.0 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 11.2 hr with 638 performance score @250nits
JEITA 2.0: up to 21.6 hr @150nits
Local video playback: up to 17.5 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 10.6 hr with 639 performance score @250nits
JEITA 2.0: up to 18.5 hr @150nits
Local video playback: up to 15.6 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA low power (non-touch), Intel® i3-1315U, 8GB LPDDR5, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA low power (non-touch), Intel® i5-1340P, 16GB LPDDR5, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), Intel® i5-1350P, 16GB LPDDR5, Win 11, 54.7Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
No power adapter[2]

Notes:
[2] No power adapter is for special bid only.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
</table>

ThinkPad X13 Gen 4 (Intel) - February 04 2024
**ThinkPad X13 Gen 4 (Intel)**

### Display

<table>
<thead>
<tr>
<th>Model</th>
<th>Resolution</th>
<th>Native Refresh Rate</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angles</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3” WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
</tr>
<tr>
<td>13.3” WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
</tr>
<tr>
<td>13.3” WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
</tr>
<tr>
<td>13.3” 2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
</tr>
</tbody>
</table>

**Touchscreen**

- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

### Input Device

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**

- LED backlight
- Non-backlight[3]

**UltraNav™**

TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

**Notes:**

[1] Non-backlit keyboard is only available for the models with deep black cover.

### Mechanical

**Dimensions (WxDxH)**[3]

301.7 x 214.8 x 15.95 mm (11.88 x 8.46 x 0.63 inches)

**Weight**[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with deep black carbon fiber hybrid top cover</td>
<td>Starting at 1.09 kg (2.41 lbs)</td>
</tr>
<tr>
<td>Models with deep black CFRP top cover</td>
<td>Starting at 1.12 kg (2.47 lbs)</td>
</tr>
<tr>
<td>Models with storm grey top cover</td>
<td>Starting at 1.25 kg (2.76 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**[2]

- Deep black
- Storm grey

**Case Material**[2]

- Deep black models: carbon fiber hybrid or CFRP (top), aluminium (bottom)
- Storm grey models: aluminium (top), aluminium (bottom)

**Notes:**

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

### CONNECTIVITY

---

**ThinkPad X13 Gen 4 (Intel) - February 04 2024**

5 of 10
**Network**

Ethernet
No onboard Ethernet

**WLAN + Bluetooth®**

Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

**WWAN**

- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**

No physical SIM card inbox

**NFC**

- Near Field Communication
- No support

---

**Notes:**

[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

[2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

[3] Wireless WAN upgradable to 4G is ONLY available in EMEA.

[4] NFC is mutually exclusive with smart card reader.

---

**Ports**

**Standard Ports**

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 2.0)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports**

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

---

**Docking**

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® X13 Gen 4 (Intel®)

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**SECURITY & PRIVACY**

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ThinkPad X13 Gen 4 (Intel) - February 04 2024

6 of 10
Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- Camera privacy shutter (camera models)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Ultrasonic Human Presence Detection (IR camera models)

Notes:
[1] Smart card reader is mutually exclusive with NFC.

MANAGEABILITY

System Management

System Management**
- Intel® vPro® Enterprise[1]
- Intel® vPro® Essentials[2]
- Non-vPro®

Notes:
[1], [2] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories**[1]
OPERATING REQUIREMENTS

Operating Environment

Temperature[^1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

[^1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 50% recycled aluminium on storm grey top cover
- 50% recycled aluminium or 90% recycled magnesium on keyboard frame
- 55% recycled aluminium on bottom cover
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the battery enclosure
- 90% PCC recycled plastic used in standard 45W and 65W adapters
- Low-temperature solder
- Retail packaging: plastic free packaging with 100% bamboo sugarcane fiber
- Standard or bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications[^2]
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[^3]
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

[^1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
[^2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit [epeat.net](http://epeat.net) and [energystar.gov](http://energystar.gov) for more information.
[^3] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.
Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Intel® Evo™ Platform
- (Optional) Eyesafe® Certified 2.0

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OVERVIEW

1. 2x Thunderbolt 4
2. USB-A (USB 5Gbps), Always On
3. Headphone / microphone combo jack (3.5mm)
4. Smart card reader *
5. Nano-SIM card slot *
6. USB-A (USB 5Gbps)
7. HDMI
8. Kensington Nano Security Slot

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® U or H Series Core™ Ultra 5 / 7 Processor (Series 1)

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz</td>
<td>P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
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<td>Intel® AI Boost</td>
</tr>
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<td>Core™ Ultra 5 135U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
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<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
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<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
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<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
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</tbody>
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Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux[1]
- Linux[2]
- No preload operating system

Notes:
[1], [2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

NPU

NPU
Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
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<td>Intel® Arc™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
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<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support[3]
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
- HDMI® supports up to 4K@60Hz
ThinkPad X13 Gen 5

- Thunderbolt™ supports up to 8K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.
[2] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

Chipset
Chipset
Intel® SoC (System on Chip) platform

Memory
Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable
- 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDRx5-6400

Notes:
[1] Installed memory is actually LPDDRx5-7500 but run as LPDDRx5-6400 due to platform limitation.

Storage
Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe*, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe*, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers
Stereo speakers, 2W x2, Dolby Audio™ Premium

Microphone
- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone

Camera
- 5.0MP + IR discrete, with privacy shutter, fixed focus
- 5.0MP, with privacy shutter, fixed focus
- No camera
Battery

Battery**
- Integrated Li-Polymer 41Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- Integrated Li-Polymer 54.7Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 25: up to 15.2 hr with 667 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 12.4 hr / 31.2 hr @200nits
Local video playback: up to 21.7 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 13.2 hr with 652 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 11.7 hr / 24.1 hr @200nits
Local video playback: up to 20.1 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 13.1 hr with 730 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 11.7 hr / 30.8 hr @200nits
Local video playback: up to 20.1 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA low power (non-touch), Intel® Core™ Ultra 5 125U, 16GB LPDDR5x, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (non-touch), Intel® Core™ Ultra 5 125U, 16GB LPDDR5x, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA low power (non-touch), Intel® Core™ Ultra 5 125H, 16GB LPDDR5x, Win 11, 54.7Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter[2]

Notes:
[2] No power adapter is for special bid only.

DESIGN

Display

Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
</tbody>
</table>
### Touchscreen
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

### Input Device

**Keyboard**
- 6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
- LED backlight
- Non-backlight

**UltraNav™**
- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
- Glass-like Mylar® surface multi-touch touchpad, 61 x 115 mm (2.40 x 4.53 inches)

### Mechanical

**Dimensions (WxDxH)**
- 301.7 x 214.8 x 15.95 mm (11.88 x 8.46 x 0.63 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with 54.7Wh battery and carbon fiber hybrid top cover</td>
<td>Starting at 1.17 kg (2.58 lbs)</td>
</tr>
<tr>
<td>Models with 41Wh battery and CFRP top cover</td>
<td>Starting at 1.12 kg (2.47 lbs)</td>
</tr>
<tr>
<td>Models with 41Wh battery and carbon fiber hybrid top cover</td>
<td>Starting at 1.13 kg (2.49 lbs)</td>
</tr>
<tr>
<td>Models with 54.7Wh battery and CFRP top cover</td>
<td>Starting at 1.17 kg (2.58 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
- Black

**Case Material**
- Carbon fiber hybrid or CFRP (top), aluminium (bottom)

**Notes:**

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

### CONNECTIVITY

**Network**

**Ethernet**
- No onboard Ethernet

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)

**WWAN**
- Low power, Eyesafe® Certified 2.0
Wireless WAN upgradable to 4G (with antenna ready)\(^5\)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 Card, with embedded eSIM functionality
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication
- No support

Notes:
\([1]\) Ethernet support via optional Lenovo\(^\circ\) USB-C\(^\circ\) to Ethernet Adapter.
\([2]\) Bluetooth\(^\star\) may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
\([3]\) Wi-Fi\(^\star\) 6E full features might be limited by country-level restrictions. Wi-Fi\(^\star\) 6E is only enabled on Windows\(^\circ\) 11 and operates as Wi-Fi\(^\star\) 6 with Windows\(^\circ\) 10. 6GHz Wi-Fi\(^\star\) 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi\(^\star\) 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth\(^\star\) 5.3 operation requires Windows\(^\circ\) 11. For more information please visit [General Bluetooth\(^\star\) Support Information on Microsoft\(^\circ\)].
\([4]\) Wi-Fi\(^\star\) 7 is only enabled on Windows\(^\circ\) 11 and operates as Wi-Fi\(^\star\) 6 with Windows\(^\circ\) 10. 6GHz Wi-Fi\(^\star\) 7 operation is subject to the regulation rules in each country. Bluetooth\(^\star\) 5.3 operation requires Windows\(^\circ\) 11. For more information please visit [General Bluetooth\(^\star\) Support Information on Microsoft\(^\circ\)].
\([5]\) Wireless WAN upgradable to 4G is only available in EMEA.

**Ports\(^1\)**

**Standard Ports**
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C\(^\circ\) (Thunderbolt\(^\star\) 4 / USB4\(^\circ\) 40Gbps), with USB PD 3.0 and DisplayPort\(^\star\) 2.1
- 1x HDMI\(^\star\) 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

Notes:
\([1]\) The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

**Docking**

Various docking solutions supported via Thunderbolt\(^\star\) / USB-C\(^\circ\).
For more compatible docking solutions, please visit [Docking for ThinkPad\(^\circ\) X13 Gen 5]

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**
Kensington\(^\star\) Nano Security Slot\(^\star\), 2.5 x 6 mm

**Smart Card Reader**
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader
Fingerprint Reader
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- Camera privacy shutter (camera models)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Ultrasonic Human Presence Detection (IR camera models)

MANAGEABILITY

System Management

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X13 Gen 5.

OPERATING REQUIREMENTS

Operating Environment

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X13 Gen 5.
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
90% recycled magnesium on keyboard frame
55% recycled aluminium on bottom cover
85% PCC recycled plastic used in keycaps
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery enclosure
90% PCC recycled plastic used in standard 45W and 65W adapters
Plastic free packaging with FSC certified

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® 8.0
• EPEAT™ Gold Registered
• ErP Lot 6/26
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
• (Optional) Intel® Evo™ Platform
• (Optional) Eyesafe® Certified 2.0

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Headphone / microphone combo jack (3.5mm)
2. Nano-SIM card slot *
3. USB 3.2 Gen 1
4. Kensington Nano Security Slot
5. Thunderbolt 4
6. Thunderbolt 4
7. HDMI
8. USB 3.2 Gen 1 (Always On)
9. Smart card reader *
10. Pen slot *

Notes:
* Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
12th Generation Intel® Core™ i5 / i7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 Home Single Language
- Windows® 10 Pro 64
- Ubuntu Linux[1]
- Linux[2]
- No preload operating system

Notes:
[1], [2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support[3]

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI*)
- Thunderbolt™ supports up to 5K@60Hz
- HDMI* supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

**Memory Type**
LPDDR4x-4266

**Storage**

**Storage Support**
One drive, up to 2TB M.2 2280 SSD

**Storage Slot**
One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® x4(2)</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

[2] PCIe® x4 may be PCIe® 3.0x4 or PCIe® 4.0x4 as substitution.

**Removable Storage**

No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3306 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™

**Microphone**
Dual-microphone array, far-field, Dolby Voice®

**Camera**

- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus

**Battery**

**Battery**
Integrated Li-Polymer 52.8Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 2018: up to 12.63 hr with 862 performance score @200nits
MobileMark® 25: up to 11.48 hr with 667 performance score @250nits
JEITA 2.0: up to 19.11 hr @150nits
Local video playback: up to 17.66 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 12.1 hr with 842 performance score @200nits
MobileMark® 25: up to 10.83 hr with 721 performance score @250nits
JEITA 2.0: up to 18.23 hr @150nits
Local video playback: up to 15.7 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 11.63 hr with 836 performance score @200nits
MobileMark® 25: up to 10.3 hr with 756 performance score @250nits
JEITA 2.0: up to 17.95 hr @150nits
Local video playback: up to 15.6 hr @150nits

Notes:
Configuration 1 (max battery life): WQXGA (touch), Intel® i5-1235U, 8GB LPDDR4x, Win 11, 52.8Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA AR/AS (touch), Intel® i5-1245U, 16GB LPDDR4x, Win 11, 52.8Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA AR/AS (touch), Intel® i7-1265U, 32GB LPDDR4x, Win 11, 52.8Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter*[*]

• 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:


DESIGN

Display

Display**[1]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>500nits</td>
<td>Anti-glare, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WQXGA (2560x1600)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Dolby Vision®, TÜV Low Blue Light (Hardware Solution)</td>
</tr>
</tbody>
</table>

Touchscreen

OGS (One Glass Solution) multi-touch, supports 10-point touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Multi-mode

Multi-mode

Laptop, tent, stand, and tablet modes supported by 360° hinge
**Input Device**

**Pen**
- Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and rechargeable
- No pen (with a pen garage ready, purchase separately)[1]

**Keyboard**
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
LED backlight

**UltraNav™**
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

---

**Notes:**
[1] No pen inbox is only for special bid models.

**Mechanical**

**Dimensions (WxDxH)[1]**
305 x 214.15 x 15.9 mm (12.0 x 8.43 x 0.63 inches)

**Weight[2]**
Starting at 1.19 kg (2.62 lbs)

**Case Color**
Thunder black

**Case Material**
Carbon fiber hybrid (top), carbon fiber hybrid (bottom)

---

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
No onboard Ethernet[1]

**WLAN + Bluetooth®[2]**
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)[3]

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
- No support

**SIM Card**
- Gemalto eSIM card (physical)
- No physical SIM card inbox

**NFC**
- Near Field Communication
- No support

---

**Notes:**
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system,
driver, etc.

[3] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

**Ports**

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 2.0)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports***
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

---

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Docking

Various docking solutions supported via Thunderbolt™ / USB-C®.

For more compatible docking solutions, please visit [Docking for ThinkPad® X13 Yoga® Gen 3](#)

---

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**
Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**
- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter
MANAGEABILITY

System Management

System Management

- Intel® vPro® Enterprise\[1\]
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X13 Yoga® Gen 3.

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL
**Sustainability**

**Material**
- 30% PCC recycled plastic used in speaker enclosure
- 25% PCC recycled plastic used in the 57Wh battery frame
- 95% PCC recycled plastic used in standard 65W adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging

**CERTIFICATIONS**

**Green Certifications**

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

**Other Certifications**

- Mil-Spec Test
  - MIL-STD-810H military test passed

**Notes:**

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit [epeat.net](http://epeat.net) and [energystar.gov](http://energystar.gov) for more information.

[3] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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*The specifications on this page may not be available in all regions, and may be changed or updated without notice.*
## Overview

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Pen slot *</td>
<td><strong>6.</strong> 2x Thunderbolt 4</td>
</tr>
<tr>
<td><strong>2.</strong> Nano-SIM card slot *</td>
<td><strong>7.</strong> USB 3.2 Gen 1 (Always On)</td>
</tr>
<tr>
<td><strong>3.</strong> USB 3.2 Gen 1</td>
<td><strong>8.</strong> Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td><strong>4.</strong> HDMI</td>
<td><strong>9.</strong> Smart card reader *</td>
</tr>
<tr>
<td><strong>5.</strong> Kensington Nano Security Slot</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation Intel® U or P Series Core™ i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1370P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® P series processors are for special bid only.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux[1]
- Linux[2]
- No preload operating system

Notes:
[1, 2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support[1]
Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI*)
- Thunderbolt™ supports up to 5K@60Hz
- HDMI* supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Chipset
Intel® SoC (System on Chip) platform
Memory
Max Memory
• 8GB soldered memory, not upgradable
• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable
Memory Slots
Memory soldered to systemboard, no slots, dual-channel
Memory Type
LPDDR5-4800[1]

Notes:
[1] Installed memory is actually LPDDR5-6400 but run as LPDDR5-4800 due to platform limitation.

Storage
Storage Support[1]
One drive, up to 2TB M.2 2280 SSD
Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot
Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3287 codec
Speakers
Stereo speakers, 2W x2, Dolby Audio™ Premium
Microphone
• Dual-microphone array, 360° far-field, Dolby Voice®
• No microphone
Camera**
• 5.0MP + IR discrete, with privacy shutter, fixed focus
• FHD 1080p, with privacy shutter, fixed focus
• No camera[1]

Notes:
[1] No camera is for special bid only.

Battery
Battery**
• Integrated Li-Polymer 41Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
• Integrated Li-Polymer 54.7Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 25: up to 11.2 hr with 769 performance score @250nits
JEITA 2.0: up to 22.6 hr @150nits
Local video playback: up to 18.0 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 10.8 hr with 707 performance score @250nits
JEITA 2.0: up to 21.8 hr @150nits
Local video playback: up to 17.3 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 9.8 hr with 739 performance score @250nits
JEITA 2.0: up to 18.1 hr @150nits
Local video playback: up to 15.3 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA low power (touch), Intel® i5-1335U, 8GB LPDDR5, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA low power (touch), Intel® i7-1360P, 16GB LPDDR5, Win 11, 54.7Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA anti-glare (touch), Intel® i7-1370P, 16GB LPDDR5, Win 11, 54.7Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**[1]

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

DESIGN

Display

Display**[1]

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>-</td>
</tr>
<tr>
<td>13.3&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

Touchscreen

OGS (One Glass Solution) multi-touch, supports 10-point touch

Notes:
IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Multi-mode
Multi-mode
Laptop, tent, stand, and tablet modes supported by 360° hinge

Input Device
Pen
- Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and rechargeable
- No pen (with a pen garage ready, purchase separately)
Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls
Keyboard Backlight
LED backlight
UltraNav™
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

Mechanical
Dimensions (WxDxH)
301.7 x 214.6 x 16.4 mm (11.88 x 8.45 x 0.65 inches)
Weight
Starting at 1.21 kg (2.66 lbs)
Case Color
- Deep black
- Storm grey
Case Material
Magnesium (top), magnesium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
No onboard Ethernet
WLAN + Bluetooth®
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
WWAN
- Wireless WAN upgradable to 4G (with antenna ready)
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support
SIM Card
No physical SIM card inbox
NFC
- Near Field Communication
- No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

[2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

[3] Wireless WAN upgradable to 4G is ONLY available in EMEA.

**Ports**

- **Standard Ports**
  - 1x USB 3.2 Gen 1
  - 1x USB 3.2 Gen 1 (Always On)
  - 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 2.0)
  - 1x HDMI® 2.1, up to 4K/60Hz
  - 1x Headphone / microphone combo jack (3.5mm)

- **Optional Ports***
  - 1x Smart card reader
  - 1x Nano-SIM card slot (WWAN support models)

---

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Docking

Various docking solutions supported via Thunderbolt™ / USB-C®.

For more compatible docking solutions, please visit Docking for ThinkPad® X13 Yoga® Gen 4

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**

- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

**Fingerprint Reader**

- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**

- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**
ThinkPad X13 Yoga Gen 4

- Camera privacy shutter (camera models)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Glance by Mirametrix®
- Ultrasonic Human Presence Detection (IR camera models)

MANAGEABILITY

System Management

Intel® vPro® Enterprise

Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Lenovo® HDMI® to VGA Monitor Adapter
Lenovo® USB-C® to DisplayPort™ Adapter
Lenovo® USB-C® to Ethernet Adapter (1Gbps)
Lenovo® USB-C® to VGA Adapter
None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X13 Yoga® Gen 4.

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL
Sustainability

Material
90% recycled magnesium on top cover
90% recycled magnesium on keyboard frame
90% recycled magnesium on bottom cover
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery enclosure
90% PCC recycled plastic used in standard 45W and 65W adapters
Low-temperature solder
Retail packaging: plastic free packaging with 100% bamboo sugarcane fiber
Standard or bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
• EPEAT™ Gold Registered
• ErP Lot 6/26
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
• (Optional) Intel® Evo™ Platform
• (Optional) Eyesafe® Certified 2.0

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Headphone / microphone combo jack (3.5mm)
2. Nano-SIM card slot *
3. Kensington Nano Security Slot
4. USB-C 3.2 Gen 2
5. USB-C 3.2 Gen 2

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Qualcomm® Snapdragon® Processor

Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualcomm® Snapdragon® 8cx Gen 3</td>
<td>4x Kryo Prime + 4x Kryo Gold</td>
<td>8</td>
<td>Kryo Prime / Gold @3.0GHz</td>
<td>1MB L2 for Prime core + 512KB L2 for Gold Core™</td>
<td>Qualcomm® Adreno™ 690 GPU</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro (on ARM)
- Windows® 11 Home (on ARM)
- Windows® 11 Home Single Language (on ARM)

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualcomm® Adreno™ 690 GPU</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 3 independent displays (native display and 2 external monitors via USB-C®)
- USB-C® supports up to 5K@60Hz

Chipset

Chipset
Qualcomm® SoC (System on Chip) platform

Memory

Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, dual-channel

Memory Type
LPDDR4x-4266

Storage

Storage Support[^1]
One drive, up to 1TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 3.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD[^2]</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[^1]: The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[^2]: PCIe® 4.0x4 is downgraded to closer to PCIe® 3.0x4 due to the system slot limitation.

Removable Storage
Card Reader
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Qualcomm® WCD9385 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Audio™

**Microphone**
Triple-microphone array, far-field

**Camera**
- 5.0MP + IR discrete, with E-shutter, MIPI, fixed focus
- 5.0MP + IR discrete, with E-shutter, MIPI, fixed focus, Computer Vision
- 5.0MP, with E-shutter, MIPI, fixed focus

**Battery**

**Battery**
Integrated Li-Polymer 49.5Wh battery

**Battery Life**[^1]
Configuration 1 (max battery life)
Local video playback: up to 28 hr @150nits

Alternate configuration 2
Local video playback: up to 26.2 hr @150nits

Alternate configuration 3
Local video playback: up to 22.2 hr @150nits

---

**Notes:**

[^1]: Configuration 1 (max battery life): WUXGA 400nits (non-touch), Qualcomm® Snapdragon® 8cx Gen 3, 8GB LPDDR4x, Win 11, 49.5Wh battery, balanced power mode
Alternate configuration 2: WUXGA 300nits (non-touch), Qualcomm® Snapdragon® 8cx Gen 3, 16GB LPDDR4x, Win 11, 49.5Wh battery, balanced power mode
Alternate configuration 3: WQXGA 300nits (touch), Qualcomm® Snapdragon® 8cx Gen 3, 32GB LPDDR4x, Win 11, 49.5Wh battery, balanced power mode

All battery life claims are approximate maximum and based on results using continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**[^2]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter[^3]

---

**Notes:**

[^1]: AC adapter offerings depend on the country.
[^2]: No power adapter is for special bid only.

---

**DESIGN**
## Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
</tbody>
</table>

**Notes:**
- On-cell multi-touch, supports 10-point touch
- Non-touch

## Touchscreen

- On-cell multi-touch, supports 10-point touch
- Non-touch

---

## Input Device

### Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

### Keyboard Backlight
LED backlight

### UltraNav™
TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 56 x 115 mm (2.24 x 4.53 inches)

## Mechanical

### Dimensions (WxDxH)
298.7 x 206.4 x 13.4 mm (11.76 x 8.13 x 0.53 inches)

### Weight
Starting at 1.06 kg (2.35 lbs)

### Case Color
Thunder black

### Case Material
Magnesium-aluminium (top), GFRP (bottom)

---

Notes:
- The system dimensions may vary depending on configurations.
- The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

## CONNECTIVITY

### Network

#### Ethernet
No onboard Ethernet

#### WLAN + Bluetooth®
Qualcomm® Wi-Fi® 6E WCN6855, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)

#### WWAN
- Qualcomm® Snapdragon® X55 5G Modem-RF System, Sub-6 GHz & mmWave, M.2 card, with embedded eSIM functionality
**SIM Card**
No physical SIM card inbox

**NFC**
No support

---

**Notes:**

[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[3] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

---

**Ports**

**Standard Ports**
- 2x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports**
- 1x Nano-SIM card slot (WWAN support models)

---

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

---

**Docking**

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® X13s Gen 1](#)

---

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

**Physical Locks**
Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**
No smart card reader

**Fingerprint Reader**
- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

**BIOS Security**
- Supervisor password
- Power-on password
- System management password
- Self-healing BIOS
Other Security
• E-shutter
• (Optional) Computer Vision-based User Presence Sensing including lock on leave

SERVICE

Warranty
Base Warranty**
• 1-year courier service
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
• Lenovo® USB-C® Port Replicator
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X13s Gen 1.

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
90% certified recycled magnesium
97% PCC recycled plastic used in speaker enclosure
30% PCC recycled plastic used in the 49.5Wh battery frame
30% PCC recycled plastic used in standard 65W adapter
90% recycled and/or sustainable packaging

CERTIFICATIONS
Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 3
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

(Optional) Eyesafe® Certified

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th>1.</th>
<th>USB-A (USB 5Gbps), Always On</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>2x Thunderbolt 4</td>
</tr>
<tr>
<td>3.</td>
<td>Nano-SIM card slot *</td>
</tr>
<tr>
<td>4.</td>
<td>Power button</td>
</tr>
<tr>
<td>5.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>6.</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>7.</td>
<td>HDMI</td>
</tr>
<tr>
<td>8.</td>
<td>Kensington Nano Security Slot</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® U Series Core™ Ultra 5 / 7 Processor (Series 1)

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux[1]
- Linux[2]
- No preload operating system

Notes:
[1], [2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

NPU

NPU

Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)

- HDMI® supports up to 4K@60Hz
- Thunderbolt™ supports up to 8K@60Hz[2]

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.
[2] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

Chipset
ThinkPad X12-in-1Gen 9

Chipset
Intel® SoC (System on Chip) platform

Memory
Max Memory
• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable
• 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, 8-channel

Memory Type
LPDDR5x-6400[1]

Notes:
[1] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

Storage
Storage Support[1]
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera**
• FHD 1080p + IR discrete, with privacy shutter, fixed focus
• UHD 8.0MP + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision[1]

Notes:
[1] UHD 8.0MP + IR camera is only available (100% attach) on Privacy Guard or 2.8K OLED display.

Battery
Battery
Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 25: up to 15.1 hr with 597 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 13.2 hr / 32.0 hr @200nits
Local video playback: up to 23.2 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 14.4 hr with 605 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 11.7 hr / 28.4 hr @200nits
Local video playback: up to 23.0 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 9.9 hr with 732 performance score @250nits
JEITA-BAT 3.0 (Video/Idle): up to 8.6 hr / 14.8 hr @200nits
Local video playback: up to 14.8 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (touch), Intel® Core™ Ultra 7 165U, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® Core™ Ultra 5 125U, 32GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: 2.8K OLED (touch), Intel® Core™ Ultra 7 165U, 64GB LPDDR5x, Win 11, 57Wh battery, balanced power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.
Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.
The maximum capacity of the battery will decrease with time, ambient temperature and use.
Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

Power Adapter**
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
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Notes:

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
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<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
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<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[1]</td>
<td>400nits</td>
<td>Anti-glare, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0, 87.8% screen to body ratio</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0, 87.8% screen to body ratio</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[3]</td>
<td>500nits</td>
<td>Anti-glare, anti-</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard, TÜV</td>
</tr>
</tbody>
</table>
ThinkPad X12-in-1 Gen 9

## Touchscreen
OGS (One Glass Solution) multi-touch, supports 10-point touch

### Notes:

[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

## Multi-mode

### Multi-mode

Laptop, tent, stand, and tablet modes supported by 360° hinge

## Input Device

### Pen
- Lenovo® Slim Pen
- No pen (purchase separately)

### Keyboard

6-row, spill-resistant, air intake design, multimedia Fn keys

### Keyboard Backlight

LED backlight

### UltraNav™

- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
- Glass surface multi-touch Haptic Touchpad, 70.9 x 120 mm (2.76 x 4.72 inches) [1]
- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
- Glass surface multi-touch 3-button Trackpad, 56 x 120 mm (2.24 x 4.72 inches)

### Notes:

[1] Haptic Touchpad is mutually exclusive with NFC.

## Mechanical

### Dimensions (WxDxH)

312.80 x 217.65 x 15.49 mm (12.31 x 8.57 x 0.61 inches)

### Weight

Starting at 1.35 kg (2.97 lbs)

### Case Color

Grey

### Case Material

Aluminium (top), aluminium (bottom)

### Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
CONNECTIVITY

Network

Ethernet
No onboard Ethernet[1]

WLAN + Bluetooth®**[2]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[3]
- Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)[4]

WWAN**
- Wireless WAN upgradable to 4G or 5G (with antenna ready)
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- Quectel RM520N-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
- Near Field Communication[5]
- No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Intel® Wi-Fi® 7 BE200 is for special bid only.
[3] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E. and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
[4] Wi-Fi® 7 is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
[5] NFC is mutually exclusive with Haptic Touchpad.

Ports[1]

Standard Ports
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports
1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Docking

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® X1 2-in-1 Gen 9

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader in keyboard key, match-on-chip

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- Computer Vision-based User Presence Sensing including lock on leave (UHD 8.0MP + IR camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- IR camera for Windows® Hello (facial recognition)
- Ultrasonic Human Presence Detection (FHD 1080p + IR camera models)
- Camera privacy shutter

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X1 2-in-1 Gen 9.

OPERATING REQUIREMENTS
Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability
Material
- 75% recycled aluminium on top cover
- 90% recycled magnesium on keyboard frame (WWAN models)
- 75% recycled aluminium on keyboard frame (WLAN models)
- 55% recycled aluminium and 45% hydro aluminum on bottom cover
- 85% PCC recycled plastic used in keycaps
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the 57Wh battery pack enclosure
- 90% PCC recycled plastic used in standard 45W and 65W adapters
- Low-temperature solder
- FSC Certified Plastic Free Packaging
- Bamboo + Sugarcane Retail Packaging / Standard Cushions

CERTIFICATIONS

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
- MIL-STD-810H military test passed

Other Certifications
- (Optional) Intel® Evo™ Platform
- (Optional) Eyesafe® Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- TÜV Rheinland® Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)
• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Thunderbolt 4
2. Thunderbolt 4
3. USB 3.2 Gen 1
4. HDMI
5. Headphone / microphone combo jack (3.5mm)
6. Nano-SIM card slot *
7. USB 3.2 Gen 1 (Always On)
8. Kensington Nano Security Slot

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
12th Generation Intel® Core™ i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1250P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1270P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1280P [1]</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] NOT available in EMEA.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux [6]
- Ubuntu Linux [2]
- Linux [3]
- No preload operating system

Notes:
[1], [2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support [1]
Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI*)
- Thunderbolt™ supports up to 5K@60Hz
• HDMI® supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

**Chipset**

Chipset
Intel® SoC (System on Chip) platform

**Memory**

Max Memory
• 8GB soldered memory, not upgradable[1]
• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots, 8-channel

Memory Type
LPDDR5-5200[2]

Notes:
[1] 8GB memory is NOT available in EMEA.
[2] Installed memory is actually LPDDR5-6400 but run as LPDDR5-5200 due to processor limitation.

**Storage**

Storage Support[3]
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB[2]</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® x4[3]</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] 512GB and 1TB are NOT available in EMEA.
[3] PCIe® x4 may be PCIe® 3.0x4 or PCIe® 4.0x4 as substitution.

**Removable Storage**

Card Reader
No card reader

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers
Stereo speakers, 2W x2 woofers and 0.8W x2 tweeters, Dolby Atmos®

Microphone
Quad-microphone array, 360° far-field, Dolby Voice®

Camera**
• FHD 1080p + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision
• FHD 1080p + IR hybrid, with privacy shutter, fixed focus
• FHD 1080p, with privacy shutter, fixed focus
• HD 720p, with privacy shutter, fixed focus[11]
**Battery**

Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 2018: up to 15.0 hr with 838 performance score @200nits
MobileMark® 25: up to 13.1 hr with 663 performance score @250nits
JEITA 2.0: up to 24.9 hr @150nits
Local video playback: up to 19.9 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 14.3 hr with 840 performance score @200nits
MobileMark® 25: up to 11.3 hr with 623 performance score @250nits
JEITA 2.0: up to 24.9 hr @150nits
Local video playback: up to 19.9 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 14.2 hr with 809 performance score @200nits
MobileMark® 25: up to 11.1 hr with 600 performance score @250nits
JEITA 2.0: up to 21.7 hr @150nits
Local video playback: up to 19.7 hr @150nits

**Notes:**

1. Configuration 1 (max battery life): WUXGA (non-touch), Intel® i5-1235U, 8GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode
2. Alternate configuration 2: WUXGA (non-touch), Intel® i5-1240P, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode
3. Alternate configuration 3: WUXGA (non-touch), Intel® i7-1260P, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.

Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

**Notes:**

1. AC adapter offerings depend on the country.
2. In EMEA only 65W USB-C® slim AC adapters are available.

**DESIGN**

**Display**

**Display**
## Key Features

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[2]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>On-cell touch</td>
<td>IPS[3]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>On-cell touch</td>
<td>IPS[4]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS[5]</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>None</td>
<td>IPS[6]</td>
<td>500nits</td>
<td>Glossy</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>Add-on Film touch</td>
<td>IPS[7]</td>
<td>500nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
</tr>
</tbody>
</table>

**Touchscreen**
- Add-on Film Touch, supports 10-point touch
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1] 2.2K display and Add on Film Touch display are NOT available in EMEA.
[2], [3], [4], [5], [6], [7] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

### Input Device

**Keyboard**
6-row, spill-resistant, air intake design, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
LED backlight

**UltraNav™**
TrackPoint® pointing device and glass surface multi-touch touchpad, 56 x 110 mm (2.20 x 4.33 inches)

### Mechanical

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with 720p camera</td>
<td>315.6 x 222.5 x 14.95 mm (12.43 x 8.76 x 0.59 inches)</td>
</tr>
<tr>
<td>Models with other camera</td>
<td>315.6 x 222.5 x 15.36 mm (12.43 x 8.76 x 0.60 inches)</td>
</tr>
</tbody>
</table>

**Weight**
Starting at 1.12 kg (2.48 lbs)
**Case Color**
- Deep black, paint
- Deep black, weave

**Case Material**
Carbon fiber (top), aluminium (bottom)

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

## CONNECTIVITY

### Network

**Ethernet**
No onboard Ethernet[1]

**WLAN + Bluetooth®**[1, 2]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)[3]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)[4]

**WWAN**
- Wireless WAN upgradable to 4G (with antenna ready)
- Fibocom L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**
- Gemalto eSIM card (physical)
- No physical SIM card inbox

**NFC**
- Near Field Communication
- No support

**Notes:**
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3] Wi-Fi® 6 full features might be limited by country-level restrictions.
[4] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

### Ports[1]

**Standard Ports**
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports**
1x Nano-SIM card slot (WWAN support models)

**Notes:**
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking
Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® X1 Carbon Gen 10

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security

• Supervisor password
• Power-on password
• System management password
• NVMe® password
• Certificate based BIOS authentication
• FIDO (Fast Identity Online) authentication
• Self-healing BIOS

Other Security

• Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter
• Glance by Mirametrix®
• (Optional) Computer Vision-based User Presence Sensing including lock on leave
• Tile ready

MANAGEABILITY

System Management

System Management**

• Intel® vPro® Enterprise[1]
• Intel® vPro® Essentials[2]
• Non-vPro®

Notes:
[1], [2] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**

• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories

• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X1 Carbon Gen 10.

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
95% PCC recycled plastic used in speaker enclosure
25-30% PCC recycled plastic used in the 57Wh battery frame
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

• ENERGY STAR® 8.0
• EPEAT™ Gold Registered
• ErP Lot 3
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
- (Optional) Intel® Evo™ Platform
- (Optional) Eyesafe® Certified
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- TÜV Rheinland® Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)

Feature with ** means that only one offering listed under the feature is configured on selected models.

Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Thunderbolt 4
2. Thunderbolt 4
3. USB 3.2 Gen 1
4. HDMI
5. Headphone / microphone combo jack (3.5mm)
6. Nano-SIM card slot *
7. USB 3.2 Gen 1 (Always On)
8. Kensington Nano Security Slot

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation Intel® U or P Series Core™ i5 / i7 Processor

Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1335U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1345U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1355U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1365U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1370P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Core™ i5-1340P, i5-1350P and i7-1360p are for special bid only.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux[2]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:
[1], [2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support[4]
Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)
- Thunderbolt™ supports up to 5K@60Hz
- HDMI® supports up to 4K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.
ThinkPad X1 Carbon Gen 11

**Chipset**

Intel® SoC (System on Chip) platform

**Memory**

Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable
- 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots, 8-channel

Memory Type
- LPDDR5/x-6000 (32GB)\(^1\)
- LPDDR5/x-6400 (16GB)\(^2\)
- LPDDR5x-6000 (64GB)\(^3\)

Notes:
- [1] Installed memory is actually LPDDR5-6400 or LPDDR5x-7500 but run as LPDDR5-6000 or LPDDR5x-6000 due to platform limitation.
- [2] Installed LPDDR5x memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.
- [3] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6000 due to platform limitation.

**Storage**

Storage Support
- One drive, up to 2TB M.2 2280 SSD

Storage Slot
- One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
- [1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

Card Reader
- No card reader

**Multi-Media**

Audio Chip
- High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers
- Stereo speakers, 2W x2 woofers and 0.8W x2 tweeters, Dolby Atmos®

Microphone
- Quad-microphone array, 360° far-field, Dolby Voice®

Camera
- FHD 1080p + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- HD 720p, with privacy shutter, fixed focus

**Battery**
### Battery
Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

### Battery Life

**Configuration 1 (max battery life)**
- MobileMark® 25: up to 13.95 hr with 658 performance score @250nits
- JEITA 2.0: up to 28.5 hr @150nits
- Local video playback: up to 22.9 hr @150nits

**Alternate configuration 2**
- MobileMark® 25: up to 13.63 hr with 654 performance score @250nits
- JEITA 2.0: up to 26.4 hr @150nits
- Local video playback: up to 20.5 hr @150nits

**Alternate configuration 3**
- MobileMark® 25: up to 13.48 hr with 642 performance score @250nits
- JEITA 2.0: up to 24.8 hr @150nits
- Local video playback: up to 19.8 hr @150nits

**Notes:**

[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel® i5-1345U, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

[2] Alternate configuration 2: WUXGA (non-touch), Intel® i5-1340P, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

[3] Alternate configuration 3: WUXGA (non-touch), Intel® i5-1350P, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.

Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft link for more information about the Windows® Performance power slider.

### Power Adapter

**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

**Notes:**


[2] No power adapter is for special bid only.

### DESIGN

#### Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85° Low power, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85° Low power, Eyesafe®</td>
</tr>
</tbody>
</table>
ThinkPad X1 Carbon Gen 11

**Certified 2.0**

<table>
<thead>
<tr>
<th>14&quot;</th>
<th>WUXGA (1920x1200)</th>
<th>Multi-touch</th>
<th>IPS</th>
<th>500nits</th>
<th>Anti-glare</th>
<th>16:10</th>
<th>1000:1</th>
<th>100% sRGB</th>
<th>85°/85°/85°/85°</th>
<th>ThinkPad® Privacy Guard</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>2.2K (2240x1400)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>TÜV Low Blue Light (Hardware Solution)</td>
</tr>
<tr>
<td>14&quot;</td>
<td>2.8K (2880x1800)</td>
<td>None</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
<td>DisplayHDR™ True Black 500, Dolby Vision®, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

**Touchscreen**
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1], [2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, air intake design, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**
LED backlight

**UltraNav™**
TrackPoint® pointing device and glass surface multi-touch touchpad, 56 x 110 mm (2.20 x 4.33 inches)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with 720p camera</td>
<td>315.6 x 222.5 x 14.96 mm (12.43 x 8.76 x 0.59 inches)</td>
</tr>
<tr>
<td>Models with other camera</td>
<td>315.6 x 222.5 x 15.36 mm (12.43 x 8.76 x 0.60 inches)</td>
</tr>
</tbody>
</table>

**Weight**
Starting at 1.12 kg (2.48 lbs)

**Case Color**
- Deep black, paint
- Deep black, weave

**Case Material**
Carbon fiber (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**
No onboard Ethernet

**WLAN + Bluetooth®**
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

**WWAN**
Wireless WAN upgradable to 4G or 5G (with antenna ready)
• Fibocom L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card, with embedded eSIM functionality
• Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
• No support

SIM Card
No physical SIM card inbox

NFC
• Near Field Communication
• No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Standard Ports
• 1x USB 3.2 Gen 1
• 1x USB 3.2 Gen 1 (Always On)
• 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
• 1x HDMI® 2.1, up to 4K/60Hz
• 1x Headphone / microphone combo jack (3.5mm)

Optional Ports
1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Docking
Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® X1 Carbon Gen 11

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security
• Supervisor password
• Power-on password
• System management password
• NVMe® password
• Certificate based BIOS authentication
• FIDO (Fast Identity Online) authentication
• Self-healing BIOS

Other Security
• Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter
• Glance by Mirametrix®
• (Optional) Computer Vision-based User Presence Sensing including lock on leave

MANAGEABILITY

System Management
System Management**
• Intel® vPro® Enterprise[1]
• Intel® vPro® Essentials[2]
• Non-vPro®

Notes:
[1], [2] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty
Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories
Bundled Accessories**[1]
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X1 Carbon Gen 11.

OPERATING REQUIREMENTS

Operating Environment
Temperature[1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
90% recycled magnesium on keyboard frame
55% recycled aluminium on bottom cover
90% PCC recycled plastic used in speaker enclosure
25-30% PCC recycled plastic used in the 57Wh battery enclosure
90% PCC recycled plastic used in standard 45W and 65W adapters
Low-temperature solder
Retail or standard packaging: plastic free packaging with 100% bamboo sugarcane fiber
Bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications

Green Certifications
[1]

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 6/26
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

(Optional) Intel® Evo™ Platform
(Optional) Eyesafe® Certified 2.0
(Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
TÜV Rheinland® Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)

Feature with ** means that only one offering listed under the feature is configured on selected models.

Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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OVERVIEW

1. USB-A (USB 5Gbps), Always On
2. 2x Thunderbolt 4
3. Nano-SIM card slot *
4. Power button
5. Headphone / microphone combo jack (3.5mm)
6. USB-A (USB 5Gbps)
7. HDMI
8. Kensington Nano Security Slot

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® U or H Series Core™ Ultra 5 / 7 Processor (Series 1)

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 125H</td>
<td>14 (4 P-core + 8 E-core + 2 LPE-core)</td>
<td>18</td>
<td>P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz</td>
<td>P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz</td>
<td>18MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 125U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.3GHz / E-core 800MHz / LPE-core 700MHz</td>
<td>P-core 4.3GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 5 135U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.6GHz / E-core 1.1GHz / LPE-core 700MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155H</td>
<td>16 (6 P-core + 8 E-core + 2 LPE-core)</td>
<td>22</td>
<td>P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz</td>
<td>24MB</td>
<td>Intel® Arc™ Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 155U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 165U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:
[1], [2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

NPU

NPU
Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Arc™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support[1]
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
ThinkPad X1 Carbon Gen 12

- HDMI® supports up to 4K@60Hz
- Thunderbolt™ supports up to 8K@60Hz

Notes:
[1] Refresh rates >60Hz also supported, however max resolution will be limited.
[2] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable
- 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots, 8-channel

Memory Type
LPDDR5x-6400

Notes:
[1] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

Storage

Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®

Microphone
Dual-microphone array, far-field, Dolby Voice®

Camera
- FHD 1080p + IR discrete, with privacy shutter, fixed focus
- UHD 8.0MP + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision

Notes:
**Battery**

Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Battery Life**

Configuration 1 (max battery life)
- MobileMark® 25: up to 16.0 hr with 604 performance score @250nits
- JEITA-BAT 3.0 (Video/Idle): up to 12.8 hr / 35.4 hr @200nits
- Local video playback: up to 23.4 hr @150nits

Alternate configuration 2
- MobileMark® 25: up to 14.6 hr with 725 performance score @250nits
- JEITA-BAT 3.0 (Video/Idle): up to 12.4 hr / 36.4 hr @200nits
- Local video playback: up to 25.2 hr @150nits

Alternate configuration 3
- MobileMark® 25: up to 11.6 hr with 768 performance score @250nits
- JEITA-BAT 3.0 (Video/Idle): up to 9.2 hr / 15.5 hr @200nits
- Local video playback: up to 15.9 hr @150nits

Notes:

**[1]** Configuration 1 (max battery life): WUXGA 400nits (non-touch), Intel® Core™ Ultra 5 125U, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA 400nits (non-touch), Intel® Core™ Ultra 7 155H, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 3: 2.8K OLED (non-touch), Intel® Core™ Ultra 7 155H, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.

Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

Power Adapter**[2]**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:

**[1]** AC adapter offerings depend on the country.

**[2]** No power adapter is for special bid only.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe</td>
</tr>
</tbody>
</table>

---

[1] UHD 8.0MP + IR camera is only available (100% attach) on Privacy Guard or 2.8K OLED touch display.

[2] No power adapter is for special bid only.
<table>
<thead>
<tr>
<th>Display Type</th>
<th>Touchscreen</th>
<th>Resolution</th>
<th>Touch Technology</th>
<th>Brightness</th>
<th>Aspect Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>WUXGA (1920x1200)</td>
<td>On-cell touch</td>
<td>16:10</td>
<td>1000:1</td>
<td>400nits</td>
<td>IPS[2]</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>16:10</td>
<td>1500:1</td>
<td>500nits</td>
<td>IPS[3]</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>2.8K (2880x1800)</td>
<td>Add-on Film touch</td>
<td>16:10</td>
<td>100,000:1</td>
<td>400nits</td>
<td>OLED</td>
<td>100% DCI-P3</td>
<td>120Hz</td>
<td>85°/85°/85°/85°</td>
</tr>
<tr>
<td>2.8K (2880x1800)</td>
<td>Add-on Film touch</td>
<td>16:10</td>
<td>100,000:1</td>
<td>400nits</td>
<td>OLED</td>
<td>100% DCI-P3</td>
<td>120Hz</td>
<td>85°/85°/85°/85°</td>
</tr>
</tbody>
</table>

**Touchscreen**
- Add-on Film Touch, supports 10-point touch
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
6-row, spill-resistant, air intake design, multimedia Fn keys

**Keyboard Backlight**
LED backlight

**UltraNav™**
- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu

Notes:
[1] Haptic Touchpad is mutually exclusive with NFC.

**Mechanical**

**Dimensions (WxDxH)**
312.80 x 214.75 x 14.96 mm (12.31 x 8.45 x 0.59 inches)

**Weight**
### CONNECTIVITY

#### Network

**Ethernet**
No onboard Ethernet[^1]

**WLAN + Bluetooth®**[^2][^3][^4]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[^2]
- Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready)[^4]

**WWAN**
- Wireless WAN upgradable to 4G or 5G (with antenna ready)
- Quectel EM160R-GL, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- Quectel RM520N-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**
No physical SIM card inbox

**NFC**
- Near Field Communication[^5]
- No support

---

**Notes:**
[^1]: Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[^2]: Intel® Wi-Fi® 7 BE200 is for special bid only.
[^3]: Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](https://www.microsoft.com/en-us/support).[^4]: Wi-Fi® 7 is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](https://www.microsoft.com/en-us/support).[^5]: NFC is mutually exclusive with Haptic Touchpad.

#### Ports[^1]

**Standard Ports**
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
Optional Ports
1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Docking

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® X1 Carbon Gen 12

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader in keyboard key, match-on-chip

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- Computer Vision-based User Presence Sensing including lock on leave (UHD 8.0MP + IR camera models)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- IR camera for Windows® Hello (facial recognition)
- Ultrasonic Human Presence Detection (FHD 1080p + IR camera models)
- Camera privacy shutter

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X1 Carbon Gen 12.

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- Recycled carbon fiber contained in plastic frame on top cover
- 90% recycled magnesium on keyboard frame
- 55% recycled aluminium and 45% hydro aluminum on bottom cover
- 85% PCC recycled plastic used in keycaps
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the 57Wh battery pack enclosure
- 90% PCC recycled plastic used in standard 45W and 65W adapters
- Low-temperature solder
- FSC Certified Plastic Free Packaging
- Bamboo + Sugarcane Retail Packaging / Standard Cushions

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0
Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
• (Optional) Intel® Evo™ Platform
• Eyesafe® Certified 2.0
• TÜV Rheinland® Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Thunderbolt 4
2. Volume buttons
3. Power button
4. USB-C 3.2 Gen 2
5. Thunderbolt 4

Notes:
• Optional nano-SIM card slot on the left of Port 1 (not shown on the sample product above)
PERFORMANCE

Processor
Processor Family
12th Generation Intel® Core™ i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1230U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.0GHz / E-core 0.7GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1240U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.1GHz / E-core 0.8GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1250U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.1GHz / E-core 0.8GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1260U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.1GHz / E-core 0.8GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System
Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language

Graphics
Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support
Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and USB-C*)
- USB-C* supports up to 3840x2160@60Hz
- Thunderbolt™ supports up to 5120x3200@60Hz

Chipset
Chipset
Intel® SoC (System on Chip) platform

Memory
Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, 8-channel

Memory Type
LPDDR5-5200

Storage
Storage Support[*]
One drive, up to 1TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 4.0 x4 slot

Storage Type
<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**

No card reader

**Multi-Media**

**Audio Chip**

High Definition (HD) Audio

**Speakers**

Stereo speakers, 2W x3, Dolby Atmos®, 2 of 3 speakers enabled in each posture

**Microphone**

Quad-microphone array, far-field, Dolby Voice®, 2 of 4 microphones enabled in each posture

**Camera**

- 5.0MP + IR discrete, MIPI, fixed focus
- 5.0MP + IR discrete, MIPI, fixed focus, Computer Vision

**Battery**

**Battery**

- Integrated Li-Polymer 48Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 64Wh (48Wh + 16Wh) battery, gets 4 hours of runtime with a 30-minute charge

**Battery Life**

Configuration 1 (max battery life)

MobileMark® 2018: up to 11.28 hr with 834 performance score @200nits
MobileMark® 25: up to 10.23 hr with 818 performance score @250nits
JEITA 2.0: up to 14.65 hr @150nits
Local video playback: up to 15.18 hr @150nits

Alternate configuration 2

MobileMark® 2018: up to 11.23 hr with 830 performance score @200nits
MobileMark® 25: up to 9.73 hr with 843 performance score @250nits
JEITA 2.0: up to 14.5 hr @150nits
Local video playback: up to 14.75 hr @150nits

Alternate configuration 3

MobileMark® 2018: up to 8.06 hr with 768 performance score @200nits
MobileMark® 25: up to 6.58 hr with 771 performance score @250nits
JEITA 2.0: up to 10.5 hr @150nits
Local video playback: up to 9.96 hr @150nits

Notes:

[1] Configuration 1 (max battery life): 2560x2024 OLED, Intel® i5-1240U, 16GB LPDDR5, Win 11, 64Wh battery, best power efficiency power mode
Alternate configuration 2: 2560x2024 OLED, Intel® i5-1240U, 16GB LPDDR5, Win 11, 64Wh battery, best power efficiency power mode
Alternate configuration 3: 2560x2024 OLED, Intel® i5-1240U, 8GB LPDDR5, Win 11, 48Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.
Power Adapter

Power Adapter**[1]

• 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
• 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:


DESIGN

Display

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.3&quot;</td>
<td>2560x2024</td>
<td>Multi-touch</td>
<td>Folding</td>
<td>SDR 400nits / HDR 600nits</td>
<td>Anti-smudge</td>
<td>4:3</td>
<td>1,000,000:1</td>
<td>100% DCI-P3</td>
<td>89°/89°/89°/89°</td>
<td>16.3&quot; when open and 12&quot; when folded, DisplayHDR™ True Black 600, Dolby Vision®</td>
</tr>
</tbody>
</table>

Touchscreen
On-cell multi-touch, supports 10-point touch

Multi-mode

Multi-mode
Laptop with OSK (on screen keyboard) or split screen, laptop with keyboard, landscape with keyboard, portrait with keyboard, tablet and book

Input Device

Pen**

• Lenovo® Precision Pen 2 with USB cable, built-in rechargeable battery, 4096 levels of pressure sensitivity, tilt detection, supports WGP, AES 2.0 and MPP 2.0 protocols. For more information, please read Lenovo® Precision Pen 2
• Lenovo® Precision Pen, 4096 levels of pressure sensitivity, magnetically attached to the system. For more information, please read Lenovo® Precision Pen Overview
• No pen (purchase separately)

Keyboard

• ThinkPad® Bluetooth® TrackPoint® Keyboard and Stand. Full size keyboard with LED backlight, magnetically attachable to bottom, charging via USB-C® cable. Stand supports system in both portrait & landscape modes and magnetically attaches to system in portrait mode. Living hinge for angle adjustment.[1]
• No keyboard and stand

Keyboard Backlight
LED backlight on optional keyboard

UltraNav™

TrackPoint® pointing device and glass surface multi-touch Haptic Touchpad, 50 x 110 mm (1.97 x 4.33 inches)

Notes:

[1] ThinkPad® Bluetooth® TrackPoint® Keyboard and Stand is sold as a single unit and components are not available individually.

Mechanical

Dimensions (WxDxH)[2]

Folded: 176.2 x 276.2 x 17.4 mm (6.94 x 10.87 x 0.69 inches)
Unfolded: 345.7 x 276.2 x 8.6 mm (13.61 x 10.87 x 0.34 inches)

Weight[2]

[Refer to the actual page for the detailed values]
<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLAN models with 48Wh battery</td>
<td>X1 Fold 16: starting at 1.26 kg (2.78 lbs)</td>
</tr>
<tr>
<td></td>
<td>Keyboard and stand: around 627 g (1.38 lbs)</td>
</tr>
<tr>
<td></td>
<td>Total: around 1.887 kg (4.16 lbs)</td>
</tr>
<tr>
<td>WLAN models with 64Wh battery</td>
<td>X1 Fold 16: starting at 1.31 kg (2.89 lbs)</td>
</tr>
<tr>
<td></td>
<td>Keyboard and stand: around 627 g (1.38 lbs)</td>
</tr>
<tr>
<td></td>
<td>Total: around 1.938 kg (4.27 lbs)</td>
</tr>
<tr>
<td>WWAN models with 64Wh battery</td>
<td>X1 Fold 16: starting at 1.314 kg (2.9 lbs)</td>
</tr>
<tr>
<td></td>
<td>Keyboard and stand: around 627 g (1.38 lbs)</td>
</tr>
<tr>
<td></td>
<td>Total: around 1.941 kg (4.28 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
Performance black

**Case Material**
Aluminium + 100% recycled woven performance fabric

---

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

---

**CONNECTIVITY**

**Network**

**Ethernet**
No onboard Ethernet

**WLAN + Bluetooth®**
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)

**WWAN**
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**
No physical SIM card inbox

**NFC**
No support

---

**Notes:**
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

**Ports**

**Standard Ports**
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)

**Optional Ports**
1x Nano-SIM card slot (WWAN support models)

---

**Notes:**
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be
slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® X1 Fold 16 Gen 1

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Smart Card Reader
No smart card reader

Fingerprint Reader
  • Touch style fingerprint reader in keyboard key, match-on-chip
  • No fingerprint reader

BIOS Security
  • Supervisor password
  • Power-on password
  • System management password
  • NVMe® password
  • FIDO (Fast Identity Online) authentication
  • Self-healing BIOS

Other Security
  • IR camera for Windows® Hello (facial recognition)
  • Glance by Mirametrix®
  • (Optional) Computer Vision-based User Presence Sensing including lock on leave
  • Tile ready

MANAGEABILITY

System Management

System Management
  • Intel® vPro® Enterprise
  • Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**
  • 1-year courier or carry-in service
  • 1-year courier or carry-in with 2-year system board service (Korea only)
  • 1-year limited onsite service
  • 3-year (1-yr battery) courier or carry-in service
  • 3-year (1-yr battery) limited onsite service
  • No base warranty

[2]
Notes:
[1] No base warranty is for special bid only.

ACCESSORIES

Bundled Accessories

Bundled Accessories

- Lenovo® Powered USB-C® Travel Hub
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X1 Fold 16 Gen 1.

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

- Recycled Performance Woven fabric cover
- 97% PCC recycled plastic used in speaker enclosure
- 97% PCC recycled plastic used in the 48Wh and 16Wh batteries
- At least 90% PCC recycled plastic used in standard 65W adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

**Other Certifications**

Mil-Spec Test
MIL-STD-810H military test passed

**Other Certifications**

(Optional) Intel® Evo™ Platform

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Power button
2. Headphone / microphone combo jack (3.5mm)
3. Thunderbolt 4
4. Thunderbolt 4

Notes:
• Optional nano-SIM card slot on the rear side (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
13th Generation Intel® P Series Core™ i5 / i7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1340P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i5-1350P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1360P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core™ i7-1370P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.9GHz / E-core 1.4GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 10 IoT Enterprise LTSC 2021[1]
- No preload operating system

Notes:
[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated Shared</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support[1]

Supports up to 3 independent displays (native display and 2 external monitors via Thunderbolt™)
- Thunderbolt™ supports up to 5K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory
16GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, 8-channel

Memory Type
LPDDR5x-6400[1]
Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

### Storage

#### Storage Support
One drive, up to 1TB M.2 2242 SSD

#### Storage Slot
One M.2 2242 PCIe® 4.0 x4 slot

#### Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

### Removable Storage

#### Card Reader
No card reader

### Multi-Media

#### Audio Chip
High Definition (HD) Audio, Realtek® ALC3306 codec

#### Speakers
Stereo speakers, 2W x2 woofers and 1W x2 tweeters, Dolby Atmos®

#### Microphone
Quad-microphone array, 360° far-field, Dolby Voice®

#### Camera**
- FHD 1080p + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus

### Battery

#### Battery
Integrated Li-Polymer 49.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

#### Battery Life**(1)
Configuration 1 (max battery life)
- MobileMark® 25: up to 11.13 hr with 632 performance score @250nits
- JEITA 2.0: up to 19.67 hr @150nits
- Local video playback: up to 17.83 hr @150nits

Alternate configuration 2
- MobileMark® 25: up to 10.58 hr with 653 performance score @250nits
- JEITA 2.0: up to 19.03 hr @150nits
- Local video playback: up to 17.44 hr @150nits

Alternate configuration 3
- MobileMark® 25: up to 10.28 hr with 651 performance score @250nits
- JEITA 2.0: up to 18.92 hr @150nits
- Local video playback: up to 17.13 hr @150nits

Notes:

[1] Configuration 1 (max battery life): 2K (non-touch), Intel® i5-1340P, 16GB LPDDR5x, Win 11, 49.5Wh battery, best power efficiency power mode
Alternate configuration 2: 2K (touch), Intel® i5-1350P, 16GB LPDDR5x, Win 11, 49.5Wh battery, best power efficiency power mode
Alternate configuration 3: 2K (touch), Intel® i7-1370P, 16GB LPDDR5x, Win 11, 49.5Wh battery, best power efficiency power mode
All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:

- [1] AC adapter offerings depend on the country.
- [2] No power adapter is for special bid only.

**DESIGN**

**Display**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13&quot;</td>
<td>2K (2160x1350)</td>
<td>None</td>
<td>IPS</td>
<td>450nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power</td>
</tr>
<tr>
<td>13&quot;</td>
<td>2K (2160x1350)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>450nits</td>
<td>Anti-glare, anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power</td>
</tr>
</tbody>
</table>

**Touchscreen**

- Add-on Film Touch, supports 10-point touch
- Non-touch

Notes:

- [1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**

LED backlight

**UltraNav™**

TrackPoint® pointing device and glass surface multi-touch touchpad, 56 x 110 mm (2.20 x 4.33 inches)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-touch models</td>
<td>293.2 x 208.0 x 14.4 mm (11.54 x 8.19 x 0.57 inches)</td>
</tr>
<tr>
<td>Touch models</td>
<td>293.3 x 208.1 x 14.8 mm (11.55 x 8.19 x 0.58 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-touch models</td>
<td>1.24 lb (0.56 kg)</td>
</tr>
<tr>
<td>Touch models</td>
<td>1.30 lb (0.59 kg)</td>
</tr>
</tbody>
</table>
## Models

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-touch models</td>
<td>Starting at 966.5 g (2.13 lbs)</td>
</tr>
<tr>
<td>Touch models</td>
<td>Starting at 991.5 g (2.19 lbs)</td>
</tr>
</tbody>
</table>

### Case Color
- Deep black, paint

### Case Material
- Carbon fiber (top), magnesium alloy (bottom)

### Notes:
1. The system dimensions may vary depending on configurations.
2. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

## CONNECTIVITY

### Network

#### Ethernet
- No onboard Ethernet[^1]

#### WLAN + Bluetooth®
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[^2]

#### WWAN
- Wireless WAN upgradable to 4G (with antenna ready)
- No support

#### SIM Card
- No physical SIM card inbox

#### NFC
- No support

### Notes:
1. Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
2. Wi-Fi® 6E full features might be limited by country-level restrictions.
   - Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
   - 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](#).

### Ports[^1]

#### Standard Ports
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Headphone / microphone combo jack (3.5mm)

#### Optional Ports
- 1x Nano-SIM card slot (WWAN support models)

### Notes:
1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
   - USB 2.0: 480 Mbit/s;
   - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
   - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
   - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
   - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
   - Thunderbolt™ 3/4: 40 Gbit/s.
**Docking**

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® X1 Nano Gen 3](#).

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TCG 2.0, TCG certified, FIPS 140-2 certified

**Smart Card Reader**
No smart card reader

**Fingerprint Reader**
Touch style fingerprint reader on palm rest, match-on-chip

**BIOS Security**
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**
- IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter
- View by Mirametrix®
- (Optional) Computer Vision-based User Presence Sensing including lock on leave

**MANAGEABILITY**

**System Management**

**System Management**
- Intel® vPro® Enterprise[^1]
- Non-vPro®

Notes:
[^1]: Intel® vPro® offers a superset of DASH's defined capabilities.

**SERVICE**

**Warranty**

**Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

**ACCESSORIES**

**Bundled Accessories**

**Bundled Accessories**[^1]
- Lenovo® USB-C® Port Replicator
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 90% recycled magnesium on keyboard frame and bottom cover
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the 49.5Wh battery enclosure
- 90% PCC recycled plastic used in standard 45W and 65W adapters
- Low-temperature solder
- Retail or standard packaging: plastic free packaging with 100% bamboo sugarcane fiber
- Bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
- MIL-STD-810H military test passed
Other Certifications
(Optional) Intel® Evo™ Platform

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Thunderbolt 4
2. Thunderbolt 4
3. USB 3.2 Gen 1
4. HDMI
5. Pen slot
6. Headphone / microphone combo jack (3.5mm)
7. USB 3.2 Gen 1 (Always On)
8. Kensington Nano Security Slot

Notes:
- Optional nano-SIM card slot on the right side (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
12th Generation Intel® Core™ i5 / i7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
</tr>
<tr>
<td>Core™ i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
</tr>
<tr>
<td>Core™ i5-1245U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
</tr>
<tr>
<td>Core™ i5-1250P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
</tr>
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<td>Core™ i7-1255U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>12MB</td>
</tr>
<tr>
<td>Core™ i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
</tr>
<tr>
<td>Core™ i7-1265U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>12MB</td>
</tr>
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<td>Core™ i7-1270P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>18MB</td>
</tr>
<tr>
<td>Core™ i7-1280P(1)</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>24MB</td>
</tr>
</tbody>
</table>

Notes:
[1] NOT available in EMEA.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:
[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Iris® Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
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Monitor Support

Monitor Support[1]

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)
ThinkPad X1 Yoga Gen 7

- Thunderbolt™ supports up to 5K@60Hz
- HDMI® supports up to 4K@60Hz

Notes:
1. Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, 8-channel

Memory Type
LPDDR5-5200

Notes:
1. 8GB memory is NOT available in EMEA.
2. Installed memory is actually LPDDR5-6400 but run as LPDDR5-5200 due to processor limitation.

Storage

Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
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<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
1. The storage capacity supported is based on the test results with current Lenovo® storage offerings.
2. 512GB and 1TB M.2 2280 PCIe® 4x4 SSD are NOT available in EMEA.
3. PCIe® x4 may be PCIe® 3.0x4 or PCIe® 4.0x4 as substitution.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers
Stereo speakers, 2W x2 woofers and 0.8W x2 tweeters, Dolby Atmos®

Microphone
Quad-microphone array, 360° far-field, Dolby Voice®

Camera
- FHD 1080p + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
Sensor
Sensors
- Accelerometer (G) sensor
- Proximity (P) sensor

Battery
Battery
Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 2018: up to 14.9 hr with 848 performance score @250nits
JEITA 2.0: up to 24.5 hr @150nits
Local video playback: up to 19.7 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 14.2 hr with 820 performance score @200nits
MobileMark® 25: up to 11.3 hr with 608 performance score @250nits
JEITA 2.0: up to 24.1 hr @150nits
Local video playback: up to 19.7 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 14.0 hr with 810 performance score @200nits
MobileMark® 25: up to 11.0 hr with 614 performance score @250nits
JEITA 2.0: up to 21.8 hr @150nits
Local video playback: up to 19.3 hr @150nits

Notes:[1] Configuration 1 (max battery life): WUXGA (touch), Intel® i5-1235U, 8GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), Intel® i5-1240P, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode
Alternate configuration 3: WUXGA (touch), Intel® i7-1260P, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter
Power Adapter*[1][2]
- 45W USB-C* (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C* (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C* (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C* (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C* slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C* slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:
[2] In EMEA only 65W USB-C* slim AC adapters are available.

DESIGN
Display
Display**
ThinkPad X1 Yoga Gen 7

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified</td>
</tr>
<tr>
<td>14”</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad® Privacy Guard</td>
</tr>
<tr>
<td>14”</td>
<td>WQUXGA (3840x2400)</td>
<td>Multi-touch</td>
<td>500nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>85°/85°/85°/85°</td>
<td>Low power, DisplayHDR™ 400, Dolby Vision®, Eyesafe® Certified</td>
</tr>
</tbody>
</table>

Touchscreen
OGS (One Glass Solution) multi-touch, supports 10-point touch

Notes:
[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Multi-mode
Multi-mode
Laptop, tent, stand, and tablet modes supported by 360° hinge

Input Device
Pen
Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and rechargeable

Keyboard
6-row, spill-resistant, air intake design, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
LED backlight

UltraNav™
TrackPoint® pointing device and glass surface multi-touch touchpad, 56 x 110 mm (2.20 x 4.33 inches)

Mechanical
Dimensions (WxDxH)[1]
314.4 x 222.3 x 15.53 mm (12.38 x 8.75 x 0.61 inches)

Weight[2]
Starting at 1.38 kg (3.04 lbs)

Case Color
Storm grey

Case Material
Aluminium (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY
**Network**

**Ethernet**
No onboard Ethernet\[1\]

**WLAN + Bluetooth®**\[2\]

- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)\[3\]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)\[4\]

**WWAN**

- Wireless WAN upgradable to 4G (with antenna ready)
- Fibocom L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- No support

**SIM Card**

- Gemalto eSIM card (physical)
- No physical SIM card inbox

**NFC**

- Near Field Communication
- No support

**Notes:**

- Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
- Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
- Wi-Fi® 6 full features might be limited by country-level restrictions.
- Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

**Ports**\[1\]

**Standard Ports**

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports**

1x Nano-SIM card slot (WWAN support models)

**Notes:**

- The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

**Docking**

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® X1 Yoga® Gen 7](#)

**SECURITY & PRIVACY**

**Security**
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter
- Glance by Mirametrix®
- (Optional) Computer Vision-based User Presence Sensing including lock on leave
- Tile ready

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X1 Yoga® Gen 7
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 95% PCC recycled plastic used in speaker enclosure
- 25-30% PCC recycled plastic used in the 57Wh battery frame
- 95% PCC recycled plastic used in standard 65W adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
- MIL-STD-810H military test passed

Other Certifications
- (Optional) Intel® Evo™ Platform
- (Optional) Eyesafe® Certified
- TÜV Rheinland® Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected...
models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Thunderbolt 4
2. Thunderbolt 4
3. USB 3.2 Gen 1
4. HDMI
5. Pen slot
6. Headphone / microphone combo jack (3.5mm)
7. Nano-SIM card slot *
8. USB 3.2 Gen 1 (Always On)
9. Kensington Nano Security Slot

Notes:
* Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation Intel® U or P Series Core™ i5 / i7 Processor

Processor**[^1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
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<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
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Notes:
[^1] Intel® Core™ i5-1340P, i5-1350P and i7-1360P are for special bid only.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021[^1]
- Ubuntu Linux[^2]
- Linux[^3]
- No preload operating system

Notes:
[^1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.
[^2], [^3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

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Monitor Support

Monitor Support[^1]

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ and HDMI®)
- Thunderbolt™ supports up to 5K@60Hz
- HDMI® supports up to 4K@60Hz

Notes:
[^1] Refresh rates >60Hz also supported, however max resolution will be limited.
**Chipset**

Intel® SoC (System on Chip) platform

**Memory**

Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable
- 64GB soldered memory, not upgradable

Memory Slots
Memory soldered to systemboard, no slots, 8-channel

Memory Type**
- LPDDR5/x-6000 (32GB)[3]
- LPDDR5/x-6400 (16GB)[2]
- LPDDR5x-6000 (64GB)[3]

Notes:
[1] Installed memory is actually LPDDR5-6400 or LPDDR5x-7500 but run as LPDDR5-6000 or LPDDR5x-6000 due to platform limitation.
[2] Installed LPDDR5x memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.
[3] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6000 due to platform limitation.

**Storage**

Storage Support[3]
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type**

<table>
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<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

Card Reader
No card reader

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Realtek® ALC3306 codec

 Speakers
Stereo speakers, 2W x2 woofers and 0.8W x2 tweeters, Dolby Atmos®

 Microphone
Quad-microphone array, 360° far-field, Dolby Voice®

 Camera**
- FHD 1080p + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus

**Battery**

Battery
Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1 hr) with 65W AC adapter

**Battery Life**

**Configuration 1 (max battery life)**

MobileMark® 25: up to 13.7 hr with 667 performance score @250nits
JEITA 2.0: up to 27.7 hr @150nits
Local video playback: up to 22.4 hr @150nits

**Alternate configuration 2**

MobileMark® 25: up to 13.05 hr with 637 performance score @250nits
JEITA 2.0: up to 24.7 hr @150nits
Local video playback: up to 20.1 hr @150nits

**Alternate configuration 3**

MobileMark® 25: up to 13.4 hr with 659 performance score @250nits
JEITA 2.0: up to 24.2 hr @150nits
Local video playback: up to 19.5 hr @150nits

Notes:

[1] Configuration 1 (max battery life): WUXGA (touch), Intel® i5-1345U, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA (touch), Intel® i5-1340P, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 3: WUXGA (touch), Intel® i5-1350P, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests.

Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use.

Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:


**DESIGN**

**Display**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>14&quot;</td>
<td>WUXGA</td>
<td>Multi-touch</td>
<td>IPS[1]</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA</td>
<td>Multi-touch</td>
<td>IPS[2]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>85°/85°/85°/85°</td>
<td>Low power, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>14&quot;</td>
<td>WUXGA</td>
<td>Multi-</td>
<td>IPS[3]</td>
<td>500nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100%</td>
<td>85°/85°/85°/85°</td>
<td>ThinkPad®</td>
</tr>
</tbody>
</table>
ThinkPad X1 Yoga Gen 8

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touchscreen</td>
<td>OGS (One Glass Solution) multi-touch, supports 10-point touch</td>
</tr>
<tr>
<td>Notes:</td>
<td>[1], [2], [3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.</td>
</tr>
<tr>
<td>Multi-mode</td>
<td>Multi-mode</td>
</tr>
<tr>
<td>Multi-mode</td>
<td>Laptop, tent, stand, and tablet modes supported by 360° hinge</td>
</tr>
<tr>
<td>Input Device</td>
<td></td>
</tr>
<tr>
<td>Pen</td>
<td>Lenovo® Integrated Pen, with built-in rechargeable battery, 4096 levels of pressure sensitivity, on-board garaged and rechargeable</td>
</tr>
<tr>
<td>Keyboard</td>
<td>6-row, spill-resistant, air intake design, multimedia Fn keys with Unified Communications controls</td>
</tr>
<tr>
<td>Keyboard Backlight</td>
<td>LED backlight</td>
</tr>
<tr>
<td>UltraNav™</td>
<td>TrackPoint® pointing device and glass surface multi-touch touchpad, 56 x 110 mm (2.20 x 4.33 inches)</td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
</tr>
<tr>
<td>Dimensions (WxDxH)</td>
<td>314.4 x 222.3 x 15.53 mm (12.38 x 8.75 x 0.61 inches)</td>
</tr>
<tr>
<td>Weight</td>
<td>Starting at 1.38 kg (3.04 lbs)</td>
</tr>
<tr>
<td>Case Color</td>
<td>Storm grey</td>
</tr>
<tr>
<td>Case Material</td>
<td>Aluminium (top), aluminium (bottom)</td>
</tr>
<tr>
<td>Notes:</td>
<td>[1] The system dimensions may vary depending on configurations.</td>
</tr>
<tr>
<td></td>
<td>[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.</td>
</tr>
</tbody>
</table>

**CONNECTIVITY**

**Network**

**Ethernet**

No onboard Ethernet

**WLAN + Bluetooth®**

Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

**WWAN**

- Wireless WAN upgradable to 4G or 5G (with antenna ready)
- Fibocom L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card, with embedded eSIM functionality
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
**ThinkPad X1 Yoga Gen 8**

- **SIM Card**
  No physical SIM card inbox

- **NFC**
  - Near Field Communication
  - No support

**Notes:**

[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

[2] Wi-Fi® 6E full features might be limited by country-level restrictions.

Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](https://www.microsoft.com).

**Ports**

**Standard Ports**

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports**

1x Nano-SIM card slot (WWAN support models)

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;

USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;

USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;

USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;

USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;

Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Various docking solutions supported via Thunderbolt™ / USB-C®.

For more compatible docking solutions, please visit [Docking for ThinkPad® X1 Yoga® Gen 8](https://www.lenovo.com).

**SECURITY & PRIVACY**

**Security**

**Security Chip**

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**

No smart card reader

**Fingerprint Reader**

Touch style fingerprint reader integrated in power button, match-on-chip

**BIOS Security**

- Supervisor password
- Power-on password
- System management password
NVMe® password
• Certificate based BIOS authentication
• FIDO (Fast Identity Online) authentication
• Self-healing BIOS

Other Security
• Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)
• (Optional) IR camera for Windows® Hello (facial recognition)
• Camera privacy shutter
• Glance by Mirametrix®
• (Optional) Computer Vision-based User Presence Sensing including lock on leave

MANAGEABILITY

System Management

System Management**
• Intel® vPro® Enterprise[1]
• Intel® vPro® Essentials[2]
• Non-vPro®

Notes:
[1], [2] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
• Lenovo® HDMI® to VGA Monitor Adapter
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X1 Yoga® Gen 8

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
• Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
• Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
• Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
55% recycled aluminium on bottom cover
90% PCC recycled plastic used in speaker enclosure
25–30% PCC recycled plastic used in the 57Wh battery enclosure
90% PCC recycled plastic used in standard 45W and 65W adapters
Low-temperature solder
Retail or standard packaging: plastic free packaging with 100% bamboo sugarcane fiber
Bulk packaging: 90% recycled and FSC certified content

CERTIFICATIONS

Green Certifications

Green Certifications

• ENERGY STAR® 8.0
• EPEAT™ Gold Registered
• ErP Lot 6/26
• RoHS compliant
• TCO Certified 9.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

• (Optional) Intel® Evo™ Platform
• (Optional) Eyesafe® Certified 2.0
• TÜV Rheinland® Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without
OVERVIEW

1. Headphone / microphone combo jack (3.5mm)
2. Power button
3. USB4
4. USB4

Notes:
• Optional nano-SIM card slot on the right side (not shown on the sample product above)
### PERFORMANCE

**Processor**

**Processor Family**
AMD Ryzen™ 5 / 7 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 6650U</td>
<td>6</td>
<td>12</td>
<td>2.9GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 6850U</td>
<td>8</td>
<td>16</td>
<td>2.7GHz</td>
<td>4.7GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 6860Z</td>
<td>8</td>
<td>16</td>
<td>2.7GHz</td>
<td>4.75GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M</td>
</tr>
</tbody>
</table>

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux[^1]
- Ubuntu Linux[^2]
- Linux[^3]
- No preload operating system

**Notes:**

[^1], [^2], [^3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

### Graphics

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 660M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 680M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

### Monitor Support

**Monitor Support**

Supports up to 3 independent displays (native display and 2 external monitors via USB4®)

- USB4® supports up to 8K@30Hz[^1]

**Notes:**

[^1] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

### Chipset

**Chipset**

AMD SoC (System on Chip) platform

### Memory

**Max Memory**

- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

**Memory Slots**

Memory soldered to systemboard, no slots, dual-channel

**Memory Type**

LPDDR5-6400
Storage

Storage Support
One drive, up to 1TB M.2 2242 SSD

Storage Slot
One M.2 2242 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®

Microphone
Dual-microphone array, 360° far-field, Dolby Voice®

Camera

- FHD 1080p + IR discrete, with E-shutter, fixed focus
- FHD 1080p + IR hybrid, with E-shutter, fixed focus

Battery

Battery
Integrated Li-Polymer 51.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Battery Life

Configuration 1 (max battery life)
MobileMark® 2018: up to 18.33 hr with 666 performance score @200nits
MobileMark® 25: up to 16.66 hr with 759 performance score @250nits
JEITA 2.0: up to 22.8 hr @150nits
Local video playback: up to 22.8 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 17.93 hr with 651 performance score @200nits
MobileMark® 25: up to 14.3 hr with 785 performance score @250nits
JEITA 2.0: up to 22.1 hr @150nits
Local video playback: up to 21.35 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 7.81 hr with 635 performance score @200nits
MobileMark® 25: up to 7.4 hr with 794 performance score @250nits
JEITA 2.0: up to 11.71 hr @150nits
Local video playback: up to 13.55 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 PRO 6850U, 16GB LPDDR5, Win 11, 51.5Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (non-touch), AMD Ryzen™ 5 PRO 6650U, 16GB LPDDR5, Win 11, 51.5Wh battery, best power efficiency power mode
Alternate configuration 3: 2.8K OLED (touch), AMD Ryzen™ 5 PRO 6650U, 32GB LPDDR5, Win 11, 51.5Wh battery, best power efficiency power mode
All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:

[2] No power adapter is for special bid only.

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Low power, TÜV Low Blue Light (Hardware Solution), 91.6% screen to body ratio</td>
</tr>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>On-cell touch</td>
<td>IPS</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Low power, TÜV Low Blue Light (Hardware Solution), 91.6% screen to body ratio</td>
</tr>
<tr>
<td>13.3”</td>
<td>2.8K (2880x1800)</td>
<td>OGS touch</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>60Hz</td>
<td>87.5° / 87.5° / 87.5° / 87.5°</td>
<td>DisplayHDR™ 400, Dolby Vision®, TÜV Low Blue Light (Hardware Solution), 91.6% screen to body ratio</td>
</tr>
</tbody>
</table>

**Touchscreen**

- OGS (One Glass Solution) multi-touch, supports 10-point touch
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:

[1], [2] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**
Pen
• No pen (purchase separately)
• No support (non-touch display doesn't support pen input)

Keyboard
6-row, spill-resistant, edge-to-edge, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
LED backlight

UltraNav™
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Glass surface multi-touch Haptic Touchpad, 70.9 x 120 mm (2.79 x 4.72 inches)

Mechanical
Dimensions (WxDxH)
294.4 x 199.6 x 13.99 mm (11.59 x 7.86 x 0.55 inches)

Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-touch models</td>
<td>Starting at 1.19 kg (2.63 lbs)</td>
</tr>
<tr>
<td>Touch models</td>
<td>Starting at 1.26 kg (2.78 lbs)</td>
</tr>
</tbody>
</table>

Case Color**
• Arctic grey (top), black (bottom)
• Black (top), black (bottom)
• Bronze with black vegan leather (top), black (bottom)

Case Material**
• Vegan leather + aluminium (top), aluminium (bottom)
• Aluminium (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] Black top cover is NOT available in NA and EMEA.

CONNECTIVITY

Network

Ethernet
No onboard Ethernet

WLAN + Bluetooth®
Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)

WWAN**
• Quectel EM05-G, 4G LTE CAT4, M.2 card
• Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
• No support

SIM Card
• Gemalto eSIM card (physical)
• No physical SIM card inbox

NFC
No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system,
driver, etc.  
[3] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

**Ports**[1]

**Standard Ports**
- 2x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x Headphone / microphone combo jack (3.5mm)

**Optional Ports**
1x Nano-SIM card slot (WWAN support models)

**Notes:**
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Docking
Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® Z13 Gen 1](#).

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

**Smart Card Reader**
No smart card reader

**Fingerprint Reader**
Touch style fingerprint reader in keyboard key, match-on-chip

**BIOS Security**
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**
- IR camera for Windows® Hello (facial recognition)
- E-shutter
- Glance by Mirametrix®

**MANAGEABILITY**

**System Management**

**System Management**
- DASH
- Non-DASH
SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty[1]

Notes:
[1] No base warranty is for special bid only.

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to HDMI® Adapter
- Lenovo® USB-C® to USB-A Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® Z13 Gen 1.

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 75% post-consumer recycled aluminium
- 97% PCC recycled plastic used in speaker enclosure
- 97% PCC recycled plastic used in the 50Wh battery frame
- 95% PCC recycled plastic used in standard 65W adapter
- Low-temperature solder
- 90% recycled and/or sustainable packaging

CERTIFICATIONS
Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications
TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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OVERVIEW

1. USB4
2. Headphone / microphone combo jack (3.5mm)
3. Nano-SIM card slot *
4. Power button
5. USB4

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 7540U</td>
<td>6</td>
<td>12</td>
<td>3.2GHz</td>
<td>4.9GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7840U</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

• Windows® 11 Pro
• Windows® 11 Home
• Windows® 11 Home Single Language
• Windows® 11 DG Windows® 10 Pro 64
• Fedora Linux[1]
• Ubuntu Linux[2]
• Linux[3]
• No preload operating system

Notes:
[1], [2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 740M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 3 independent displays (native display and 2 external monitors via USB4*)
* USB4* supports up to 8K@30Hz[1]

Notes:
[1] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory

• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable
• 64GB soldered memory, not upgradable[1]

Memory Slots

Memory soldered to system board, no slots, dual-channel

Memory Type

LPDDR5x-6400[2]
Notes:
[1] Available for AMD Ryzen™ 7 PRO models only.
[2] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

**Storage**

**Storage Support**
One drive, up to 2TB M.2 2242 SSD

**Storage Slot**
One M.2 2242 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3306 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Atmos®

**Microphone**
Dual-microphone array, 360° far-field, Dolby Voice®

**Camera**
- FHD 1080p + IR discrete, with E-shutter, fixed focus
- FHD 1080p + IR hybrid, with E-shutter, fixed focus

**Battery**

**Battery**
Integrated Li-Polymer 51.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

**Battery Life**

Configuration 1 (max battery life)
MobileMark® 25: up to 16.15 hr with 674 performance score @250nits
JEITA 2.0: up to 24.34 hr @150nits
Local video playback: up to 23.46 hr @150nits

Alternate configuration 2
MobileMark® 25: up to 15.91 hr with 648 performance score @250nits
JEITA 2.0: up to 22.32 hr @150nits
Local video playback: up to 19.71 hr @150nits

Alternate configuration 3
MobileMark® 25: up to 10.23 hr with 634 performance score @250nits
JEITA 2.0: up to 13.6 hr @150nits
Local video playback: up to 18.4 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 PRO 7840U, 16GB LPDDR5, Win 11, 51.5Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 5 PRO 7540U, 16GB LPDDR5, Win 11, 51.5Wh battery, best power efficiency power mode
Alternate configuration 3: 2.8K OLED (touch), AMD Ryzen™ 5 PRO 7540U, 16GB LPDDR5, Win 11, 51.5Wh battery, best
All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

**Power Adapter**

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

**Notes:**

[2] Special bid only.

**DESIGN**

**Display**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Low power, TÜV Low Blue Light (Hardware Solution), 91.6% screen to body ratio</td>
</tr>
<tr>
<td>13.3”</td>
<td>WUXGA (1920x1200)</td>
<td>On-cell touch</td>
<td>IPS[2]</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>Low power, TÜV Low Blue Light (Hardware Solution), 91.6% screen to body ratio</td>
</tr>
<tr>
<td>13.3”</td>
<td>2.8K (2880x1800)</td>
<td>OGS touch</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>60Hz</td>
<td>87.5° / 87.5° / 87.5° / 87.5°</td>
<td>DisplayHDR™ 400, Dolby Vision®, TÜV Low Blue Light (Hardware Solution), 91.6% screen to body ratio</td>
</tr>
</tbody>
</table>

**Touchscreen**

- OGS (One Glass Solution) multi-touch, supports 10-point touch
- On-cell multi-touch, supports 10-point touch
- Non-touch

**Notes:**

[1], [2] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
Input Device

Pen
- No pen (purchase separately)
- No support (non-touch display doesn't support pen input)

Keyboard

6-row, spill-resistant, edge-to-edge, multimedia Fn keys with Unified Communications controls

Keyboard Backlight

LED backlight

UltraNav™

TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Glass surface multi-touch Haptic Touchpad, 70.9 x 120 mm (2.79 x 4.72 inches)

Mechanical

Dimensions (WxDxH)\(^1\)
294.4 x 199.6 x 13.99 mm (11.59 x 7.86 x 0.55 inches)

Weight\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with arctic grey cover and OLED display</td>
<td>Starting at 1.24 kg (2.74 lbs)</td>
</tr>
<tr>
<td>Models with flax fiber bronze cover and OLED display</td>
<td>Starting at 1.27 kg (2.80 lbs)</td>
</tr>
<tr>
<td>Models with arctic grey cover and WUXGA non-touch display</td>
<td>Starting at 1.19 kg (2.63 lbs)</td>
</tr>
<tr>
<td>Models with arctic grey cover and WUXGA multi-touch display</td>
<td>Starting at 1.26 kg (2.78 lbs)</td>
</tr>
<tr>
<td>Models with flax fiber bronze cover and WUXGA multi-touch display</td>
<td>Starting at 1.29 kg (2.84 lbs)</td>
</tr>
</tbody>
</table>

Case Color\(^*\)*
- Arctic grey (top), black (bottom)
- Flax fiber bronze (top), black (bottom)\(^3\)

Case Material\(^*\)*
- Arctic grey models: aluminium (top), aluminium (bottom)
- Flax fiber bronze models: flax fiber + aluminium (top), aluminium (bottom)

Notes:

\(^1\) The system dimensions may vary depending on configurations.
\(^2\) The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
\(^3\) Available for multi-touch models only.

CONNECTIVITY

Network

Ethernet
No onboard Ethernet\(^1\)

WLAN + Bluetooth®
MediaTek Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3\(^2\)

WWAN
- Quectel EM05-G, 4G LTE CAT4, M.2 card, with embedded eSIM functionality
- No support

SIM Card
No physical SIM card inbox

NFC
No support
Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Standard Ports
- 2x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x Headphone / microphone combo jack (3.5mm)

Optional Ports
1x Nano-SIM card slot (WWAN support models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® Z13 Gen 2

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader in keyboard key, match-on-chip

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- IR camera for Windows® Hello (facial recognition)
- E-shutter
- Glance by Mirametrix®

MANAGEABILITY

System Management
**System Management**

- DASH
- Non-DASH

**SERVICE**

**Warranty**

**Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

**Notes:**

[1] No base warranty is for special bid only.

**ACCESSORIES**

**Bundled Accessories**

**Bundled Accessories**

- Lenovo® Powered USB-C® Travel Hub
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to HDMI® Adapter
- Lenovo® USB-C® to USB-A Adapter
- Lenovo® USB-C® to VGA Adapter
- None

**Notes:**

[1] For more compatible accessory solutions, please visit [Accessories for ThinkPad® Z13 Gen 2](#).

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

**Relative Humidity**

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

**Altitude**

Maximum altitude (without pressurization): 3048 m (10,000 ft)

**Notes:**

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

**ENVIRONMENTAL**

**Sustainability**

**Material**

- 75% recycled aluminium on top cover
- Sustainable flax fiber on bronze top cover
55% recycled aluminium on bottom cover
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the 51.5Wh battery frame
90% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
FSC certified plastic free packaging with bamboo + sugarcane fiber retail box / standard cushion

CERTIFICATIONS

Green Certifications

ENERGY STAR® 8.0
EPEAT™ Gold Registered
ErP Lot 6/26
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
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MIL-STD-810H military test passed

TÜV Rheinland® Low Blue Light (Hardware Solution)

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### OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power button</td>
</tr>
<tr>
<td>2</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>3</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>4</td>
<td>Kensington Nano Security Slot</td>
</tr>
<tr>
<td>5</td>
<td>USB4</td>
</tr>
<tr>
<td>6</td>
<td>USB4</td>
</tr>
<tr>
<td>7</td>
<td>SD card reader</td>
</tr>
</tbody>
</table>

**Notes:**
- Optional nano-SIM card slot on the right side (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 / 9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 6650H</td>
<td>6</td>
<td>12</td>
<td>3.3GHz</td>
<td>4.5GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>AMD Radeon™ 660M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 6850H</td>
<td>8</td>
<td>16</td>
<td>3.2GHz</td>
<td>4.7GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M</td>
</tr>
<tr>
<td>AMD Ryzen™ 9 PRO 6950H</td>
<td>8</td>
<td>16</td>
<td>3.3GHz</td>
<td>4.9GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>AMD Radeon™ 680M</td>
</tr>
</tbody>
</table>

Operating System

Operating System
• Windows® 11 Pro
• Windows® 11 Home
• Windows® 11 Home Single Language
• Windows® 11 DG Windows® 10 Pro 64
• Fedora Linux\[5\]
• Ubuntu Linux\[2\]
• Linux\[3\]
• No preload operating system

Notes:
[1], [2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 660M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 680M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6500M</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>DirectX® 12 Ultimate</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via USB4® and USB-C®)
• USB-C® supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)
• USB4® supports up to 8K@30Hz\[1\]

Notes:
[1] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
• 16GB soldered memory, not upgradable
• 32GB soldered memory, not upgradable

Notes:
Memory soldered to system board, no slots, dual-channel
Memory Type
LPDDR5-6400

Storage
Storage Support
One drive, up to 2TB M.2 2280 SSD

Storage Slot
One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® x4[2]</td>
<td>256GB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] PCIe® x4 may be PCIe® 3.0x4 or PCIe® 4.0x4 as substitution.

Removable Storage
Card Reader
SD card reader, supports UHS-II SD card

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®

Microphone
Dual-microphone array, 360° far-field, Dolby Voice®

Camera
- FHD 1080p + IR discrete, with E-shutter, fixed focus
- FHD 1080p + IR hybrid, with E-shutter, fixed focus

Battery

Battery
Integrated Li-Polymer 72Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Battery Life[1]
Configuration 1 (max battery life)
MobileMark® 2018: up to 20.5 hr with 657 performance score @200nits
MobileMark® 25: up to 20.0 hr with 624 performance score @250nits
JEITA 2.0: up to 25.9 hr @150nits
Local video playback: up to 28.2 hr @150nits

Alternate configuration 2
MobileMark® 2018: up to 19.4 hr with 635 performance score @200nits
MobileMark® 25: up to 19.0 hr with 524 performance score @250nits
JEITA 2.0: up to 25.6 hr @150nits
Local video playback: up to 24.6 hr @150nits

Alternate configuration 3
MobileMark® 2018: up to 9.4 hr with 619 performance score @200nits
MobileMark® 25: up to 6.9 hr with 485 performance score @250nits
JEITA 2.0: up to 9.1 hr @150nits
Local video playback: up to 13.6 hr @150nits

Notes:
[1] Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 PRO 6850H, 16GB LPDDR5, Win 11, 72Wh
battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 7 PRO 6850H, 16GB LPDDR5, Win 11, 72Wh battery, best power efficiency power mode
Alternate configuration 3: WQUXGA OLED (touch), AMD Ryzen™ 5 PRO 6650H, 16GB LPDDR5, Win 11, 72Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 2018, MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

**Power Adapter**

135W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:

**DESIGN**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
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<tr>
<td>16&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS[1]</td>
<td>400nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/80°/80°</td>
<td>Low power, TÜV Low Blue Light (Hardware Solution), 92.3% screen to body ratio</td>
</tr>
<tr>
<td></td>
<td>WUXGA (1920x1200)</td>
<td>On-cell</td>
<td>IPS[2]</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>60Hz</td>
<td>89°/89°/80°/80°</td>
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<tr>
<td>16&quot;</td>
<td>WQUXGA (3840x2400)</td>
<td>OGS</td>
<td>OLED</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>16:10</td>
<td>100,000:1</td>
<td>100% DCI-P3</td>
<td>60Hz</td>
<td>87.5° / 87.5° / 87.5° / 87.5°</td>
<td>DisplayHDR™ 400, Dolby Vision®, TÜV Low Blue Light (Hardware Solution), 92.3% screen to body ratio</td>
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</tbody>
</table>

**Touchscreen**
- OGS (One Glass Solution) multi-touch, supports 10-point touch
- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:
[1], [2] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**
Pen
  - No pen (purchase separately)
  - No support (non-touch display doesn't support pen input)

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
LED backlight

UltraNav™
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Glass surface multi-touch Haptic Touchpad, 80 x 120 mm (3.15 x 4.72 inches)

Mechanical
Dimensions (WxDxH)\(^1\)
354.4 x 237.4 x 15.8 mm (13.95 x 9.35 x 0.62 inches)

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<th>Models</th>
<th>Weight</th>
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<td>OLED models</td>
<td>Starting at 1.81 kg (3.99 lbs)</td>
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<td>WUXGA non-touch models</td>
<td>Starting at 1.83 kg (4.04 lbs)</td>
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Case Color
Arctic grey (top), black (bottom)

Case Material
Aluminium (top), aluminium (bottom)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
No onboard Ethernet\(^8\)

WLAN + Bluetooth®\(^2\)
Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)\(^3\)

WWAN**
  - Quectel EM05-G, 4G LTE CAT4, M.2 card
  - Fibocom L860-GL-16, 4G LTE CAT16, M.2 card
  - No support

SIM Card
  - Gemalto eSIM card (physical)
  - No physical SIM card inbox

NFC
No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[3] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.

**Ports**

**Standard Ports**
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 2x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD card reader

**Optional Ports**
- 1x Nano-SIM card slot (WWAN support models)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

**Docking**

Docking

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® Z16 Gen 1](#).

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

**Physical Locks**
Kensington® Nano Security Slot™, 2.5 x 6 mm

**Smart Card Reader**
No smart card reader

**Fingerprint Reader**
Touch style fingerprint reader in keyboard key, match-on-chip

**BIOS Security**
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

**Other Security**
- IR camera for Windows® Hello (facial recognition)
- E-shutter
- Glance by Mirametrix®

**MANAGEABILITY**

**System Management**

System Management
SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to HDMI® Adapter
- Lenovo® USB-C® to USB-A Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® Z16 Gen 1.

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
75% post-consumer recycled aluminium
97% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the 70Wh battery frame
Low-temperature solder
90% recycled and/or sustainable packaging

CERTIFICATIONS

Green Certifications[1]
Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. USB4
2. USB4
3. SD card reader
4. Power button
5. Headphone / microphone combo jack (3.5mm)
6. USB-C 3.2 Gen 2
7. Kensington Nano Security Slot

| 1. USB4 | 5. Headphone / microphone combo jack (3.5mm) |
| 2. USB4 | 6. USB-C 3.2 Gen 2 |
| 3. SD card reader | 7. Kensington Nano Security Slot |
| 4. Power button | |
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 5 / 7 / 9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 5 PRO 7640HS</td>
<td>6</td>
<td>12</td>
<td>4.3GHz</td>
<td>5.0GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 760M</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 7840HS</td>
<td>8</td>
<td>16</td>
<td>3.8GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
</tr>
<tr>
<td>AMD Ryzen™ 9 PRO 7940HS</td>
<td>8</td>
<td>16</td>
<td>4.0GHz</td>
<td>5.2GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
</tr>
</tbody>
</table>

Operating System

Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Fedora Linux
- Ubuntu Linux
- Linux
- No preload operating system

Notes:
[1], [2], [3] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 760M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6550M</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>DirectX® 12 Ultimate</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via USB4® and USB-C®)
- USB-C® supports up to 4K@60Hz (4 displays output), 5K@60Hz (3 displays output) or 5K@120Hz (up to 2 displays output)
- USB4® supports up to 8K@30Hz

Notes:
[1] 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

Chipset

Chipset
AMD SoC (System on Chip) platform

Memory

Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable
- 64GB soldered memory, not upgradable

Memory Slots
ThinkPad Z16 Gen 2

Memory soldered to systemboard, no slots, dual-channel

**Memory Type**
LPDDR5x-6400

Notes:

[1] Available for AMD Ryzen™ 9 PRO models only.
[2] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

**Storage**

**Storage Support**
One drive, up to 2TB M.2 2280 SSD

**Storage Slot**
One M.2 2280 PCIe® 4.0 x4 slot

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Card Reader**
SD card reader, supports UHS-II SD card

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC3306 codec

**Speakers**
Stereo speakers, 2W x2, Dolby Atmos®

**Microphone**
Dual-microphone array, 360° far-field, Dolby Voice®

**Camera**
- FHD 1080p + IR discrete, with E-shutter, fixed focus
- FHD 1080p + IR hybrid, with E-shutter, fixed focus

**Battery**

**Battery**
Integrated Li-Polymer 72Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

**Battery Life**

**Configuration 1 (max battery life)**
MobileMark® 25: up to 18.46 hr with 726 performance score @250nits
JEITA 2.0: up to 25.28 hr @150nits
Local video playback: up to 25.53 hr @150nits

**Alternate configuration 2**
MobileMark® 25: up to 17.75 hr with 722 performance score @250nits
JEITA 2.0: up to 25.12 hr @150nits
Local video playback: up to 24.61 hr @150nits

**Alternate configuration 3**
MobileMark® 25: up to 8.63 hr with 869 performance score @250nits
JEITA 2.0: up to 12.11 hr @150nits
Local video playback: up to 12.65 hr @150nits

Notes:
Configuration 1 (max battery life): WUXGA (non-touch), AMD Ryzen™ 7 PRO 7840HS, 16GB LPDDR5x, Win 11, 72Wh battery, best power efficiency power mode
Alternate configuration 2: WUXGA (touch), AMD Ryzen™ 7 PRO 7840HS, 16GB LPDDR5x, Win 11, 72Wh battery, best power efficiency power mode
Alternate configuration 3: WQUXGA OLED (touch), AMD Ryzen™ 7 PRO 7840HS, 32GB LPDDR5x, AMD Radeon™ RX 6550M, Win 11, 72Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 2.0, continuous 1080p local video playback (using default Media Player in Fullscreen mode with 150nits brightness and default volume level), or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration, software, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time, ambient temperature and use. Refer to Microsoft® link for more information about the Windows® Performance power slider.

Power Adapter

135W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

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Touchscreen**

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- On-cell multi-touch, supports 10-point touch
- Non-touch

Notes:

[1], [2] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
Input Device

Pen
- No pen (purchase separately)
- No support (non-touch display doesn’t support pen input)

Keyboard
6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

Keyboard Backlight
LED backlight

UltraNav™
TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu
Glass surface multi-touch Haptic Touchpad, 80 x 120 mm (3.15 x 4.72 inches)

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Notes:
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[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
No onboard Ethernet\(^1\)

WLAN + Bluetooth®
MediaTek Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3\(^2\)

WWAN
No support

NFC
No support

Notes:
[1] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.
[2] Wi-Fi® 6E full features might be limited by country-level restrictions. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10. 6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation. Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.
Ports:

Standard Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 2x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4a)
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD card reader

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

Docking

Various docking solutions supported via USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® Z16 Gen 2

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0 (TCG certified, FIPS 140-2 certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

Physical Locks
Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader
No smart card reader

Fingerprint Reader
Touch style fingerprint reader in keyboard key, match-on-chip

BIOS Security
- Supervisor password
- Power-on password
- System management password
- NVMe® password
- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

Other Security
- IR camera for Windows® Hello (facial recognition)
- E-shutter
- Glance by Mirametrix®

MANAGEABILITY

System Management

System Management
- DASH
- Non-DASH

SERVICE
Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty

Notes:
[1] No base warranty is for special bid only.

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

- Lenovo® Powered USB-C® Travel Hub
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to HDMI® Adapter
- Lenovo® USB-C® to USB-A Adapter
- Lenovo® USB-C® to VGA Adapter
- None

Notes:
[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® Z16 Gen 2.

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material

- 75% recycled aluminium on top cover
- 55% recycled aluminium on bottom cover
- 90% PCC recycled plastic used in speaker enclosure
- 90% PCC recycled plastic used in the 72Wh battery frame
- 90% PCC recycled plastic used in standard 135W adapter
- Low-temperature solder
- FSC certified plastic free packaging with bamboo + sugarcane fiber retail box / standard cushion

CERTIFICATIONS
Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

Other Certifications

TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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Limited warranty: Support unrelated to a warranty issue may be subject to additional charges.

Lenovo Services:
Carry-in or Mail-in Service: Parts and labor repair coverage where the customer is responsible for shipping (including packaging) or delivery to authorized warranty provider or repair center.

Depot or Courier Service: Parts and labor repair coverage where shipping (including packaging) or delivery to the repair center is paid for by Lenovo.

Expedited Depot: Parts and labor coverage with expedited turnaround. Shipping (including packaging) or delivery to the repair center is paid for by Lenovo.

Onsite / In-home Service: Parts and labor repair coverage where labor is provided onsite at your place of business. If Lenovo determines your product problem is covered by the product warranty and cannot be resolved over the telephone, a technician will be dispatched to arrive onsite, typically the next day.


Included software: may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

Battery life: Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover</td>
<td>1</td>
</tr>
<tr>
<td>Contents</td>
<td>2</td>
</tr>
<tr>
<td>Summary Of Change</td>
<td>3</td>
</tr>
<tr>
<td>ThinkPad Tablets</td>
<td>4</td>
</tr>
<tr>
<td>ThinkPad X12 Detachable</td>
<td>4</td>
</tr>
<tr>
<td>ThinkPad X12 Detachable Gen 2</td>
<td>12</td>
</tr>
<tr>
<td>Legal Information</td>
<td>20</td>
</tr>
</tbody>
</table>
Summary of Changes

This section describes the technical changes made in this edition. This edition might also include minor corrections and editorial changes which are not identified.

June 5, 2024 - Version 631

Additions in this update

➢ New product(s)
  ThinkPad X12 Detachable Gen 2

➢ Spec updated
  None

Withdrawals in this update

➢ Withdrawn product(s)
  None
OVERVIEW

1. Power button  
2. Volume button  
3. Kensington Nano Security Slot  
4. Headphone / microphone combo jack (3.5mm)  
5. Thunderbolt 4  
6. Nano-SIM card slot*  
7. USB-C 3.2 Gen 2

Notes:
- Items with * are only available on selected models
- Pogo pin connector (8-point) not shown on the sample product above
PERFORMANCE

Processor

Processor Family
11th Generation Intel® Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ i3-1110G4</td>
<td>2</td>
<td>4</td>
<td>2.5GHz</td>
<td>3.9GHz</td>
<td>6MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core™ i5-1130G7</td>
<td>4</td>
<td>8</td>
<td>1.8GHz</td>
<td>4.0GHz</td>
<td>8MB</td>
<td>Intel® Iris® Xe Graphics[^1]</td>
</tr>
<tr>
<td>Core™ i5-1140G7</td>
<td>4</td>
<td>8</td>
<td>1.8GHz</td>
<td>4.2GHz</td>
<td>8MB</td>
<td>Intel® Iris® Xe Graphics[^2]</td>
</tr>
<tr>
<td>Core™ i7-1160G7</td>
<td>4</td>
<td>8</td>
<td>2.1GHz</td>
<td>4.4GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[^3]</td>
</tr>
<tr>
<td>Core™ i7-1180G7</td>
<td>4</td>
<td>8</td>
<td>2.2GHz</td>
<td>4.6GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics[^4]</td>
</tr>
</tbody>
</table>

Notes:
[^1], [^2], [^3], [^4] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 Pro 64
- Windows® 10 Home 64
- Windows® 10 Home 64 Single Language
- No preload operating system

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[^1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Notes:
[^1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support

Supports up to 3 independent displays via native display and 2 external monitors; supports external monitors via USB-C® (5120x3200@60Hz) or Thunderbolt™ (5120x3200@60Hz)

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory

- 4GB soldered LPDDR4x-3733, not upgradable
- 8GB soldered LPDDR4x-4266, not upgradable
- 16GB soldered LPDDR4x-4266, not upgradable

Memory Type**

- LPDDR4x-3733
ThinkPad X12 Detachable

- LPDDR4x-4266

Notes:
[1] 8GB or 16GB LPDDR4x-4266 soldered, dual-channel.

Storage

Storage Support
One drive, up to 1TB M.2 2242 SSD

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>128GB / 256GB / 512GB / 1TB</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo storage offerings.

Multi-Media

Speakers
Stereo speakers, Realtek® ALC3306-GRT codec, 1W x2, Dolby Audio™

Microphone
Dual-microphone array, 360° far-field for Cortana, near-field for Alexa

Camera
Front 5.0MP + IR hybrid user-facing camera, privacy shutter, fixed focus
Rear 8.0MP, autofocus

Sensor

Vibration Motor
No support

Sensors
- Accelerometer (G) sensor
- Gyroscope sensor
- Hall sensor
- Inclinometer sensor
- Proximity (P) sensor (WWAN models)

Battery

Battery
Integrated Li-Polymer 42Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Max Battery Life
MobileMark® 2018: 10.36 hr
JEITA 2.0: 12.42 hr

Notes:
[1] All battery life claims are approximate maximum and based on results using the MobileMark® 2014, MobileMark® 2018, JEITA 2.0, continuous 1080p video playback (with 150nits brightness and default volume level) or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

Power Adapter

Power Adapter**
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
No power adapter

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.3”</td>
<td>FHD+ (1920x1280)</td>
<td>Multi-touch</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>3:2</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>178°</td>
<td>Corning® Gorilla® Glass 5</td>
</tr>
</tbody>
</table>

Touchscreen

GF2 multi-touch, supports 10-point touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Pen[*1](1)

- Lenovo® Digital Pen with replaceable AAAA alkaline battery, 4096 levels of pressure sensitivity. For more information, please read Lenovo® Digital Pen Overview
- Lenovo® Digital Pen without replaceable AAAA alkaline battery, 4096 levels of pressure sensitivity. For more information, please read Lenovo® Digital Pen Overview
- Lenovo® Precision Pen, 4096 levels of pressure sensitivity, magnetically attached to the system. For more information, please read Lenovo® Precision Pen Overview
- No pen (purchase separately)

Notes:

[1] Lenovo® Precision Pen: might not be installed with an AAAA alkaline battery.

Mechanical

Dimensions (WxDxH)[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tablet</td>
<td>Tablet: 283.3 x 203.5 x 8.8 mm (11.15 x 8.01 x 0.34 inches)</td>
</tr>
<tr>
<td>Tablet with folio keyboard</td>
<td>Tablet: 283.3 x 203.5 x 8.8 mm (11.15 x 8.01 x 0.35 inches)</td>
</tr>
<tr>
<td></td>
<td>Folio keyboard: 283.3 x 217.8 x 5.7 mm (11.15 x 8.57 x 0.22 inches)</td>
</tr>
<tr>
<td></td>
<td>Total: 283.3 x 208.1 x 14.5 mm (11.15 x 8.19 x 0.57 inches)</td>
</tr>
</tbody>
</table>

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tablet</td>
<td>Tablet: around 760 g (1.67 lbs)</td>
</tr>
<tr>
<td>Tablet with folio keyboard</td>
<td>Tablet: around 760 g (1.67 lbs)</td>
</tr>
<tr>
<td></td>
<td>Folio keyboard: 340 g (0.75 lbs)</td>
</tr>
<tr>
<td></td>
<td>Total: 1,100 g (2.42 lbs)</td>
</tr>
</tbody>
</table>

Case Color

Black

Case Material[3]

Magnesium-aluminium

Others

- Hinge open angle: 170°
- Kensington® Nano Security Slot™

Buttons

- Power button
Volume button

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

WLAN + Bluetooth®

Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, MU-MIMO

WWAN

Fibocom L850-GL, 4G LTE CAT9, M.2 card

No support

SIM Card

Gemalto eSIM card (physical)

No physical SIM card inbox

NFC

Near Field Communication

No support

Wi-Fi® Direct

Support

Wi-Fi® Display

Support

Location Services**

<table>
<thead>
<tr>
<th>Models</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLAN models</td>
<td>No location service</td>
</tr>
<tr>
<td>WWAN models</td>
<td>GPS + GLONASS + A-GPS</td>
</tr>
</tbody>
</table>

Notes:
[1] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.
[2] Wi-Fi® 6 full features might be limited by country-level restrictions.

Ports

Standard Ports

1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
1x Headphone / microphone combo jack (3.5mm)
1x Pogo pin connector (8-point)

Optional Ports

1x Nano-SIM card slot (WWAN models)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Fingerprint Reader
• Touch style fingerprint reader on folio keyboard, match-on-chip
• No fingerprint reader

BIOS Security
• Power-on password
• Supervisor password
• System management password
• Hard disk password
• Self-healing BIOS

MANAGEABILITY

System Management

System Management
• Intel® vPro®
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**\(^{(1)}\)
• 1-year courier or carry-in service
• 1-year courier or carry-in with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) courier or carry-in service
• 3-year (1-yr battery) limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
• Lenovo® USB-C® Port Replicator
• Lenovo® USB-C® to Ethernet Adapter (1Gbps)
• Lenovo® USB-C® to HDMI® Adapter
• Lenovo® USB-C® to VGA Adapter
• ThinkPad® X12 Folio Keyboard, with touchpad (pogo pin, detachable), 3-level backlight
• None

OPERATING REQUIREMENTS

Operating Environment
Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude

Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:

[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- FAA certified
- Low Halogen
- RoHS compliant
- TCO Certified 8.0

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

- Feature with ** means that only one offering listed under the feature is configured on selected models.
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OVERVIEW

1. Power button
2. Headphone / microphone combo jack (3.5mm)
3. Thunderbolt 4
4. Nano-SIM card slot *
5. USB-C (USB 10Gbps), with USB PD 3.0 & DP 2.1
6. Pogo pin connector (8-point)
7. Kensington Nano Security Slot
8. Volume button

Notes:
• Items with * are only available on selected models
• Folio keyboard shown on above image is for demo only. It is available on selected models.
PERFORMANCE

**Processor**

Processor Family
Intel® U Series Core™ Ultra 5 / 7 Processor (Series 1)

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core™ Ultra 5 134U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 700MHz / E-core 500MHz / LPE-core 400MHz</td>
<td>P-core 4.4GHz / E-core 3.6GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
<tr>
<td>Core™ Ultra 7 164U</td>
<td>12 (2 P-core + 8 E-core + 2 LPE-core)</td>
<td>14</td>
<td>P-core 1.1GHz / E-core 700MHz / LPE-core 400MHz</td>
<td>P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.1GHz</td>
<td>12MB</td>
<td>Intel® Graphics</td>
<td>Intel® AI Boost</td>
</tr>
</tbody>
</table>

**Operating System**

**Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- No preload operating system

**Graphics**

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>CPU TDP</td>
</tr>
</tbody>
</table>

**Monitor Support**

Monitor Support
Supports up to 3 independent displays (native display and 2 external monitors via USB-C® and Thunderbolt™)
- USB-C® supports up to 6K@60Hz
- Thunderbolt™ supports up to 8K@60Hz

Notes:
[1] Refresh rates >60hz also supported, however max resolution will be limited. 6K / 8K resolution support needs 2 display pipes. That is, simultaneous display number will “-1” when 6K / 8K resolution displayed.

**Chipset**

Chipset
Intel® SoC (System on Chip) platform

**Memory**

Max Memory
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

Memory Type
LPDDR5x-6400

Notes:
[1] Installed memory is actually LPDDR5x-7500 but run as LPDDR5x-6400 due to platform limitation.

**Storage**

Storage Support
One drive, up to 1TB M.2 2242 SSD

Storage Type
**ThinkPad X12 Detachable Gen 2**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Multi-Media**

**Speakers**
Stereo speakers, 1W x2, Dolby Audio™

**Microphone**
Dual-microphone array, Dolby Voice®

**Camera**
Front 5.0MP + IR discrete user-facing camera, privacy shutter, fixed focus
Rear 8.0MP, autofocus

**Sensor**

**Vibration Motor**
No support

**Sensors**
- Accelerometer (G) sensor
- Gyroscope sensor
- Hall sensor
- Inclinometer sensor
- Proximity (P) sensor (WWAN models)

**Battery**

**Battery**
Integrated Li-Polymer 42Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

**Max Battery Life**[^3]
MobileMark25@250nits: 12.47 hr
Local video (1080p) playback@150nits: 17.52 hr
JEITA-BAT 3.0@200nits (Video/Idle): 9.98 hr / 19.31 hr

Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark® 25, JEITA 3.0, continuous 1080p video playback (with 150nits brightness and default volume level) or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

**Power Adapter**

**Power Adapter**[^3]
- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

Notes:


**DESIGN**

**Display**

Display[^3]
ThinkPad X12 Detachable Gen 2

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface Description</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.3” FHD+</td>
<td>(1920x1280)</td>
<td>Multi-touch</td>
<td>400nits</td>
<td>Anti-reflection, anti-smudge</td>
<td>3:2</td>
<td>1500:1</td>
<td>100% sRGB</td>
<td>89°/89°/89°/89°</td>
<td>Corning® Gorilla® Glass</td>
</tr>
</tbody>
</table>

**Touchscreen**

GMF / GF2 (Metal mesh film sensor) multi-touch, supports 10-point touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Pen**

- Lenovo® Digital Pen with replaceable AAAA alkaline battery, 4096 levels of pressure sensitivity. For more information, please read Lenovo® Digital Pen Overview
- Lenovo® Precision Pen, 4096 levels of pressure sensitivity, magnetically attached to the system. For more information, please read Lenovo® Precision Pen Overview
- No pen (purchase separately)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tablet</td>
<td>283.3 x 203.5 x 8.8 mm (11.15 x 8.01 x 0.34 inches)</td>
</tr>
<tr>
<td>Tablet with folio keyboard</td>
<td>Tablet: 283.3 x 203.5 x 8.8 mm (11.15 x 8.01 x 0.35 inches)</td>
</tr>
<tr>
<td></td>
<td>Folio keyboard: 283.3 x 217.8 x 5.7 mm (11.15 x 8.57 x 0.22 inches)</td>
</tr>
<tr>
<td></td>
<td>Total: 283.3 x 208.1 x 14.5 mm (11.15 x 8.19 x 0.57 inches)</td>
</tr>
</tbody>
</table>

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tablet</td>
<td>around 0.76 kg (1.67 lbs)</td>
</tr>
<tr>
<td>Tablet with folio keyboard</td>
<td>Tablet: 0.76 kg (1.67 lbs)</td>
</tr>
<tr>
<td></td>
<td>Folio keyboard: 0.34 kg (0.75 lbs)</td>
</tr>
<tr>
<td></td>
<td>Total: 1.1 kg (2.42 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**

Black

**Case Material**

Magnesium-aluminium

**Others**

- Hinge open angle: 170°
- Kensington® Nano Security Slot™

**Buttons**

- Power button
- Volume button

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

WLAN + Bluetooth®
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3

WWAN
- Quectel EM160R-GL Gen 2, 4G LTE CAT16, M.2 card, with embedded eSIM functionality
- No support

NFC
- Near Field Communication
- No support

Location Services

<table>
<thead>
<tr>
<th>Models</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLAN models</td>
<td>No location service</td>
</tr>
<tr>
<td>WWAN models</td>
<td>GPS + GLONASS + Galileo + Beidou + A-GPS</td>
</tr>
</tbody>
</table>

Notes:
1. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

Ports

Standard Ports
1. 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 3.0 and DisplayPort™ 2.1
2. 1x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
3. 1x Headphone / microphone combo jack (3.5mm)
4. 1x Pogo pin connector (8-point)

Optional Ports
1x Nano-SIM card slot (WWAN models)

Notes:
1. The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower than the theoretical speed.

Docking

Docking
Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit [Docking for ThinkPad® X12 Detachable Gen 2](Docking for ThinkPad® X12 Detachable Gen 2)

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Fingerprint Reader
- Touch style fingerprint reader on folio keyboard, match-on-chip
- No fingerprint reader

BIOS Security
- Power-on password
- Supervisor password
- System management password
- Hard disk password
- Self-healing BIOS

MANAGEABILITY

System Management

System Management
SERVICE

Warranty

**Base Warranty**
- 1-year courier or carry-in service
- 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

- Lenovo® USB-C® Port Replicator
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to HDMI® Adapter
- Lenovo® USB-C® to VGA Adapter
- ThinkPad® X12 Detachable Gen 2 Folio Keyboard, with touchpad (pogo pin, detachable)
- None

Notes:
[1] For more compatible accessory solutions, please visit [Accessories for ThinkPad® X12 Detachable Gen 2](#).

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Relative Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
- Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
[1] When you charge the battery, its temperature must be no lower than 10°C (50°F).

ENVIRONMENTAL

Sustainability

Material
- 90% recycled magnesium on top cover
- 30% PCC recycled plastic on keyboard cover
- 30% PCC recycled plastic on bottom cover
- 30% PCC recycled plastic used in speaker enclosure
- 50% recycled aluminium used in the kickstand
- 25% PCC recycled plastic used in the 42Whr battery enclosure

Up to 90% PCC recycled plastic used in standard 45W and 65W USB-C®, and Slim 65W adaptors

FSC-certified with 85% recycled plastic and/or sustainable content

CERTIFICATIONS
Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6
- ErP Lot 26
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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Warranty: For a copy of applicable warranties, write to: Lenovo Warranty Information, 1009 Think Place, Morrisville, NC, 27560. Lenovo makes no representation or warranty regarding third party products or services. The Lenovo Limited Warranty applies only to Lenovo hardware products purchased for your own use, and does not transfer upon resale.

Limited warranty: Support unrelated to a warranty issue may be subject to additional charges.

Lenovo Services:
Carry-in or Mail-in Service: Parts and labor repair coverage where the customer is responsible for shipping (including packaging) or delivery to authorized warranty provider or repair center.

Depot or Courier Service: Parts and labor repair coverage where shipping (including packaging) or delivery to the repair center is paid for by Lenovo.

Expedited Depot: Parts and labor coverage with expedited turnaround. Shipping (including packaging) or delivery to the repair center is paid for by Lenovo.

Onsite / In-home Service: Parts and labor repair coverage where labor is provided onsite at your place of business. If Lenovo determines your product problem is covered by the product warranty and cannot be resolved over the telephone, a technician will be dispatched to arrive onsite, typically the next day.


Included software: may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

Battery life: Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.


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Lenovo 1009 Think Place Morrisville, NC 27560 U.S.A.
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover</td>
<td>1</td>
</tr>
<tr>
<td>Contents</td>
<td>2</td>
</tr>
<tr>
<td>Summary Of Change</td>
<td>4</td>
</tr>
<tr>
<td>All-In-One</td>
<td>5</td>
</tr>
<tr>
<td>ThinkCentre M70a Gen 3</td>
<td>5</td>
</tr>
<tr>
<td>ThinkCentre M90a Gen 3</td>
<td>14</td>
</tr>
<tr>
<td>ThinkCentre M90a Gen 5</td>
<td>24</td>
</tr>
<tr>
<td>ThinkCentre M90a Pro Gen 3</td>
<td>34</td>
</tr>
<tr>
<td>ThinkCentre M90a Pro Gen 4</td>
<td>44</td>
</tr>
<tr>
<td>ThinkCentre neo 30a 22</td>
<td>53</td>
</tr>
<tr>
<td>ThinkCentre neo 30a 22 Gen 4</td>
<td>61</td>
</tr>
<tr>
<td>ThinkCentre neo 30a 24</td>
<td>68</td>
</tr>
<tr>
<td>ThinkCentre neo 30a 24 Gen 4</td>
<td>76</td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
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<td>98</td>
</tr>
<tr>
<td>ThinkCentre neo 50a 24 Gen 4</td>
<td>106</td>
</tr>
<tr>
<td>ThinkCentre neo 50a 24 Gen 5</td>
<td>114</td>
</tr>
<tr>
<td>ThinkCentre neo 50a 27 Gen 5</td>
<td>121</td>
</tr>
<tr>
<td>Nano Desktops</td>
<td>128</td>
</tr>
<tr>
<td>ThinkCentre M90n-1 Nano</td>
<td>128</td>
</tr>
<tr>
<td>ThinkCentre M90n-1 Nano IoT</td>
<td>136</td>
</tr>
<tr>
<td>SFF Desktops</td>
<td>145</td>
</tr>
<tr>
<td>ThinkCentre M70s Gen 3</td>
<td>145</td>
</tr>
<tr>
<td>ThinkCentre M70s Gen 4</td>
<td>154</td>
</tr>
<tr>
<td>ThinkCentre M70s Gen 5</td>
<td>163</td>
</tr>
<tr>
<td>ThinkCentre M75s Gen 2</td>
<td>172</td>
</tr>
<tr>
<td>ThinkCentre M75s Gen 5</td>
<td>182</td>
</tr>
<tr>
<td>ThinkCentre M80s Gen 3</td>
<td>190</td>
</tr>
<tr>
<td>ThinkCentre M90s Gen 3</td>
<td>200</td>
</tr>
<tr>
<td>ThinkCentre M90s Gen 4</td>
<td>210</td>
</tr>
<tr>
<td>ThinkCentre M90s Gen 5</td>
<td>219</td>
</tr>
<tr>
<td>ThinkCentre neo 50s</td>
<td>228</td>
</tr>
<tr>
<td>ThinkCentre neo 50s Gen 4</td>
<td>237</td>
</tr>
<tr>
<td>Tiny Desktops</td>
<td>245</td>
</tr>
<tr>
<td>ThinkCentre M60q Chromebox</td>
<td>245</td>
</tr>
<tr>
<td>ThinkCentre M60q Chromebox Enterprise</td>
<td>252</td>
</tr>
<tr>
<td>ThinkCentre M70q Gen 3</td>
<td>259</td>
</tr>
<tr>
<td>ThinkCentre M70q Gen 4</td>
<td>268</td>
</tr>
<tr>
<td>ThinkCentre M70q Gen 5</td>
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</tr>
<tr>
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<td>ThinkCentre neo 50q Gen 4</td>
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</tr>
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<td>ThinkCentre neo Ultra</td>
<td>356</td>
</tr>
<tr>
<td>Tiny-In-One</td>
<td>364</td>
</tr>
<tr>
<td>ThinkCentre Tiny-In-One 22 Gen 4</td>
<td>364</td>
</tr>
</tbody>
</table>
## Contents

<table>
<thead>
<tr>
<th>Model</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ThinkCentre Tiny-In-One 22 Gen 5</td>
<td>370</td>
</tr>
<tr>
<td>ThinkCentre Tiny-In-One 24 Gen 4</td>
<td>376</td>
</tr>
<tr>
<td>ThinkCentre Tiny-In-One 24 Gen 5</td>
<td>382</td>
</tr>
<tr>
<td>ThinkCentre Tiny-In-One 27</td>
<td>388</td>
</tr>
<tr>
<td>ThinkCentre TIO Flex 22i</td>
<td>394</td>
</tr>
<tr>
<td>ThinkCentre TIO Flex 24i</td>
<td>400</td>
</tr>
<tr>
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<td>406</td>
</tr>
<tr>
<td><strong>Tower Desktops</strong></td>
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<tr>
<td>ThinkCentre M70t Gen 3</td>
<td>412</td>
</tr>
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</tr>
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</tr>
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</tr>
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<td>477</td>
</tr>
<tr>
<td>ThinkCentre neo 50t</td>
<td>486</td>
</tr>
<tr>
<td>ThinkCentre neo 50t Gen 4</td>
<td>495</td>
</tr>
<tr>
<td>ThinkCentre neo 50t Gen 5</td>
<td>504</td>
</tr>
<tr>
<td>ThinkCentre neo 70t</td>
<td>512</td>
</tr>
<tr>
<td><strong>Legal Information</strong></td>
<td></td>
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<tr>
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</tbody>
</table>
Summary of Changes

This section describes the technical changes made in this edition. This edition might also include minor corrections and editorial changes which are not identified.

July 2024 - Version 633

Additions in this update
► New product(s)
  ThinkCentre neo 50t Gen 5
  ThinkCentre neo Ultra
► New model(s)
  None
► Others
  None

Withdrawals in this update
► Withdrawn product(s)
  None
► Withdrawn model(s)
  None
### OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>2</td>
<td>USB-C 3.2 Gen 2 (data transfer, 15W charging)</td>
</tr>
<tr>
<td>3</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>4</td>
<td>HDMI (HDMI in / HDMI out combo port)</td>
</tr>
<tr>
<td>5</td>
<td>DisplayPort 1.4</td>
</tr>
<tr>
<td>6</td>
<td>Power connector</td>
</tr>
<tr>
<td>7</td>
<td>Microphone mute button</td>
</tr>
<tr>
<td>8</td>
<td>PC / monitor mode switch</td>
</tr>
<tr>
<td>9</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>10</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>11</td>
<td>Card reader *</td>
</tr>
<tr>
<td>12</td>
<td>Power button</td>
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</tbody>
</table>

**Notes:**
- Items with * are only available on selected models

---

**ThinkCentre M70a Gen 3 - March 29 2024**
## PERFORMANCE

### Processor Family

**Intel® Celeron®, Intel® Pentium®, or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® G6900</td>
<td>2</td>
<td>2</td>
<td>3.4GHz</td>
<td>-</td>
<td>4MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td>-</td>
<td>6MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-12300</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz[2]</td>
<td>12MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[3]</td>
<td>18MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz[4]</td>
<td>18MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12600</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.8GHz[5]</td>
<td>18MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 770</td>
</tr>
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<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
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<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[6]</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[7]</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:

[1], [2], [3], [4], [5], [6], [7] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see [http://www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

### Operating System

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- No preload operating system

### Graphics

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 5120x2160@60Hz(DP)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
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<td>Integrated</td>
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<td>4096x2160@60Hz(HDMI®), 5120x2160@60Hz(DP)</td>
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</table>

### Monitor Support
Monitor Support
Supports up to 3 independent displays via native display and 2 external monitor; supports external monitors via DisplayPort™ and HDMI®; work as standalone monitor via HDMI® (HDMI® in / out combo)

Chipset
Chipset
Intel® Q670 chipset

Memory
Max Memory[1]
Up to 64GB DDR4-3200
Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable
Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage
Storage Support[2][3]
Up to three drives, 2x 2.5" HDD + 1x M.2 SSD
• 2.5" HDD up to 2TB each
• M.2 SSD up to 1TB
Technical support up to 2 HDDs + 1 SSD, but Lenovo® only offers the models with up to 2 HDDs or 1 SSD + 1 HDD

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
<td>-</td>
</tr>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Value</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID[3]
RAID 0/1 support for HDDs

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] 2nd 2.5" HDD occupies ODD bay, and needs ODD to HDD bracket kit (optional, come with 2nd 2.5" HDD).
[3] RAID is not preset by default, user can config RAID 0/1 according to the demand.

Removable Storage

Optical**
• DVD-ROM, SATA connector, slim (9.0mm)
• DVD burner (DVD±RW), SATA connector, slim (9.0mm)
• None

Card Reader
• 3-in-1 card reader (SD, SDHC, SDXC)
• No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC256-NL codec

Speakers
Stereo speakers, 2W x2, Dolby Atmos®

Microphone
- Dual-microphone array
- No microphone

Camera**
- 5.0-megapixel, IR + RGB hybrid, with ThinkShutter (physical switch on/off), ±20° view angle adjustable, Windows® Hello support
- 5.0-megapixel, with ThinkShutter (physical switch on/off), ±20° view angle adjustable
- No camera

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>90%</td>
<td>100V - 240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.5&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
</tr>
<tr>
<td>21.5&quot;</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
</tr>
</tbody>
</table>

Touchscreen
- Advanced In-cell Touch (AIT), supports 10-point touch
- Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

Mechanical

Buttons
**Microphone mute button**
- Monitor / PC mode switch button
- Power button

**Form Factor**
AIO (21.5 inches)

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
</table>
| Models (with UltraFlex V stand, with camera) | Lowest in vertical mode: 489 x 216.32 x 358.82 mm (19.25 x 8.52 x 14.13 inches)  
Highest in vertical mode: 489 x 216.32 x 443.31 mm (19.25 x 8.52 x 17.45 inches) |
| Models (with UltraFlex V stand, without camera) | Lowest in vertical mode: 489 x 216.32 x 338.32 mm (19.25 x 8.52 x 13.32 inches)  
Highest in vertical mode: 489 x 216.32 x 422.81 mm (19.25 x 8.52 x 16.65 inches) |
| Models (with full function monitor stand, with camera) | Lowest in vertical mode: 489 x 217.31 x 365.96 mm (19.52 x 8.56 x 14.41 inches)  
Highest in vertical mode: 489 x 217.31 x 474.97 mm (19.52 x 8.56 x 18.7 inches) |
| Models (with full function monitor stand, without camera) | Lowest in vertical mode: 489 x 217.31 x 345.46 mm (19.52 x 8.56 x 13.6 inches)  
Highest in vertical mode: 489 x 217.31 x 454.47 mm (19.52 x 8.56 x 17.89 inches) |

**Packaging Dimensions (WxDxH)**
- With Full Function Monitor Stand: 605 x 235 x 550 mm (23.82 x 9.35 x 21.65 inches)
- With UltraFlex V Stand: 605 x 248 x 545 mm (23.82 x 9.76 x 23.46 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models (with UltraFlex V stand, with ODD, with camera)</td>
<td>Around 7.985 kg (17.6 lbs)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, with ODD, with camera)</td>
<td>Around 7.678 kg (16.92 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
- With Full Function Monitor Stand: 1.867 kg (4.12 lbs), packaging only
- With UltraFlex V Stand: 1.983 kg (4.37 lbs), packaging only

**Case Color**
- Black

**Bays**
- 2x 2.5" disk bay (2nd 2.5" HDD occupies ODD bay)
- 1x slim ODD bay

**Expansion Slots**
- Two M.2 slots (one for WLAN, one for SSD)

**EOU**
- Toolless cover, stand, motherboard shielding, HDD, and memory assembly / removal

**Stand**
- UltraFlex V stand, supports -5° to +70° tilt, up to 70°±2° lift (up to 179.96mm lift in flat mode / up to 84.37mm lift in vertical mode)
- Full function monitor stand, supports -5° to +20° tilt, left & right 45° swivel, 90° pivot, up to 110mm lift
- No stand

**Mounting**
- Supports VESA mount 100mm

**Others**
- (Optional) Conference Call Base, 3W x4 Harman speakers, 4 digital microphones array with AI noise suppression, Physical button for Teams, USB-C® connector
- Supports Smart Power On
Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2nd 2.5” HDD needs ODD to HDD bracket kit (optional, come with 2nd 2.5” HDD).

**CONNECTIVITY**

**Network**

**Onboard Ethernet**

Gigabit Ethernet, Realtek® RTL8111K, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**

No optional Ethernet

**WLAN + Bluetooth®**

- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card\(^1\)
- Realtek® Wi-Fi® 6 RTL8852AE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card\(^2\)
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card\(^3\)
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card\(^4\)
- No WLAN and Bluetooth®

Notes:


**Ports**\(^1\)

**Rear Ports**

- 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
- 3x USB 3.2 Gen 1
- 1x HDMI® (HDMI® in 1.4 / HDMI® out 2.1 TMDS combo port)
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

**Optional Rear Ports**

1x serial

**Right Ports**

- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

**Optional Right Ports**

1x card reader

Notes:

\(^1\) The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch

Fingerprint Reader
• Touch style fingerprint reader on mouse (EOL on Jan, 2023)
• No fingerprint reader

Other Security
ThinkShutter camera cover (camera models)

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Boot without keyboard and mouse
• Individual USB port disablement
• Self-healing BIOS
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

SERVICE

Warranty[1]
Base Warranty
• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
• DP to DVI dongle
• DP to Dual DP dongle
• DP to HDMI® dongle
• DP to VGA dongle
• HDMI® to DVI dongle
• HDMI® to VGA dongle
• None

OPERATING REQUIREMENTS

Operating Environment
Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0
- TCO edge

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
- (Optional) TÜV Rheinland® Ultra Low Noise
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- UL Anti-dust

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.

- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th>1.</th>
<th>3x USB 3.2 Gen 1</th>
<th>7.</th>
<th>Microphone mute button</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>USB-C 3.2 Gen 2 (support data transfer and 15W charging)</td>
<td>8.</td>
<td>PC / monitor mode switch</td>
</tr>
<tr>
<td>3.</td>
<td>Ethernet (RJ-45)</td>
<td>9.</td>
<td>3x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>4.</td>
<td>HDMI (HDMI in 1.4 / HDMI out 2.1 TMDS combo port)</td>
<td>10.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5.</td>
<td>DisplayPort 1.4</td>
<td>11.</td>
<td>Card reader *</td>
</tr>
<tr>
<td>6.</td>
<td>Power connector</td>
<td>12.</td>
<td>Power button</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® Celeron®, Intel® Pentium®, or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® G6900</td>
<td>2</td>
<td>2</td>
<td>3.4GHz</td>
<td>-</td>
<td>4MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td>-</td>
<td>6MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-12300</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz[2]</td>
<td>12MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[3]</td>
<td>18MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz[4]</td>
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<td>Core i5-12600</td>
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[1], [2], [3], [4], [5], [6], [7] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- No preload operating system

Graphics

Graphics***

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</tr>
<tr>
<td>NVIDIA® GeForce MX550</td>
<td>Discrete</td>
<td>2GB GDDR6</td>
<td>4096x2160@60Hz(HDMI*), 5120x2160@60Hz(DP)</td>
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Monitor Support

Supports up to 3 independent displays via native display and 2 external monitor; supports external monitors via DisplayPort™ and HDMI®; work as standalone monitor via HDMI® (HDMI® in / out combo)

Chipset

Intel® Q670 chipset

Memory

Max Memory[*]
Up to 64GB DDR4-3200

Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:
[*] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support[*][**]
Up to three drives, 2x 2.5" HDD + 1x M.2 SSD
• 2.5" HDD up to 2TB each
• M.2 SSD up to 1TB
Technical support up to 2 HDDs + 1 SSD, but Lenovo® only offers the models with up to 2 HDDs or 1 SSD + 1 HDD

Storage Type***

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<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
<td>-</td>
</tr>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Value</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID[*]
RAID 0/1 support for HDDs

Notes:
[*] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[**] 2nd 2.5" HDD occupies ODD bay, and needs ODD to HDD bracket kit (optional, come with 2nd 2.5" HDD).
[***] RAID is not preset by default, user can config RAID 0/1 according to the demand.

Removable Storage

Optical**
• DVD-ROM, SATA connector, slim (9.0mm)
• DVD burner (DVD±RW), SATA connector, slim (9.0mm)
• None

Card Reader
• 3-in-1 card reader (SD, SDHC, SDXC)
• No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC256-NL codec
Speakers
Stereo speakers, 3W x2, Dolby Atmos®

Microphone
• Dual-microphone array
• No microphone

Camera**
• 5.0-megapixel, IR + RGB hybrid, with ThinkShutter (physical switch on/off), ±20° view angle adjustable, Windows® Hello support
• 5.0-megapixel, with ThinkShutter (physical switch on/off), ±20° view angle adjustable
• No camera

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>90%</td>
<td>100V - 240V, 50-60Hz</td>
</tr>
<tr>
<td>230W</td>
<td>Fixed</td>
<td>92%</td>
<td>100V - 240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
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<tbody>
<tr>
<td>23.8&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>14ms response Time, borderless design, low blue light, flicker free</td>
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<td>23.8&quot;</td>
<td>FHD (1920x1080)</td>
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Touchscreen
• Advanced In-cell Touch (AIT), supports 10-point touch
• Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard**
• Lenovo® Calliope Keyboard (USB connector), black
• Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
• Lenovo® Traditional Keyboard (USB connector), black
• No keyboard

Mouse**
• Lenovo® Calliope Mouse (USB connector), black
• Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
• Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
• No mouse
Mechanical

Buttons
• Microphone mute button
• Monitor / PC mode switch button
• Power button

Form Factor
AIO (23.8 inches)

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models (with UltraFlex V stand, with camera)</td>
<td>Lowest in vertical mode: 539.6 x 216.32 x 387.63 mm (21.24 x 8.52 x 15.26 inches)</td>
</tr>
<tr>
<td>Models (with UltraFlex V stand, without camera)</td>
<td>Lowest in vertical mode: 539.6 x 216.32 x 367.13 mm (21.24 x 8.52 x 14.45 inches)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, with camera)</td>
<td>Lowest in vertical mode: 539.6 x 217.31 x 394.65 mm (21.24 x 8.56 x 15.54 inches)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, without camera)</td>
<td>Lowest in vertical mode: 539.6 x 217.31 x 374.15 mm (21.24 x 8.56 x 14.73 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
• With UltraFlex V Stand: 660 x 238 x 545 mm (25.98 x 9.37 x 21.46 inches)
• With Full Function Monitor Stand: 660 x 238 x 575 mm (25.98 x 9.37 x 22.64 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models (with UltraFlex V stand, with ODD, with camera)</td>
<td>Around 8.742 kg (19.27 lbs)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, with ODD, with camera)</td>
<td>Around 8.235 kg (18.15 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
• With Full Function Monitor Stand: 2.084 kg (4.59 lbs), packaging only
• With UltraFlex V Stand: 2.0658 kg (4.55 lbs), packaging only

Case Color
Black

Bays[3]
• 2x 2.5” disk bay (2nd 2.5” HDD occupies ODD bay)
• 1x slim ODD bay

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

EOU
Toolless cover, stand, motherboard shielding, HDD, and memory assembly / removal

Stand**
• UltraFlex V stand, supports -5° to +70° tilt, up to 70°±2° lift (up to 174.02mm lift in flat mode / up to 84.37mm lift in vertical mode)
• Full function monitor stand, supports -5° to +20° tilt, left & right 45° swivel, 90° pivot, up to 110mm lift
• No stand

Mounting
Supports VESA mount 100mm

Others
ThinkCentre M90a Gen 3

- (Optional) Conference Call Base, 3W x4 Harman speakers, 4 digital microphones array with AI noise suppression, Physical button for Teams, USB-C® connector
- (Optional) Smart Human Presence Detection based on Radar Sensor
- Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2nd 2.5" HDD needs ODD to HDD bracket kit (optional, come with 2nd 2.5" HDD).

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
No optional Ethernet

WLAN + Bluetooth®
- MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
- Realtek® Wi-Fi® 6 RTL8852AE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
- No WLAN and Bluetooth®

Notes:

Ports
Rear Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
- 3x USB 3.2 Gen 1
- 1x HDMI® (HDMI® in 1.4 / HDMI® out 2.1 TMDS combo port)
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

Optional Rear Ports
- 1x serial

Right Ports
- 3x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

Optional Right Ports
- 1x card reader

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY
Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

Other Security
ThinkShutter camera cover (camera models)

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise[1]
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0
- TCO edge

Other Certifications
- (Optional) TÜV Rheinland® Ultra Low Noise
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- UL Anti-dust

Mil-Spec Test
- MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
### OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>3x USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>2.</td>
<td>USB-C (USB 10Gbps), with 15W charging</td>
</tr>
<tr>
<td>3.</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>4.</td>
<td>HDMI (HDMI in 1.4 / HDMI out 2.1 TMDS combo)</td>
</tr>
<tr>
<td>5.</td>
<td>DisplayPort 1.4</td>
</tr>
<tr>
<td>6.</td>
<td>Serial *</td>
</tr>
<tr>
<td>7.</td>
<td>Power connector</td>
</tr>
<tr>
<td>8.</td>
<td>Microphone mute button</td>
</tr>
<tr>
<td>9.</td>
<td>PC / monitor mode switch</td>
</tr>
<tr>
<td>10.</td>
<td>3x USB-A (USB 10Gbps)</td>
</tr>
<tr>
<td>11.</td>
<td>Card reader *</td>
</tr>
<tr>
<td>12.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>13.</td>
<td>Power button</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
**PERFORMANCE**

**Processor Family**
13th / 14th Generation Intel® Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i3-14100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
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<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- No preload operating system

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI*), 4096x2160@60Hz(DP)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI*), 4096x2160@60Hz(DP)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® GeForce MX570A</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>4096x2160@60Hz(HDMI*), 4096x2160@60Hz(DP)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

**Monitor Support**

Monitor Support

Supports up to 3 independent displays via native display and 2 external monitor; supports external monitors via DisplayPort™ and HDMI®; work as standalone monitor via HDMI® (HDMI® in / out combo)

**Chipset**

Chipset

Intel® Q670 chipset

**Memory**
Max Memory
- Models with Core i3/i5: Up to 64GB DDR5-4800
- Models with Core i7: Up to 64GB DDR5-5200

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
- DDR5-4800
- DDR5-5200
- DDR5-5600

Memory Protection
Non-ECC

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR5-5600 but may run as DDR5-4800, DDR5-5200, or DDR5-5600 depending on the memory support capability of processor.

Storage
Storage Support
- Models with Intel® UHD graphics:
  - Up to two drives, 2x M.2 SSD
  - M.2 SSD up to 2TB each
- Models with NVIDIA® GeForce MX570A:
  - Up to one drives, 1x M.2 SSD
  - M.2 SSD up to 2TB each

Storage Type
<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Security</th>
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<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>Opal 2.0</td>
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</table>

RAID
- RAID 0/1 support for SSDs
- No support

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] Only available for models with integrated graphics

Removable Storage
Optical
- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

Card Reader
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC233NL-VB2-CG codec

Speakers
Stereo speakers, 3W x2, Dolby Atmos®

Microphone
- Dual-microphone array
- No microphone

Camera
• 5.0-megapixel, IR + RGB hybrid, with ThinkShutter (physical switch on/off) and Human Presence Detection (Radar Sensor), ±20° view angle adjustable, Windows® Hello support
• 5.0-megapixel, IR + RGB hybrid, with ThinkShutter (physical switch on/off), ±20° view angle adjustable, Windows® Hello support
• 5.0-megapixel, with ThinkShutter (physical switch on/off)
• No camera

**Power Supply**

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**DESIGN**

**Display**

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<td>23.8&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glace</td>
<td>16:9</td>
<td>1300:1</td>
<td>99% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>14ms response Time, borderless design, TÜV Rheinland® Low Blue Light (Hardware Solution), TÜV Rheinland® Flicker Free, Eyesafe® Certified 2.0</td>
</tr>
<tr>
<td>23.8&quot;</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
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<td>14ms response Time, borderless design, TÜV Rheinland® Low Blue Light (Software Solution), TÜV Rheinland® Flicker Free</td>
</tr>
</tbody>
</table>

**Touchscreen**

• Advanced In-cell Touch (AIT), supports 10-point touch
• Non-touch

**Input Device**

**Keyboard**

• EOS Wireless Keyboard, black
• Lenovo® Calliope Keyboard (USB connector), black

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
Lenovo® Traditional Keyboard (USB connector), black
• No keyboard

Mouse**
• Lenovo® Calliope Mouse (USB connector), black
• EOS Wireless Mouse, Black
• No mouse

Mechanical

Buttons
• Microphone mute button
• Monitor / PC mode switch button
• Power button

Form Factor
AIO (23.8 inches)

Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models (with UltraFlex V stand, with camera)</td>
<td>Lowest in flat mode: 539.6 x 344.19 x 227.54 mm (21.24 x 13.55 x 8.96 inches)</td>
</tr>
<tr>
<td></td>
<td>Highest in vertical mode: 539.6 x 252.60 x 472.00 mm (21.24 x 9.94 x 18.58 inches)</td>
</tr>
<tr>
<td>Models (with UltraFlex V stand, without camera)</td>
<td>Lowest in flat mode: 539.6 x 341.42 x 219.50 mm (21.24 x 13.44 x 8.64 inches)</td>
</tr>
<tr>
<td></td>
<td>Highest in vertical mode: 539.6 x 252.60 x 451.51 mm (21.24 x 9.94 x 17.78 inches)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, with camera)</td>
<td>539.6 x 217.31 x 393.66-501.85 mm (21.24 x 8.56 x 15.50-19.76 inches)</td>
</tr>
<tr>
<td>Models (with full function monitor stand, without camera)</td>
<td>539.6 x 217.31 x 374.15-483.16 mm (21.24 x 8.56 x 14.73-19.02 inches)</td>
</tr>
<tr>
<td>Models (with tilt only stand, with camera)</td>
<td>539.6 x 213.38 x 453.39 mm (21.24 x 8.40 x 17.85 inches)</td>
</tr>
<tr>
<td>Models (with tilt only stand, without camera)</td>
<td>539.6 x 213.38 x 434.39 mm (21.24 x 8.40 x 17.10 inches)</td>
</tr>
<tr>
<td>Models (without stand, with camera)</td>
<td>539.6 x 49.6 x 371 mm (21.24 x 1.95 x 14.61 inches)</td>
</tr>
<tr>
<td>Models (without stand, without camera)</td>
<td>539.6 x 49.6 x 352 mm (21.24 x 1.95 x 13.86 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)**
• Models (with UltraFlex V stand): 690 x 545 x 238 mm (27.17 x 21.46 x 9.37 inches)
• Models (with full function monitor stand): 660 x 575 x 228 mm (25.98 x 22.64 x 8.98 inches)
• Models (with tilt only stand): 660 x 550 x 216 mm (25.98 x 21.65 x 8.50 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models (with UltraFlex V stand)</td>
<td>Around 7.83 kg (17.3 lbs)</td>
</tr>
<tr>
<td>Models (with full function monitor stand)</td>
<td>Around 8.13 kg (17.9 lbs)</td>
</tr>
<tr>
<td>Models (with tilt only stand)</td>
<td>Around 7.61 kg (16.8 lbs)</td>
</tr>
<tr>
<td>Models (without stand)</td>
<td>Around 5.53 kg (12.2 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
• Models (with UltraFlex V stand): 2.94 kg (6.5 lbs), packaging only
• Models (with full function monitor stand): 2.96 kg (6.5 lbs), packaging only
• Models (with tilt only stand): 2.73 kg (6.0 lbs), packaging only

Case Color
Black

Bays
• 1x 2.5” disk bay (optional, only available via special bid)
• 1x slim ODD bay

Expansion Slots
• Models with Intel® UHD graphics: Three M.2 slots (one for WLAN, two for SSD)
• Models with NVIDIA® GeForce MX570A: Two M.2 slots (one for WLAN, one for SSD)

**EOU**
Toolless cover, stand, motherboard shielding, and memory assembly / removal

**Stand**
- UltraFlex V stand, supports -5° to +70° tilt, up to 70°±2° lift (up to 179.96mm lift in flat mode / up to 84.37mm lift in vertical mode)
- Full function monitor stand, supports -5° to +20° tilt, left & right 45° swivel, 90° pivot, up to 110mm lift
- Tilt only stand, supports -5° to +20° tilt.
- No stand

**Mounting**
Supports VESA mount 100mm

**Others**
Supports Smart Power On

---

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

---

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**
No optional Ethernet

**WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[2]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card[3]
- No WLAN and Bluetooth®

**Notes:**

**Ports**

**Rear Ports**
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with data transfer and 15W charging
- 3x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x HDMI® (HDMI® in 1.4 / HDMI® out 2.1 TMDS combo port)
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

**Optional Rear Ports**
- 1x serial

**Right Ports**
- 3x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)

**Optional Right Ports**
- 1x card reader

**Notes:**
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the
host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 20 Gbit/s;

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

Other Security
- ThinkShutter camera cover (camera models)
- (Optional) Smart Human Presence Detection (Camera with Radar Sensor)

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.
ACCESSORIES

Bundled Accessories

Bundled Accessories**

- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to DVI dongle
- HDMI® to VGA dongle
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- GREENGUARD®
- RoHS compliant
- TCO Certified 9.0
- TCO edge

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- (Optional) TÜV Rheinland® Low Blue Light (Software Solution)
- (Optional) TÜV Rheinland® Ultra Low Noise
- Eyesafe® Certified 2.0
- TÜV Rheinland® Flicker Free
- UL Anti-dust

Mil-Spec Test

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

1. 3x USB 3.2 Gen 1
2. USB-C 3.2 Gen 2 (data transfer, 15W charging)
3. Ethernet (RJ-45)
4. HDMI in/out combo port
5. DisplayPort 1.4
6. Power connector
7. Microphone mute button
8. PC / monitor mode switch
9. 3x USB 3.2 Gen 2
10. Headphone / microphone combo jack (3.5mm)
11. Card reader *
12. Power button

**Notes:**
- Items with * are only available on selected models
## PERFORMANCE

### Processor

**Processor Family**

Intel® Celeron®, Intel® Pentium®, or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® G6900</td>
<td>2</td>
<td>2</td>
<td>3.4GHz</td>
<td>-</td>
<td>4MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td>-</td>
<td>6MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12300</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz[2]</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[3]</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz[4]</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12600</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.8GHz[5]</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[6]</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[7]</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:

[1], [2], [3], [4], [5], [6], [7] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

### Operating System

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- No preload operating system

### Graphics

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 5120x2160@60Hz(DP)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 5120x2160@60Hz(DP)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 5120x2160@60Hz(DP)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® GeForce MX550</td>
<td>Discrete</td>
<td>2GB GDDR6</td>
<td>4096x2160@60Hz(HDMI®), 5120x2160@60Hz(DP)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>
Monitor Support

Supports up to 3 independent displays via native display and 2 external monitor; supports external monitors via DisplayPort™ and HDMI®; work as standalone monitor via HDMI® (HDMI® in / out combo)

Chipset

Intel® Q670 chipset

Memory

Max Memory[1]
Up to 64GB DDR5-4800

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-4800

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support[2][3]
Up to three drives, 2x 2.5" HDD + 1x M.2 SSD
• 2.5" HDD up to 2TB each
• M.2 SSD up to 1TB
Technical support up to 2 HDDs + 1 SSD, but Lenovo® only offers the models with up to 2 HDDs or 1 SSD + 1 HDD

Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
<td>-</td>
</tr>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Value</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID[3]
RAID 0/1 support for HDDs

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] 2nd 2.5" HDD occupies ODD bay, and needs ODD to HDD bracket kit (optional, come with 2nd 2.5" HDD).
[3] RAID is not preset by default, user can config RAID 0/1 according to the demand.

Removable Storage

Optical**
• DVD-ROM, SATA connector, slim (9.0mm)
• DVD burner (DVD±RW), SATA connector, slim (9.0mm)
• None

Card Reader
• 3-in-1 card reader (SD, SDHC, SDXC)
• No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC256-NL codec
Speakers
Stereo speakers, 3W x2, Dolby Atmos®

Microphone
- Dual-microphone array
- No microphone

Camera**
- 5.0-megapixel, IR + RGB hybrid, with ThinkShutter (physical switch on/off), ±20° view angle adjustable, Windows® Hello support
- 5.0-megapixel, with ThinkShutter (physical switch on/off), ±20° view angle adjustable
- No camera

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>90%</td>
<td>100V - 240V, 50-60Hz</td>
</tr>
<tr>
<td>230W</td>
<td>Fixed</td>
<td>92%</td>
<td>100V - 240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.8&quot;</td>
<td>QHD (2560x1440)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>99% sRGB</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>14ms response Time, borderless design, low blue light (Hardware Solution), flicker free, Eye Safe</td>
</tr>
</tbody>
</table>

Touchscreen
Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

Mechanical

Buttons
- Microphone mute button
- Monitor / PC mode switch button
Power button

Form Factor
AIO (23.8 inches)

Dimensions (WxDxH)

| Models (with UltraFlex V stand, with camera) | Lowest in vertical mode: 539.6 x 216.32 x 387.63 mm (21.24 x 8.52 x 15.26 inches)  
|                                             | Highest in vertical mode: 539.6 x 216.32 x 472 mm (21.24 x 8.52 x 18.58 inches) |
| Models (with UltraFlex V stand, without camera) | Lowest in vertical mode: 539.6 x 216.32 x 367.13 mm (21.24 x 8.52 x 14.45 inches)  
|                                             | Highest in vertical mode: 539.6 x 216.32 x 451.5 mm (21.24 x 8.52 x 17.78 inches) |
| Models (with full function monitor stand, with camera) | Lowest in vertical mode: 539.6 x 217.31 x 394.65 mm (21.24 x 8.56 x 15.54 inches)  
|                                             | Highest in vertical mode: 539.6 x 217.31 x 503.66 mm (21.24 x 8.56 x 19.83 inches) |
| Models (with full function monitor stand, without camera) | Lowest in vertical mode: 539.6 x 217.31 x 374.15 mm (21.24 x 8.56 x 14.73 inches)  
|                                             | Highest in vertical mode: 539.6 x 217.31 x 483.16 mm (21.24 x 8.56 x 19.02 inches) |

Packaging Dimensions (WxDxH)

- With UltraFlex V Stand: 660 x 238 x 545 mm (25.98 x 9.37 x 21.46 inches)
- With Full Function Monitor Stand: 660 x 238 x 575 mm (25.98 x 9.37 x 22.64 inches)

Weight

| Models (with UltraFlex V stand, with ODD, with camera) | Around 8.742 kg (19.27 lbs) |
| Models (with full function monitor stand, with ODD, with camera) | Around 8.235 kg (18.15 lbs) |

Packaging Weight

- With Full Function Monitor Stand: 2.084 kg (4.59 lbs), packaging only
- With UltraFlex V Stand: 2.0658 kg (4.55 lbs), packaging only

Case Color
Black

Bays
- 2x 2.5” disk bay (2nd 2.5” HDD occupies ODD bay)
- 1x slim ODD bay

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

EOU
Toolless cover, stand, motherboard shielding, HDD, and memory assembly / removal

Stand
- UltraFlex V stand, supports -5° to +70° tilt, up to 70°±2° lift (up to 174.02mm lift in flat mode / up to 84.37mm lift in vertical mode)
- Full function monitor stand, supports -5° to +20° tilt, left & right 45° swivel, 90° pivot, up to 110mm lift
- No stand

Mounting
Supports VESA mount 100mm

Others
- (Optional) Conference Call Base, 3W x4 Harman speakers, 4 digital microphones array with AI noise suppression, Physical button for Teams, USB-C® connector
- (Optional) Smart Human Presence Detection based on Radar Sensor
- Supports Smart Power On

Notes:
The system dimensions may vary depending on configurations. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

2nd 2.5" HDD needs ODD to HDD bracket kit (optional, come with 2nd 2.5" HDD).

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**
No optional Ethernet

**WLAN + Bluetooth®**

- MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
- Realtek® Wi-Fi® 6 RTL8852AE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
- No WLAN and Bluetooth®

Notes:

[4] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

**Ports**

**Rear Ports**

- 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
- 3x USB 3.2 Gen 1
- 1x HDMI® (HDMI® in 1.4 / HDMI® out 2.1 TMDS combo port)
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

**Optional Rear Ports**

- 1x serial

**Right Ports**

- 3x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

**Optional Right Ports**

- 1x card reader

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

Other Security
ThinkShutter camera cover (camera models)

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management
- Intel® vPro® Enterprise\(^1\)
- Non-vPro®

Notes:
\(^1\) Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty\(^1\)
Base Warranty**
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
\(^1\) The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to [https://smartfind.lenovo.com/](https://smartfind.lenovo.com/). To learn more details of warranty policy, please access [https://pcsupport.lenovo.com/warranty](https://pcsupport.lenovo.com/warranty).

ACCESSORIES

Bundled Accessories

Bundled Accessories***
- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to DVI dongle
- HDMI® to VGA dongle
- None
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[1]

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered[2]
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0
- TCO edge
- VOC Report

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
[2] EPEAT™ is registered where applicable, please visit [epat.net](http://epat.net) for registration status by country.

Other Certifications

- (Optional) TÜV Rheinland® Ultra Low Noise
- Eyesafe® Certified
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light (Hardware Solution)
- UL Anti-dust

Mil-Spec Test

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
**OVERVIEW**

1. OSD joystick  
2. 3x USB 3.2 Gen 1  
3. USB-C 3.2 Gen 2 (data transfer, 15W charging)  
4. Ethernet (RJ-45)  
5. HDMI in 1.4 / out 2.1 TMDS combo port  
6. DisplayPort 1.4  
7. Power connector  
8. Microphone mute button  
9. Thunderbolt 4  
10. 2x USB 3.2 Gen 2  
11. Thunderbolt 3 (for display and file sharing) *  
12. Headphone / microphone combo jack (3.5mm)  
13. Card reader *  
14. Power button

**Notes:**
- Items with * are only available on selected models
- Please note the optional Thunderbolt 3 is not a Thunderbolt host port. For the details, please refer to the Ports section of specifications.
PERFORMANCE

Processor

Processor Family
13th Generation Intel® Core™ i5 / i7 / i9 Processor

Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-13900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz</td>
<td>36MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.
[2] Special bid only.

Operating System

Operating System**[1]

• Windows® 11 Pro
• Windows® 11 Home
• Windows® 11 Home Single Language
• Windows® 11 DG Windows® 10 Pro 64
• No preload operating system

Notes:

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 4096x2304@60Hz - 36 bpp / 5120x3200@60Hz - 24 bpp (DP), 7680x4320@60Hz - 30 bpp (Thunderbolt™ 4)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4, 1x Thunderbolt™ 4</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 4096x2304@60Hz - 36 bpp / 5120x3200@60Hz - 24 bpp (DP), 7680x4320@60Hz - 30 bpp (Thunderbolt™ 4)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4, 1x Thunderbolt™ 4</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 4050</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>4096x2160@60Hz(HDMI®), 4096x2304@60Hz - 36 bpp / 5120x3200@60Hz - 24 bpp (DP), 7680x4320@60Hz - 30 bpp (Thunderbolt™ 4)</td>
<td>1x HDMI® 2.1a TMDS, 1x DP 1.4, 1x Thunderbolt™ 4</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support

Supports up to 4 independent displays via native display and 3 external monitors; supports external monitors via DisplayPort™, HDMI® and Thunderbolt™ 4; work as standalone monitor via HDMI® (HDMI® in / out combo) or optional Thunderbolt™ 3 port
ThinkCentre M90a Pro Gen 4

**Chipset**

Intel® Q670 chipset

**Memory**

Max Memory

- Models with Core i5: Up to 64GB DDR5-4800
- Models with Core i7/i9: Up to 64GB DDR5-5200

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type

- DDR5-4800
- DDR5-5200
- DDR5-5600

Memory Protection

Non-ECC

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually 5600MHz, but may run at 4800MHz or 5200MHz depending on the memory support capability of processor.
[3] Installed memory is actually DDR5-5600 but may run as DDR5-4800 or DDR5-5200 depending on the memory support capability of processor.

**Storage**

Storage Support

Up to three drives, 1x 2.5" HDD + 2x M.2 SSD
- 2.5" HDD up to 1TB
- M.2 SSD up to 1TB each

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID

RAID 0/1 support for SSDs

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] RAID is not preset by default, user can config RAID 0/1 according to the demand.

**Removable Storage**

Optical

- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

Card Reader

- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

**Multi-Media**

Audio Chip

High Definition (HD) Audio, Realtek® ALC256-NL codec

Speakers

Stereo speakers, 5W x2, Dolby Atmos®
Microphone
Dual-microphone array

Camera
- 5.0-megapixel, IR + RGB hybrid, with ThinkShutter (physical switch on/off) and Human Presence Detection (Radar Sensor), ±20° view angle adjustable, Windows® Hello support
- 5.0-megapixel, IR + RGB hybrid, with ThinkShutter (physical switch on/off), ±20° view angle adjustable, Windows® Hello support
- 5.0-megapixel, with ThinkShutter (physical switch on/off), ±20° view angle adjustable

Power Supply

<table>
<thead>
<tr>
<th>Power Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power</strong> / <strong>Type</strong> / <strong>Efficiency</strong></td>
</tr>
<tr>
<td>230W / Fixed / 92%</td>
</tr>
<tr>
<td>100V - 240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Display

<table>
<thead>
<tr>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong> / <strong>Resolution</strong> / <strong>Touch</strong> / <strong>Type</strong> / <strong>Brightness</strong> / <strong>Surface</strong> / <strong>Aspect Ratio</strong> / <strong>Contrast Ratio</strong> / <strong>Color Gamut</strong> / <strong>Refresh Rate</strong> / <strong>Viewing Angle</strong> (L/R/U/D) / <strong>Key Features</strong></td>
</tr>
<tr>
<td>27&quot; / QHD (2560x1440) / None / IPS / 350nits / Anti-glare / 16:9 / 1000:1 / 99% sRGB / 60Hz / 89°/89°/89°/89° / 14ms response Time, 16.7 million color support, borderless design, TÜV Rheinland® Low Blue Light (Hardware Solution), TÜV Rheinland® Flicker Free, Eyesafe® Certified 2.0</td>
</tr>
</tbody>
</table>

Touchscreen
Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

Mechanical
Buttons
- Microphone mute button
- OSD joystick
• Power button

Form Factor
AIO (27 inches)

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models without stand and camera</td>
<td>613.6 x 54.5 x 383.4 mm (24.2 x 2.1 x 15.1 inches)</td>
</tr>
</tbody>
</table>
| Models (with UltraFlex V stand, with camera) | Lowest in flat mode: 613.6 x 364.54 x 227.11 mm (24.2 x 14.4 x 8.9 inches)  
Highest in vertical mode: 613.6 x 252.59 x 461.37 mm (24.2 x 9.9 x 18.2 inches) |
| Models (with full function monitor stand, with camera) | Lowest in vertical mode: 613.6 x 219.81 x 411.04 mm (24.2 x 8.7 x 16.2 inches)  
Highest in vertical mode: 613.6 x 219.81 x 521.81 mm (24.2 x 8.7 x 20.5 inches) |

Packaging Dimensions (WxDxH)
764 x 235 x 545 mm (30.1 x 9.3 x 21.5 inches)

Weight[2]
11.2 kg (24.8 lbs, maximum configuration)

Packaging Weight
2.4 kg (5.28 lbs), packaging only

Case Color
Black

Bays
• 1x 2.5” disk bay
• 1x slim ODD bay

Expansion Slots
Three M.2 slots (one for WLAN, two for SSD)

EOU
Toolless cover, stand, motherboard shielding, HDD, and memory assembly / removal

Stand**
• UltraFlex V stand, supports -5° to +70° tilt, up to 70°±2° lift (up to 166.3mm lift in flat mode / up to 63mm lift in vertical mode)
• Full function monitor stand, supports -5° to +20° tilt, left & right 45° swivel, 90° pivot, up to 110mm lift
• No stand

Mounting
Supports VESA mount 100mm

Others
• (Optional) Conference Call Base, 3W x4 Harman speakers, 4 digital microphones array with AI noise suppression, Physical button for Teams, USB-C® connector
• Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**
ThinkCentre M90a Pro Gen 4

- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[1]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card[2]
- No WLAN and Bluetooth®

Notes:

Ports

Rear Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
- 3x USB 3.2 Gen 1
- 1x HDMI® (HDMI® in 1.4 / HDMI® out 2.1 TMDS combo port)
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

Optional Rear Ports
None

Right Ports
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, 15W charging and DisplayPort™ 1.4)
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

Optional Right Ports
- 1x Thunderbolt 3[2]
- 1x card reader

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] This Thunderbolt™ 3 port is not a Thunderbolt™ host port. By connecting it to a laptop or desktop Thunderbolt™ port with the included Type-C cable, customers can share M90a Pro Gen 4 as a Thunderbolt™ monitor and share the files saved on the 2nd SSD of M90a Pro Gen 4. A Type-C cable is boundled with the models with Thunderbolt™ 3 port.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

Other Security
- (Optional) Smart Human Presence Detection (Camera with Radar Sensor)
- ThinkShutter camera cover

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
Boot sequence control
  • Boot without keyboard and mouse
  • Individual USB port disablement
  • Self-healing BIOS
  • Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management[1]
  • Intel® vPro® Enterprise
  • Non-vPro

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty[1]
Base Warranty**
  • 1-year limited onsite service
  • 3-year limited onsite service
  • No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories
Bundled Accessories***
  • DP to DVI dongle
  • DP to Dual DP dongle
  • DP to HDMI® dongle
  • DP to VGA dongle
  • HDMI® to DVI dongle
  • HDMI® to VGA dongle
  • None

OPERATING REQUIREMENTS

Operating Environment
Temperature
  • Operating: 5°C (41°F) to 35°C (95°F)
  • Storage: -20°C (-4°F) to 60°C (140°F)
Relative Humidity
Operating: 20% to 80%
Altitude
  • Operating: 0 m (0 ft) to 3048 m (10,000 ft)
  • Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS
Green Certifications

(Optional) ENERGY STAR® 8.0
(Optional) EPEAT™ Gold Registered
ErP Lot 3
RoHS compliant
TCO Certified 9.0
TCO edge
VOC Report

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

(Optional) TÜV Rheinland® Ultra Low Noise
Eyesafe® Certified 2.0
TÜV Rheinland® Flicker Free
TÜV Rheinland® Low Blue Light (Hardware Solution)
UL Anti-dust

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

Feature with ** means that only one offering listed under the feature is configured on selected models.

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OVERVIEW

1. Power button
2. Combo audio jack (on bottom)
3. Power connector
4. HDMI-out
5. 2x USB 3.2 Gen 2
6. Ethernet (RJ-45)
7. 2x USB 2.0
8. Optical drive *

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® Celeron®, Intel® Pentium®, 12th Gen Intel® U or P Series Core i3 / i5, or 12th Gen Intel® H Series Core i5 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® 7305</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.1GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>8MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Pentium® Gold 8505</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>8MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i3-1220P</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.5GHz / E-core 1.1GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core i5-12450H</td>
<td>8 (4 P-core + 4 E-core)</td>
<td>12</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.
[2], [3], [4], [5], [6], [7] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- No preload operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>1920x1080@60Hz</td>
<td>1x HDMI® 1.4</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>1920x1080@60Hz</td>
<td>1x HDMI® 1.4</td>
<td>DirectX® 12.1</td>
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</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

Chipset

Chipset
Intel® SoC (System on Chip) platform

**Memory**

**Max Memory**[1]
Up to 16GB DDR4-3200

**Memory Slots**
Two DDR4 SO-DIMM slots, dual-channel capable

**Memory Type**
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

**Storage Support**[2]
- Up to two drives, 1x 2.5" HDD + 1x M.2 SSD
  - 2.5" HDD up to 1TB
  - M.2 SSD up to 512GB
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
</tr>
</tbody>
</table>

**RAID**
No support

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Optical**
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC256 codec

**Speakers**
Stereo speakers, 3W x2, Audio by HARMAN

**Microphone**
- Single microphone
- Dual-microphone array
- No microphone

**Camera**
- HD 720p 0° Pre-angle pull up camera, LED indicator
- No camera

**Power Supply**
### Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

### DESIGN

#### Display

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.5”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>14ms response time, 16.7 million color depth, borderless design</td>
</tr>
</tbody>
</table>

**Touchscreen**

Non-touch

**Notes:**

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

### Input Device

#### Keyboard

**Keyboard**

- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- No keyboard

#### Mouse

- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

### Mechanical

#### Form Factor

AIO (21.5 inches)

#### Dimensions (WxDxH)

490.3 x 207.5 x 405.39 mm (19.3 x 8.71 x 15.96 inches)

#### Packaging Dimensions (WxDxH)

591 x 231 x 522 mm (23.27 x 9.09 x 20.55 inches)

#### Weight

Around 5.7 kg (12.6 lbs)

#### Package Weight

Around 9.3 kg (20.5 lbs)

#### Case Color

Raven black

#### Bays

- 1x 2.5" disk bay
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

#### Expansion Slots

Two M.2 slots (one for WLAN, one for SSD)

#### EOU

No support
Stand
Monitor stand, supports -5° to +25° tilt, left & right 45° swivel

Mounting
None

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111H, 1x RJ-45

WLAN + Bluetooth®

• Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
• Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, Intel® vPro® technology support, M.2 card
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[1]
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[2]

Notes:
[1], [2] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports[1]

Rear Ports
• 2x USB 2.0
• 2x USB 3.2 Gen 2
• 1x HDMI®-out
• 1x Ethernet (RJ-45)
• 1x power connector

Bottom Ports
1x headphone / microphone combo jack (3.5mm)

Left Ports
None

Optional Left Ports
None

Right Ports
None

Optional Right Ports
None

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY
Security

Security Chip
Firmware TPM 2.0 integrated in SoC

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Cover presence switch
- Intel® BIOS guard

SERVICE

Warranty[1]

Base Warranty**
- 1-year courier or carry-in service
- 1-year limited onsite service

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment
Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[1]

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[2]
- ErP Lot 3 and Lot 7

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Noise
Feature with ** means that only one offering listed under the feature is configured on selected models.

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<p>| | |</p>
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<th></th>
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<tr>
<td>1</td>
<td>Power button</td>
</tr>
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<td>2</td>
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<td>3</td>
<td>Power connector</td>
</tr>
<tr>
<td>4</td>
<td>HDMI-out</td>
</tr>
<tr>
<td>5</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>6</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>7</td>
<td>2x USB 2.0</td>
</tr>
<tr>
<td>8</td>
<td>Optical drive *</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation Intel® H Series Core i5 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
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<th>Processor Graphics</th>
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<tr>
<td>Core i5-13420H</td>
<td>8 (4 P-core + 4 E-core)</td>
<td>12</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz&lt;sup&gt;[1]&lt;/sup&gt;</td>
<td>12MB</td>
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Operating System

Operating System**
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Monitor Support
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Chipset

Chipset
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Memory

Max Memory<sup>[1]</sup>
Up to 8GB DDR4-3200

Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support<sup>[1]</sup>
- Up to two drives, 1x 2.5” HDD + 1x M.2 SSD
  - 2.5” HDD up to 1TB
  - M.2 SSD up to 512GB
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

Storage Type**
## Removable Storage

**Optical**
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

**Card Reader**
- No card reader

## Multi-Media

**Audio Chip**
- High Definition (HD) Audio, Realtek® ALC256 codec

**Speakers**
- Stereo speakers, 3W x2, Audio by HARMAN

**Microphone**
- Dual-microphone array
- No microphone

**Camera**
- HD 720p 0° Pre-angle pull up camera, LED indicator
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## Power Supply

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**Touchscreen**
- Non-touch

Notes:
- [1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
**Input Device**

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- No keyboard

**Mouse**
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- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
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**Mechanical**

**Form Factor**
AIO (21.5 inches)

**Dimensions (Wx Dx H)**
490.3 x 207.5 x 405.39 mm (19.3 x 8.17 x 15.96 inches)

**Packaging Dimensions (Wx Dx H)**
591 x 231 x 522 mm (23.27 x 9.09 x 20.55 inches)

**Weight**
Around 5.7 kg (12.6 lbs)

**Packaging Weight**
Around 9.3 kg (20.5 lbs)

**Case Color**
Raven black

**Bays**
- 1x 2.5” disk bay
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

**Expansion Slots**
Two M.2 slots (one for WLAN, one for SSD)

**EOU**
No support

**Stand**
Monitor stand, supports -5° to +25° tilt, left & right 45° swivel

**Mounting**
None

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Realtek® RTL8111H, 1x RJ-45

**WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[2]

Notes:

Bluetooth® 5.2 requires Windows® 11.

**Ports**

**Rear Ports**
- 2x USB 2.0
- 2x USB 3.2 Gen 2
- 1x HDMI®-out
- 1x Ethernet (RJ-45)
- 1x power connector

**Bottom Ports**
1x headphone / microphone combo jack (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

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USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Firmware TPM 2.0 integrated in SoC

**BIOS Security**
- Administrator password
- Power-on password
- Intel® BIOS guard

**SERVICE**

**Warranty**

**Base Warranty**
- 1-year courier or carry-in service
- 1-year limited onsite service

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

**Relative Humidity**
- Operating: 20% to 80%
- Storage: 10% to 90%

**Altitude**
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
CERTIFICATIONS

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered

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[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Noise

Feature with ** means that only one offering listed under the feature is configured on selected models.

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**OVERVIEW**

<table>
<thead>
<tr>
<th>1. Power button</th>
<th>5. 2x USB 3.2 Gen 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Combo audio jack (on bottom)</td>
<td>6. Ethernet (RJ-45)</td>
</tr>
<tr>
<td>3. Power connector</td>
<td>7. 2x USB 2.0</td>
</tr>
<tr>
<td>4. HDMI-out</td>
<td>8. Optical drive *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
**PERFORMANCE**

**Processor**

**Processor Family**

Intel® Celeron®, Intel® Pentium®, 12th Gen Intel® U Series Core i3 / i5, 12th Gen Intel® P Series Core i3 / i5 / i7, or 12th Gen Intel® H Series Core i5 Processor

**Processors**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® 7305</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.1GHz / E-core 0.9GHz</td>
<td>-</td>
<td>8MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Pentium® Gold 8505</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>-</td>
<td>8MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i3-1220P</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.5GHz / E-core 1.1GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
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<tr>
<td>Core i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core i5-12450H</td>
<td>8 (4 P-core + 4 E-core)</td>
<td>12</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
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<td>Core i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
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<td>Intel® Iris® Xe Graphics</td>
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**Notes:**

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

[2], [3], [4], [5], [6], [7], [8] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- No preload operating system

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>1920x1080@60Hz</td>
<td>1x HDMI® 1.4</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>1920x1080@60Hz</td>
<td>1x HDMI® 1.4</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

**Notes:**

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

**Monitor Support**

**Monitor Support**
Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

**Chipset**

Chipset
Intel® SoC (System on Chip) platform

**Memory**

Max Memory[1]
Up to 16GB DDR4-3200

Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

Storage Support[2]
• Up to two drives, 1x 2.5” HDD + 1x M.2 SSD
• 2.5” HDD up to 1TB
• M.2 SSD up to 1TB
• For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
</tr>
</tbody>
</table>

RAID
No support

Notes:
[2] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

Optical
• DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
• None

Card Reader
No card reader

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Realtek® ALC256 codec

Speakers
Stereo speakers, 3W x2, Audio by HARMAN

Microphone
• Dual-microphone array
• No microphone

Camera**
• 5.0-megapixel IR camera, 0° Pre-angle pull up camera, LED indicator
ThinkCentre neo 30a 24

- HD 720p 0° Pre-angle pull up camera, LED indicator
- No camera

**Power Supply**

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

**DESIGN**

**Display**

Display\(^1\)

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.8&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
</tr>
</tbody>
</table>

Touchscreen
Non-touch

Notes:
\(^1\) IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**\(^2\)
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- No keyboard

**Mouse**\(^2\)
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

**Mechanical**

**Form Factor**
AIO (23.8 inches)

**Dimensions (WxDxH)**\(^3\)

| Models with monitor stand | 541 x 207.5 x 433.8 mm (21.3 x 8.17 x 17.1 inches) |
| Models with lifttable monitor stand | 541 x 220 x 380.5-480.5 mm (21.3 x 8.66 x 14.98-18.92 inches) |

**Packaging Dimensions (WxDxH)**
662 x 231 x 551 mm (26.06 x 9.09 x 21.69 inches)

**Weight**\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with lifttable monitor stand</td>
<td>Around 6.6 kg (14.6 lbs)</td>
</tr>
<tr>
<td>Models with monitor stand</td>
<td>Around 6.7 kg (14.8 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
Around 10.74 kg (23.08 lbs)
Case Color
Raven black

Bays
• 1x 2.5" disk bay
• For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

EOU
No support

Stand**
• Monitor stand, supports -5° to +25° tilt, left & right 45° swivel
• Liftable monitor stand, supports -5° to +16° tilt, left & right 45° swivel, up to 100mm lift

Mounting
None

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111H, 1x RJ-45

WLAN + Bluetooth®**
• Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
• Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, Intel® vPro® technology support, M.2 card
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card

Notes:
[1], [2] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports

Rear Ports
• 2x USB 2.0
• 2x USB 3.2 Gen 2
• 1x HDMI®-out
• 1x Ethernet (RJ-45)
• 1x power connector

Bottom Ports
1x headphone / microphone combo jack (3.5mm)

Left Ports
None

Optional Left Ports
None

Right Ports
None

Optional Right Ports
None
Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Security Chip
Firmware TPM 2.0 integrated in SoC

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Cover presence switch
- Intel® BIOS guard

SERVICE

Warranty[1]

Base Warranty **
- 1-year courier or carry-in service
- 1-year limited onsite service

Notes:

[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[1]

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[2]
- ErP Lot 3 and Lot 7
- RoHS / WEEE / REACH
Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Noise

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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### OVERVIEW

<table>
<thead>
<tr>
<th>1. Power button</th>
<th>5. 2x USB 3.2 Gen 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Combo audio jack (on bottom)</td>
<td>6. Ethernet (RJ-45)</td>
</tr>
<tr>
<td>3. Power connector</td>
<td>7. 2x USB 2.0</td>
</tr>
<tr>
<td>4. HDMI-out</td>
<td>8. Optical drive *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor
Processor Family
13th Generation Intel® H Series Core i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-13420H</td>
<td>8 (4 P-core + 4 E-core)</td>
<td>12</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i7-13620H</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 4.9GHz / E-core 3.6GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1], [2] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System
Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>1920x1080@60Hz</td>
<td>1x HDMI® 1.4</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support
Monitor Support
Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory
Up to 16GB DDR4-3200

Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
Up to two drives, 1x 2.5” HDD + 1x M.2 SSD
- 2.5” HDD up to 1TB
- M.2 SSD up to 1TB
For installing HDD storage, assembly kits are needed. The kits only come with HDD models.
## Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4, Opal 2.0</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

## Removable Storage

### Optical
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

### Card Reader
No card reader

## Multi-Media

### Audio Chip
High Definition (HD) Audio, Realtek® ALC256 codec

### Speakers
Stereo speakers, 3W x2, Audio by HARMAN

### Microphone
- Dual-microphone array
- No microphone

### Camera
- 5.0-megapixel IR camera, 0° Pre-angle pull up camera, LED indicator
- HD 720p 0° Pre-angle pull up camera, LED indicator
- No camera

## Power Supply

<table>
<thead>
<tr>
<th>Power Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Type</td>
</tr>
<tr>
<td>90W Adapter</td>
</tr>
</tbody>
</table>

## DESIGN

### Display

<table>
<thead>
<tr>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>23.8&quot; FHD (1920x1080)</td>
</tr>
</tbody>
</table>

### Touchscreen
Non-touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
Input Device

Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

Mechanical

Form Factor
AIO (23.8 inches)

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with monitor stand</td>
<td>541 x 207.5 x 433.8 mm (21.3 x 8.17 x 17.1 inches)</td>
</tr>
<tr>
<td>Models with liftable monitor stand</td>
<td>541 x 220 x 380.5-480.5 mm (21.3 x 8.66 x 14.98-18.92 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
- Models with liftable monitor stand: 658 x 264 x 570 mm (25.91 x 10.39 x 22.44 inches)
- Models with monitor stand: 659 x 206 x 554 mm (25.94 x 8.11 x 21.81 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with liftable monitor stand</td>
<td>Around 6.6 kg (14.6 lbs)</td>
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<tr>
<td>Models with monitor stand</td>
<td>Around 6.7 kg (14.8 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
Around 10.74 kg (23.08 lbs)

Case Color
Raven black

Bays
- 1x 2.5” disk bay
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

Stand**
- Monitor stand, supports -5° to +25° tilt, left & right 45° swivel
- Liftable monitor stand, supports -5° to +16° tilt, left & right 45° swivel, up to 100mm lift

Mounting
None

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111H, 1x RJ-45

WLAN + Bluetooth®**
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card

Notes:

Ports

Rear Ports
• 2x USB 2.0
• 2x USB 3.2 Gen 2
• 1x HDMI®-out
• 1x Ethernet (RJ-45)
• 1x power connector

Bottom Ports
1x headphone / microphone combo jack (3.5mm)

Left Ports
None

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Security Chip
Firmware TPM 2.0 integrated in SoC

BIOS Security
• Administrator password
• Power-on password
• Intel® BIOS guard

SERVICE

Warranty

Base Warranty
• 1-year courier or carry-in service
• 1-year limited onsite service

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment

Temperature
Operating: 5°C (41°F) to 35°C (95°F)
Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
Operating: 20% to 80%
Storage: 10% to 90%

Altitude
Operating: 0 m (0 ft) to 3048 m (10,000 ft)
Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications
[1]
Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[2]

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Noise

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<td>6. Ethernet (RJ-45)</td>
</tr>
<tr>
<td>3. Power connector</td>
<td>7. 2x USB 2.0</td>
</tr>
<tr>
<td>4. HDMI-out</td>
<td>8. Optical drive *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor
Processor Family
12th Gen Intel® U Series Core i3 / i5, 12th Gen Intel® P Series Core i3 / i5 / i7, or 12th Gen Intel® H Series Core i5 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz[2]</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i3-1220P</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.5GHz / E-core 1.1GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz[3]</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz[4]</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz[5]</td>
<td>12MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz[7]</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.
[2], [3], [4], [5], [6], [7] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
• Windows® 11 Pro
• Windows® 11 Home
• Windows® 11 Home Single Language
• Windows® 11 DG Windows® 10 Pro 64
• No preload operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>1920x1080@60Hz</td>
<td>1x HDMI® 1.4</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>1920x1080@60Hz</td>
<td>1x HDMI® 1.4</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory
Max Memory[1]
Up to 16GB DDR4-3200

Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support[1]
• Up to two drives, 1x 2.5" HDD + 1x M.2 SSD
  • 2.5" HDD up to 1TB
  • M.2 SSD up to 1TB
• For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe*, PCIe 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe*, PCIe 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
No support

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage

Optical
• DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
• None

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC256 codec

Speakers
Stereo speakers, 3W x2

Microphone
• Dual-microphone array
• No microphone

Camera**
• 5.0-megapixel IR camera, fixed focus
• 5.0-megapixel, fixed focus
• No camera

Power Supply

Power Supply

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

DESIGN
### Display

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>27&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>14ms response time, 16.7 million color depth, borderless design</td>
</tr>
</tbody>
</table>

**Touchscreen**

Non-touch

---

**Notes:**

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

### Input Device

**Keyboard**

- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- No keyboard

**Mouse**

- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

### Mechanical

**Form Factor**

AIO (27 inches)

**Dimensions (WxDxH)**

474.12 x 207.52 x 613.1 mm (18.67 x 8.17 x 24.14 inches)

**Packaging Dimensions (WxDxH)**

570 x 233 x 763 mm (22.44 x 9.17 x 30.03 inches)

**Weight**

Around 8.11 kg (17.88 lbs)

**Packaging Weight**

Around 12.38 kg (27.29 lbs)

**Case Color**

Raven black

**Bays**

- 1x 2.5" disk bay
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

**Expansion Slots**

Two M.2 slots (one for WLAN, one for SSD)

**EOU**

No support

**Stand**

Monitor stand, supports -5° to +25° tilt, left & right 45° swivel

**Mounting**

None

---

**Notes:**
The system dimensions may vary depending on configurations.  

The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

### CONNECTIVITY

#### Network

**Onboard Ethernet**

Gigabit Ethernet, Realtek® RTL8111H, 1x RJ-45

**WLAN**

- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, Intel® vPro® technology support, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card

**WLAN + Bluetooth®**

- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, Intel® vPro® technology support, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card

**Notes:**

1. Bluetooth® 5.3 requires Windows® 11.
2. Bluetooth® 5.2 requires Windows® 11.

#### Ports

**Rear Ports**

- 2x USB 2.0
- 2x USB 3.2 Gen 2
- 1x HDMI®-out
- 1x Ethernet (RJ-45)
- 1x power connector

**Bottom Ports**

1x headphone / microphone combo jack (3.5mm)

**Left Ports**

None

**Optional Left Ports**

None

**Right Ports**

None

**Optional Right Ports**

None

**Notes:**

1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

### SECURITY & PRIVACY

#### Security

**Security Chip**

Firmware TPM 2.0 integrated in SoC
BIOS Security

- Administrator password
- Power-on password
- Hard disk password
- Cover presence switch
- Intel® BIOS guard

SERVICE

Warranty[1]

Base Warranty**

- 1-year courier or carry-in service
- 1-year limited onsite service

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity

- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude

- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[1]

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[2]
- ErP Lot 3 and Lot 7
- RoHS / WEEE / REACH

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Noise

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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## OVERVIEW

1. Power button
2. Combo audio jack (on bottom)
3. Power connector
4. HDMI-out
5. 2x USB 3.2 Gen 2
6. Ethernet (RJ-45)
7. 2x USB 2.0
8. Optical drive *

### Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor
Processor Family
13th Generation Intel® H Series Core i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-13420H</td>
<td>8 (4 P-core + 4 E-core)</td>
<td>12[1]</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i7-13620H</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 4.9GHz / E-core 3.6GHz[2]</td>
<td>24MB</td>
<td>Intel® UHD Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1], [2] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System
Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>1920x1080@60Hz</td>
<td>1x HDMI® 1.4</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support
Monitor Support
Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

Chipset
Chipset
Intel® SoC (System on Chip) platform

Memory
Max Memory[1]
Up to 16GB DDR4-3200

Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage
Storage Support[1]
- Up to two drives, 1x 2.5" HDD + 1x M.2 SSD
  - 2.5" HDD up to 1TB
  - M.2 SSD up to 1TB
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.
### Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

### RAID

No support

---

**Notes:**

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

### Removable Storage

- **Optical**
  - DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
  - None
- **Card Reader**
  - No card reader

### Multi-Media

- **Audio Chip**
  - High Definition (HD) Audio, Realtek® ALC256 codec
- **Speakers**
  - Stereo speakers, 3W x2
- **Microphone**
  - Dual-microphone array
  - No microphone
- **Camera**
  - 5.0-megapixel IR camera, 0° Pre-angle pull up camera, LED indicator
  - 5.0-megapixel camera, 0° Pre-angle pull up camera, LED indicator
  - No camera

### Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

### DESIGN

### Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>27”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>250nits</td>
<td>Anti-glace</td>
<td>16:9</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>14ms response Time, 16.7 million color depth, borderless design</td>
</tr>
</tbody>
</table>

**Touchscreen**

- Non-touch
Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

Mechanical

Form Factor
AIO (27 inches)

Dimensions (WxDxH)[3]
474.1 x 207.5 x 613.1 mm (18.67 x 8.17 x 24.14 inches)

Packaging Dimensions (WxDxH)
570 x 233 x 763 mm (22.44 x 9.17 x 30.03 inches)

Weight[2]
Around 8.11 kg (17.88 lbs)

Packaging Weight
Around 12.38 kg (27.29 lbs)

Case Color
Raven black

Bays
- 1x 2.5" disk bay
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

EOU
No support

Stand
Monitor stand, supports -5° to +25° tilt, left & right 45° swivel

Mounting
None

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111H, 1x RJ-45

WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[2]
Notes:

Ports

Rear Ports
- 2x USB 2.0
- 2x USB 3.2 Gen 2
- 1x HDMI®-out
- 1x Ethernet (RJ-45)
- 1x power connector

Bottom Ports
1x headphone / microphone combo jack (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Security Chip
Firmware TPM 2.0 integrated in SoC

BIOS Security
- Administrator password
- Power-on password
- Intel® BIOS guard

SERVICE

Warranty

Base Warranty**
- 1-year courier or carry-in service
- 1-year limited onsite service

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment
Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%
Altitude

- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications

- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Noise

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## OVERVIEW

<table>
<thead>
<tr>
<th>1. Optical drive eject button *</th>
<th>8. USB 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. USB 3.2 Gen 1</td>
<td>9. USB 3.2 Gen 2</td>
</tr>
<tr>
<td>3. Power connector</td>
<td>10. 2x USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>4. Headphone / microphone combo jack (3.5mm)</td>
<td>11. USB-C 2.0 (support data transfer, PD 3.0)</td>
</tr>
<tr>
<td>5. HDMI-in 1.4</td>
<td>12. Kensington Security Slot</td>
</tr>
<tr>
<td>6. Ethernet (RJ-45)</td>
<td>13. HDMI Switch Key</td>
</tr>
<tr>
<td>7. HDMI-out 2.1 TMDS</td>
<td>14. Power button</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
**PERFORMANCE**

**Processor**

**Processor Family**
12th Generation Intel® Core™ i3 P-Series and i5 / i7 H-Series Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
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</tr>
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<tbody>
<tr>
<td>Core i3-1220P</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.5GHz / E-core 1.1GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz[2]</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i5-12450H</td>
<td>8 (4 P-core + 4 E-core)</td>
<td>12</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz[3]</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i5-12500H</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz[4]</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core i7-12700H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.3GHz / E-core 1.7GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz[5]</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.
[2], [3], [4], [5] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

**Operating System**

**Operating System**
• Windows® 11 Pro
• Windows® 11 Home
• Windows® 11 Home Single Language
• Windows® 11 DG Windows® 10 Pro 64
• Ubuntu Linux[1]
• No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>3840x2160@60Hz(HDMI®)</td>
<td>1x HDMI® 2.1 TMDS</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>3840x2160@60Hz(HDMI®)</td>
<td>1x HDMI® 2.1 TMDS</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Arc™ A370M Graphics</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>3840x2160@60Hz(HDMI®)</td>
<td>1x HDMI® 2.1 TMDS</td>
<td>DirectX® 12 Ultimate</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

**Monitor Support**

**Monitor Support**
Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

**Chipset**

Chipset
Intel® SoC (System on Chip) platform

**Memory**

*Max Memory*[1]*

Up to 16GB DDR5-4800

**Memory Slots**

Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR5-4800

---

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

*Storage Support*[2]*

- Up to two drives, 1x 2.5" HDD + 1x M.2 SSD
  - 2.5" HDD up to 2TB
  - M.2 SSD up to 1TB
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>5.4K</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Value</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**RAID**

No support

---

Notes:

[2] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

*Optical*

- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

*Card Reader*

No card reader

**Multi-Media**

*Audio Chip*

High Definition (HD) Audio, Realtek® ALC274-CG codec

*Speakers*

Stereo speakers, 3W x2

*Microphone*

Dual-microphone array

*Camera**

- 5.0-megapixel IR camera, fixed focus
- 5.0-megapixel IR camera, fixed focus, with AI chip
- 5.0-megapixel, fixed focus
- No camera

**Power Supply**

Power Supply
**ThinkCentre neo 50a 24**

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100V - 240V, 50-60Hz</td>
</tr>
</tbody>
</table>

**DESIGN**

**Display**

**Display**\(^{[1]}\)

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.8&quot;</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1000:1</td>
<td>72% NTSC</td>
<td>60Hz</td>
<td>89°/89°/89°/89°</td>
<td>14ms response Time, borderless design, low blue light, flicker free</td>
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<tr>
<td>23.8&quot;</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>Anti-glare</td>
<td>16:9</td>
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<td>89°/89°/89°/89°</td>
<td>14ms response Time, borderless design, low blue light, flicker free</td>
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**Touchscreen**

- Advanced In-cell Touch (AIT), supports 10-point touch
- Non-touch

Notes:

\(^{[1]}\) IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**\(^{[2]}\)

- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- No keyboard

**Mouse**\(^{[2]}\)

- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Euterpe Wireless Mouse, grey
- No mouse

**Mechanical**

**Form Factor**

AIO (23.8 inches)

**Dimensions (WxDxH)**\(^{[3]}\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with monitor stand</td>
<td>541 x 209.9 x 433.7 mm (21.3 x 8.3 x 17.1 inches)</td>
</tr>
<tr>
<td>Models with liftable monitor stand</td>
<td>541 x 220 x 482 mm (21.3 x 8.7 x 19 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

- Models with liftable monitor stand: 658 x 264 x 567 mm (25.9 x 10.4 x 22.3 inches)
- Models with monitor stand: 695 x 196 x 569 mm (27.4 x 7.7 x 22.4 inches)

**Weight**\(^{[4]}\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

\(^{[1]}\) IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

\(^{[2]}\) Lenovo® Calliope Keyboard (USB connector), black

\(^{[3]}\) Models with monitor stand: 541 x 209.9 x 433.7 mm (21.3 x 8.3 x 17.1 inches)

\(^{[4]}\) Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
Models with monitor stand | Around 7.43 kg (16.4 lbs)
Models with liftable monitor stand | Around 7.65 kg (16.9 lbs)

Packaging Weight
- Models with liftable monitor stand: 10.3 kg (22.7 lbs)
- Models with monitor stand: 9.69 kg (21.4 lbs)

Case Color
Raven black

Bays
- 1x 2.5" disk bay
- 1x slim ODD bay
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

Stand**
- Monitor stand, supports -5° to +25° tilt, left & right 45° swivel
- Liftable monitor stand, supports -5° to +18° tilt, left & right 45° swivel, up to 100mm lift

Mounting
Supports VESA mount 100mm

Others
Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111K, 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®**
- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, Intel® vPro® technology support, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[2]

Notes:
[1], [2] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports[1]
Rear Ports
- 1x USB-C® 2.0 (Supports data transfer, Power Delivery 3.0)
- 2x USB-C® 3.2 Gen 2
- 1x USB 2.0
- 1x USB 3.2 Gen 2 (Supports smart power-on)
- 1x HDMI®-in 1.4
- 1x HDMI®-out 2.1 TMDS
- 1x Ethernet (RJ-45)
- 1x headphone / microphone combo jack (3.5mm)

Left Ports
1x USB 3.2 Gen 1
Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Security Chip
Firmware TPM 2.0 integrated in SoC

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Cover presence switch
• Intel® BIOS guard

SERVICE

Warranty[1]

Base Warranty**
• 1-year courier or carry-in service
• 1-year limited onsite service

Notes:

[1] The warranty upgrades may be bundled with some models, please check the "included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories
• USB-C® to USB-A dongle
• None

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
CERTIFICATIONS

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Ultra Low Noise

Mil-Spec Test

None

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
### OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Optical drive eject button *</td>
</tr>
<tr>
<td>2</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3</td>
<td>Power connector</td>
</tr>
<tr>
<td>4</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5</td>
<td>HDMI-in 1.4</td>
</tr>
<tr>
<td>6</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>7</td>
<td>HDMI-out 2.1 TMDS</td>
</tr>
<tr>
<td>8</td>
<td>USB 2.0</td>
</tr>
<tr>
<td>9</td>
<td>USB 3.2 Gen 2</td>
</tr>
<tr>
<td>10</td>
<td>2x USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>11</td>
<td>USB-C 2.0 (support data transfer, PD 3.0)</td>
</tr>
<tr>
<td>12</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>13</td>
<td>HDMI Switch Key</td>
</tr>
<tr>
<td>14</td>
<td>Power button</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
13th Generation Intel® Core™ i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-13500H</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz[2]</td>
<td>18MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
<tr>
<td>Core i7-13700H</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz[3]</td>
<td>24MB</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:
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[2], [3] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Ubuntu Linux[1]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
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Notes:
[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory[1]
Up to 16GB DDR5-5200

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable
Memory Type
DDR5-5200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
• Up to two drives, 1x 2.5" HDD + 1x M.2 SSD
  • 2.5" HDD up to 2TB
  • M.2 SSD up to 1TB
• For installing HDD storage, assembly kits are needed. The kits only come with HDD models.

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
No support

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage

Optical
• DVD burner (DVD±RW), SATA connector, slim (9.0mm)
  • None

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio

Speakers
Stereo speakers, 3W x2, Audio by HARMAN

Microphone
Dual-microphone array

Camera*
• 5.0-megapixel IR camera, fixed focus
• 5.0-megapixel IR camera, fixed focus, with AI chip
• 5.0-megapixel, fixed focus
• No camera

Power Supply

Power Supply

<table>
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DESIGN

Display

Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
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<th>Aspect Ratio</th>
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<tbody>
<tr>
<td>Model</td>
<td>Screen Size</td>
<td>Resolution</td>
<td>Anti-glare</td>
<td>Aspect Ratio</td>
<td>Brightness</td>
<td>Contrast Ratio</td>
<td>NTSC</td>
<td>Refresh Rate</td>
<td>Response Time,</td>
<td>Notes</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>------------</td>
<td>------------</td>
<td>--------------</td>
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**Touchscreen**
- Advanced In-cell Touch (AIT), supports 10-point touch
- Non-touch

**Notes:**
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

**Mechanical**

**Form Factor**
AIO (23.8 inches)

**Dimensions (WxDxH)**

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<td>541 x 220 x 482 mm (21.3 x 8.7 x 19 inches)</td>
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**Packaging Dimensions (WxDxH)**
- Models with liftable monitor stand: 658 x 264 x 570 mm (25.9 x 10.4 x 22.44 inches)
- Models with monitor stand: 695 x 196 x 554 mm (27.4 x 7.7 x 21.81 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with monitor stand</td>
<td>Around 7.42 kg (16.36 lbs)</td>
</tr>
<tr>
<td>Models with liftable monitor stand</td>
<td>Around 7.64 kg (16.84 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
- Models with liftable monitor stand: 11.88 kg (26.19 lbs)
- Models with monitor stand: 11.04 kg (24.34 lbs)

**Case Color**
Raven black

**Bays**
- 1x 2.5" disk bay
- 1x slim ODD bay
- For installing HDD storage, assembly kits are needed. The kits only come with HDD models.
Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

Stand**
- Monitor stand, supports -5° to +25° tilt, left & right 45° swivel
- Liftable monitor stand, supports -5° to +18° tilt, left & right 45° swivel, up to 100mm lift

Mounting
Supports VESA mount 100mm

Others
Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111K-CG, 1x RJ-45

WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[2]

Notes:

Ports[1]
Rear Ports
- 1x USB-C® 2.0 (Supports data transfer, Power Delivery 3.0)
- 2x USB-C® 3.2 Gen 2
- 1x USB 2.0
- 1x USB 3.2 Gen 2 (Supports smart power-on)
- 1x HDMI®-in 1.4
- 1x HDMI®-out 2.1 TMDS
- 1x Ethernet (RJ-45)
- 1x headphone / microphone combo jack (3.5mm)

Left Ports
1x USB 3.2 Gen 1

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Security Chip
Firmware TPM 2.0 integrated in SoC

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Cover presence switch
• Intel® BIOS guard

SERVICE

Warranty[1]

Base Warranty
• 1-year courier or carry-in service
• 1-year limited onsite service

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories
Bundled Accessories
• USB-C® to USB-A dongle
• None

OPERATING REQUIREMENTS

Operating Environment
Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[1]

Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Silver Registered[2]

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.
**Other Certifications**

- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Ultra Low Noise

**Mil-Spec Test**

None

- Feature with ** means that only one offering listed under the feature is configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. USB-C (USB 10Gbps), data transfer only
2. Headphone / microphone combo jack (3.5mm)
3. HDMI-in 1.4
4. Power-in
5. USB-A (Hi-Speed USB)
6. Ethernet (RJ-45)

7. USB-A (Hi-Speed USB)
8. USB-A (USB 10Gbps)
9. HDMI-out 2.1 TMDS
10. Power button
11. Camera shutter latch
PERFORMANCE

Processor

Processor Family
Intel® U-series or 13th Generation Intel® Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>U300</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>8MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i3-1315U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i5-13420H</td>
<td>8 (4 P-core + 4 E-core)</td>
<td>12</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i7-13620H</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 4.9GHz / E-core 3.6GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Ubuntu Linux
- No preload operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®)</td>
<td>1x HDMI® 2.1 TMDS</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Notes:
[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support

Monitor Support
Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory**(1)
Up to 32GB DDR5-5200

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-5200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage
Storage Support
One drive, up to 1TB M.2 2280 SSD

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage
Optical
None
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC233-CG codec
Speakers
Stereo speakers, 3W x2, Audio by HARMAN
Microphone
Dual-microphone array
Camera
- 5.0-megapixel
- 5.0-megapixel IR camera

Power Supply

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>90W Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>135W Adapter</td>
<td>90%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

DESIGN

Display

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.8&quot; FHD</td>
<td>(1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1300:1</td>
<td>99% sRGB</td>
<td>100Hz</td>
<td>89°/89°/89°/89°</td>
<td>Borderless design, low blue light, flicker free</td>
</tr>
<tr>
<td>23.8&quot; FHD</td>
<td>(1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1300:1</td>
<td>99% sRGB</td>
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<td>89°/89°/89°/89°</td>
<td>Borderless design, low blue light, flicker free</td>
</tr>
</tbody>
</table>

Touchscreen
- (Optional) 10-point multi-touch
- Non-touch

Notes:
IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**

**Keyboard**
- EOS Wireless Keyboard, black
- Lenovo® Calliope Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- EOS Wireless Mouse, Black
- No mouse

**Mechanical**

**Buttons**
- Camera Shutter Latch
- Power button

**Form Factor**
- AiO (23.8 inches)

**Dimensions (WxDxH)**
- 540 x 192 x 431 mm (21.25 x 7.56 x 16.97 inches)

**Packaging Dimensions (WxDxH)**
- 670 x 229 x 553 mm (26.38 x 9.02 x 21.77 inches)

**Weight**
- Around 6.0 kg (13.23 lbs)

**Packaging Weight**
- Around 9.55 kg (21.05 lbs)

**Case Color**
- Luna grey

**Bays**
- No bays

**Expansion Slots**
- Two M.2 slots (one for WLAN, one for SSD)

**Stand**
- Monitor stand, supports -5° to +15° tilt.

**Mounting**
- None

**Others**
- (Optional) Wireless charger 15W

**Notes:**
- [1] The system dimensions may vary depending on configurations.
- [2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
- Gigabit Ethernet, Realtek® RTL8111H, 1x RJ-45

**WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card [1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card [2]
No WLAN and Bluetooth®

Notes:

Ports

Rear Ports
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 2x USB-A (Hi-Speed USB / USB 2.0)
- 1x HDMI®-in 1.4
- 1x HDMI®-out 2.1 TMDS
- 1x Ethernet (RJ-45)
- 1x power connector

Left Ports
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 1x headphone / microphone combo jack (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Security Chip
Firmware TPM 2.0 integrated in SoC

Physical Locks
No physical locks

Chassis Intrusion Switch
No chassis intrusion switch

BIOS Security
- Administrator password
- Power-on password

MANAGEABILITY

System Management

System Management
None

SERVICE

Warranty

Base Warranty
- 1-year courier or carry-in service
- 1-year limited onsite service

Notes:
The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- ErP Lot 3 and Lot 7
- GREENGUARD®
- RoHS / WEEE / REACH

Notes:
The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Ultra Low Noise

Feature with ** means that only one offering listed under the feature is configured on selected models.

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## OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USB-C (USB 10Gbps), data transfer only</td>
</tr>
<tr>
<td>2</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>3</td>
<td>HDMI-in 1.4</td>
</tr>
<tr>
<td>4</td>
<td>Power-in</td>
</tr>
<tr>
<td>5</td>
<td>USB-A (Hi-Speed USB)</td>
</tr>
<tr>
<td>6</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>7</td>
<td>USB-A (Hi-Speed USB)</td>
</tr>
<tr>
<td>8</td>
<td>USB-A (USB 10Gbps)</td>
</tr>
<tr>
<td>9</td>
<td>HDMI-out 2.1 TMDS</td>
</tr>
<tr>
<td>10</td>
<td>Power button</td>
</tr>
<tr>
<td>11</td>
<td>Camera shutter latch</td>
</tr>
</tbody>
</table>
PERFORMANCE

Processor

Processor Family
13th Generation Intel® Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-1315U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.5GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i5-13420H</td>
<td>8 (4 P-core + 4 E-core)</td>
<td>12</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.6GHz / E-core 3.4GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i7-13620H</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>P-core 4.9GHz / E-core 3.6GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

Graphics

Graphics[1]

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®)</td>
<td>1x HDMI® 2.1 TMDS</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Notes:
[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support

Monitor Support
Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory[1]
Up to 32GB DDR5-5200

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-5200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support[1]
One drive, up to 1TB M.2 2280 SSD

Storage Type**
<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Optical**
None

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC233-CG codec

**Speakers**
Stereo speakers, 3W x2, Audio by HARMAN

**Microphone**
Dual-microphone array

**Camera**
- 5.0-megapixel
- 5.0-megapixel IR camera

**Power Supply**

**Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>135W</td>
<td>Adapter</td>
<td>90%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

**DESIGN**

**Display**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Refresh Rate</th>
<th>Viewing Angle (L/R/U/D)</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>27”</td>
<td>FHD (1920x1080)</td>
<td>None</td>
<td>IPS</td>
<td>300nits</td>
<td>Anti-glare</td>
<td>16:9</td>
<td>1300:1</td>
<td>99% sRGB</td>
<td>100Hz</td>
<td>89°/89°/89°/89°</td>
<td>Borderless design, low blue light, flicker free</td>
</tr>
<tr>
<td>27”</td>
<td>FHD (1920x1080)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300nits</td>
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<td>100Hz</td>
<td>89°/89°/89°/89°</td>
<td>Borderless design, low blue light, flicker free</td>
</tr>
</tbody>
</table>

**Touchscreen**
- (Optional) 10-point multi-touch
- Non-touch

Notes:
[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

**Input Device**
Keyboard**
- EOS Wireless Keyboard, black
- Lenovo® Calliope Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- EOS Wireless Mouse, Black

Mechanical

Buttons
- Camera Shutter Latch
- Power button

Form Factor
AIO (27 inches)

Dimensions (WxDxH)\(^1\)
611.72 x 192 x 473.16 mm (24.08 x 7.55 x 18.62 inches)

Packaging Dimensions (WxDxH)
766 x 229 x 570 mm (30.16 x 9.02 x 22.44 inches)

Weight\(^2\)
Around 7.1 kg (15.65 lbs)

Packaging Weight
Around 10.9 kg (24.03 lbs)

Case Color
Luna grey

Bays
No bays

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

Stand
Monitor stand, supports -5° to +15° tilt.

Mounting
None

Others
(Optional) Wireless charger 15W

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111H, 1x RJ-45

WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card\(^1\)
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card\(^2\)
- No WLAN and Bluetooth®

Notes:
Bluetooth® 5.3 requires Windows® 11.
Bluetooth® 5.2 requires Windows® 11.

**Ports**

**Rear Ports**
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 2x USB-A (Hi-Speed USB / USB 2.0)
- 1x HDMI®-in 1.4
- 1x HDMI®-out 2.1 TMDS
- 1x Ethernet (RJ-45)
- 1x power connector

**Left Ports**
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 1x headphone / microphone combo jack (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Firmware TPM 2.0 integrated in SoC

**Physical Locks**
No physical locks

**Chassis Intrusion Switch**
No chassis intrusion switch

**BIOS Security**
- Administrator password
- Power-on password

**MANAGEABILITY**

**System Management**
System Management
None

**SERVICE**

**Warranty**

**Base Warranty**
- 1-year courier or carry-in service
- 1-year limited onsite service

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of
warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

- Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- ErP Lot 3 and Lot 7
- GREENGUARD®
- RoHS / WEEE / REACH

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Ultra Low Noise

- Feature with ** means that only one offering listed under the feature is configured on selected models.

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OVERVIEW

1. Power button
2. USB-C 3.2 Gen 2
3. 2x USB 3.2 Gen 2
4. Headphone / microphone combo jack (3.5mm)
5. Power connector
6. DisplayPort
7. 2x USB 3.2 Gen 2
8. USB-C 3.2 Gen 2 (display and power-in)
9. Ethernet (RJ-45)
10. Kensington Security Slot
**PERFORMANCE**

**Processor**

**Processor Family**

8th Generation Intel® Core™ i3 / i5 / i7 Processor

**Processor**[^1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-8145U</td>
<td>2</td>
<td>4</td>
<td>2.1GHz</td>
<td>3.9GHz</td>
<td>4MB</td>
<td>DDR4-2400</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i5-8265U</td>
<td>4</td>
<td>8</td>
<td>1.6GHz</td>
<td>3.9GHz</td>
<td>6MB</td>
<td>DDR4-2400</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i5-8365U</td>
<td>4</td>
<td>8</td>
<td>1.6GHz</td>
<td>4.1GHz</td>
<td>6MB</td>
<td>DDR4-2400</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i7-8665U</td>
<td>4</td>
<td>8</td>
<td>1.9GHz</td>
<td>4.8GHz</td>
<td>8MB</td>
<td>DDR4-2400</td>
<td>Intel® UHD Graphics</td>
</tr>
</tbody>
</table>

Notes:
[^1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

**Operating System**

**Operating System**[^2]

- Windows® 10 Pro 64
- Windows® 10 Home 64
- Windows® 10 Home 64 Single Language
- Windows® 10 IoT Enterprise LTSC 2019
- Ubuntu Linux[^1]
- No preload operating system

Notes:
[^1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics 620</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP); 4096x2304@60Hz(USB-C®)</td>
<td>1x DP, 1 USB-C®</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

**Monitor Support**

**Monitor Support**

Supports up to 2 independent displays via onboard ports (DisplayPort™ and USB-C®)

**Chipset**

**Chipset**

Intel® SoC (System on Chip) platform

**Memory**

**Max Memory[^3]**

- 4GB soldered memory, not upgradable
- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable

**Memory Slots**

Memory soldered to systemboard, no slots

**Memory Type[^2]**

DDR4-2666
Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR4-2666 but runs at DDR4-2400 due to the memory support capability of processor.

Storage

Storage Support
Up to two drives, 2x M.2 SSD
• M.2 SSD up to 1TB each
• Optional Intel® Optane™ Memory Integrated with SSD, M.2

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Optane™ Memory with Solid State Storage, M.2 2280</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x2</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>Opal</td>
</tr>
</tbody>
</table>

RAID
RAID 0/1 support for M.2 SSDs (RAID preset only available via special bid models)

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage

Optical
None
Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC233VB codec

Speakers
Single speaker, 1W x1

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>88%</td>
</tr>
<tr>
<td>No power supply</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

DESIGN

Input Device

Keyboard**
• Lenovo® Calliope Keyboard (USB connector), black
• Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
• Lenovo® Traditional Keyboard (USB connector), black
• No keyboard

Mouse**
• Lenovo® Calliope Mouse (USB connector), black
• Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
• Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
• No mouse

Mechanical
Form Factor
Nano (0.35L)

Dimensions (WxDxH)\(^1\)
179 x 88 x 22 mm (7.05 x 3.46 x 0.87 inches)

Packaging Dimensions (WxDxH)
490 x 125 x 255 mm (19.29 x 4.92 x 10.04 inches)

Weight\(^2\)
Around 0.505 kg (1.11 lbs)

Packaging Weight
0.83 kg (1.83 lbs)

Case Color
Iron grey (top cover), black (mid bezel), red (bottom cover)

Bays
No bays

Expansion Slots
Three M.2 slots (one for WLAN, two for SSD)

Stand
No stand

IO Box
No IO box

Mounting**
- VESA mount bracket kit with adapter holder, supports VESA mount 75mm and 100mm
- VESA mount bracket kit, supports VESA mount 75mm and 100mm
- DIN rail mount bracket kit
- None

Notes:
\(^1\) The system dimensions may vary depending on configurations.
\(^2\) The system weight is approximate and based on results in Lenovo\(^\circ\) lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

Network

Onboard Ethernet**
- Gigabit Ethernet, Intel\(^\circ\) Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel\(^\circ\) Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
No optional Ethernet

WLAN + Bluetooth\(^*\)**
- Wi-Fi\(^\circ\) 5, 802.11ac 1x1 Wi-Fi\(^\circ\) + Bluetooth\(^\circ\) 5.0, M.2 card
- Realtek\(^\circ\) RTL8822CE, Wi-Fi\(^\circ\) 5, 802.11ac Dual Band 2x2 Wi-Fi\(^\circ\) + Bluetooth\(^\circ\) 5.0, M.2 card
- Intel\(^\circ\) Wireless-AC 9462, Wi-Fi\(^\circ\) 5, 802.11ac Dual Band 1x1 Wi-Fi\(^\circ\) + Bluetooth\(^\circ\) 5.0, M.2 card
- Intel\(^\circ\) Wireless-AC 9560, Wi-Fi\(^\circ\) 5, 802.11ac Dual Band 2x2 Wi-Fi\(^\circ\) + Bluetooth\(^\circ\) 5.1, Intel\(^\circ\) vPro\(^\circ\) technology support, M.2 card
- Intel\(^\circ\) Wireless-AC 9560, Wi-Fi\(^\circ\) 5, 802.11ac Dual Band 2x2 Wi-Fi\(^\circ\) + Bluetooth\(^\circ\) 5.1, M.2 card
- No WLAN and Bluetooth*

Ports\(^1\)

Front Ports
- 1x USB-C\(^\circ\) 3.2 Gen 2
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
Rear Ports

- 1x USB-C® 3.2 Gen 2 (support display function and power-in [20V and >45W])
- 2x USB 3.2 Gen 2
- 1x DisplayPort™
- 1x Ethernet (RJ-45)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

Fingerprint Reader
- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management
- Intel® vPro®
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty
Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
• DP to HDMI® dongle
• DP to VGA dongle
• USB-C® to DP dongle
• USB-C® to HDMI® dongle
• USB-C® to VGA dongle
• None

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[1]

Green Certifications
• ENERGY STAR® 8.0
• EPEAT™ Silver Registered[2]
• ErP Lot 3
• REACH
• RoHS compliant
• TCO Certified 8.0
• WEEE

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
• (Optional) TÜV Rheinland® Low Noise
• (Optional) TÜV Rheinland® Ultra Low Noise

MIL-Spec Test

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation)

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

1. Power connector  
2. HDMI (for 8145UE models) / DP (for others)  
3. USB 3.2 Gen 2 (USB 2.0 for Celeron models)  
4. USB-C 3.2 Gen 2 (display and power-in)  
5. 2x Ethernet (1x Ethernet for Celeron)  
6. Kensington Security Slot  
7. Power button  
8. 2x Serial (RS232)  
9. USB-C 3.2 Gen 2  
10. 2x USB 3.2 Gen 2  
11. Headphone / microphone combo jack (3.5mm)

![Diagram of the ThinkCentre M90n-1 Nano IoT with numbered ports and connectors]
PERFORMANCE

Processor

Processor Family
Intel® Celeron® or 8th Generation Intel® Core™ i3 / i5 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® 4205U</td>
<td>2</td>
<td>2</td>
<td>1.8GHz</td>
<td>-</td>
<td>2MB</td>
<td>DDR4-2133</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Celeron® 4305UE</td>
<td>2</td>
<td>2</td>
<td>2.0GHz</td>
<td>-</td>
<td>2MB</td>
<td>DDR4-2133</td>
<td>Intel® UHD Graphics 610</td>
</tr>
<tr>
<td>Core i3-8145U</td>
<td>2</td>
<td>4</td>
<td>2.1GHz</td>
<td>3.9GHz[2]</td>
<td>4MB</td>
<td>DDR4-2400</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i3-8145UE</td>
<td>2</td>
<td>4</td>
<td>2.2GHz</td>
<td>3.9GHz[3]</td>
<td>4MB</td>
<td>DDR4-2400</td>
<td>Intel® UHD Graphics 620</td>
</tr>
<tr>
<td>Core i5-8365U</td>
<td>4</td>
<td>8</td>
<td>1.6GHz</td>
<td>4.1GHz[4]</td>
<td>6MB</td>
<td>DDR4-2400</td>
<td>Intel® UHD Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1] Celeron® 4205U, Core i3-8145U and Core i5-8365U have been already end of life and not available any more.
[2], [3], [4] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
- Windows® 10 Pro 64
- Windows® 10 Home 64
- Windows® 10 Home 64 Single Language
- Windows® 10 IoT Enterprise LTSC 2019
- Ubuntu Linux[1]
- FreeDOS
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics**[1]

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics 610</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP); 4096x2304@60Hz(USB-C*)</td>
<td>1x DP, 1 USB-C*</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD Graphics 620</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(USB-C*)</td>
<td>1x HDMI*, 1 USB-C*</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C*)</td>
<td>1x DP, 1x USB-C*</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:
[1] The Intel® UHD Graphics which is integrated in Celeron® 4205U, Core i3-8145U, or Core i5-8365U is not available any more, because those CPUs have been already end of life.

Monitor Support

Monitor Support
Supports up to 2 independent displays via onboard ports (DisplayPort™ and USB-C®, 8145UE models support HDMI® and USB-C®)

Chipset
Chipset
Intel® SoC (System on Chip) platform

Memory
Max Memory[1]
• 4GB soldered memory, not upgradable
• 8GB soldered memory, not upgradable

Memory Slots
Memory soldered to system board, no slots

Memory Type[2]
DDR4-2666

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR4-2666 but runs at DDR4-2133 or DDR4-2400 depending on the memory support capability of processor.

Storage
Storage Support[3]
Up to two drives, 2x M.2 SSD
• M.2 SSD up to 1TB each
• Optional Intel® Optane™ Memory Integrated with SSD, M.2

Storage Type[**]

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Optane™ Memory with Solid State Storage, M.2 2280</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x2</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>Opal</td>
</tr>
</tbody>
</table>

RAID
RAID 0/1 support for M.2 SSDs (RAID preset only available via special bid models)

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage
Optical
None
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC233VB codec

Speakers
Single speaker, 1W x1

Power Supply
Power Supply[**]

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>88%</td>
<td>100-240 VAC, wide temperature</td>
<td>129 x 53 x 30 mm, 1800 mm cable</td>
</tr>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>88%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No power supply</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

DESIGN
**Input Device**

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

**Mechanical**

**Form Factor**
Nano (0.55L)

**Dimensions (WxHxD)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nano only</td>
<td>179 x 88 x 34.5 mm (7.05 x 3.46 x 1.36 inches)</td>
</tr>
<tr>
<td>Nano with IO box</td>
<td>179 x 88 x 61.3 mm (7.05 x 3.46 x 2.41 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxHxD)**
490 x 125 x 255 mm (19.29 x 4.92 x 10.04 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nano only</td>
<td>Around 0.72 kg (1.58 lbs)</td>
</tr>
<tr>
<td>Nano with IO box</td>
<td>Around 1.2 kg (2.65 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
0.83 kg (1.83 lbs)

**Case Color**
Iron grey (top cover), black (mid bezel), black (bottom cover)

**Bays**
No bays

**Expansion Slots**
Three M.2 slots (one for WLAN, two for SSD)

**Stand**
No stand

**IO Box**
- IO box: 2x serial (RS232 / RS422 / RS485, SDK selectable) and 2x Ethernet (RJ-45, Realtek® RTL8153B, gigabit Ethernet) on front, 1x DIO (4DI / 4DO), 1x USB-C® (connect to Nano) and 1x DC-in connector (9V - 36V) on rear
- No IO box

**Mounting**
- VESA mount bracket kit with adapter holder, supports VESA mount 75mm and 100mm
- VESA mount bracket kit, supports VESA mount 75mm and 100mm
- DIN rail mount bracket kit
- None

---

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

---

**CONNECTIVITY**
Network

Onboard Ethernet**

- Gigabit Ethernet, Realtek® RTL8111K, 1x RJ-45, supports Wake-on-LAN
- Two Gigabit Ethernet, Intel® Ethernet Connection I219-LM and Realtek® RTL8111H, 2x RJ-45, supports Wake-on-LAN
- Two Gigabit Ethernet, Realtek® RTL8111K and RTL8111H, 2x RJ-45, supports Wake-on-LAN

Optional Ethernet

No optional Ethernet

WLAN + Bluetooth®

- Wi-Fi® 5, 802.11ac 1x1 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9462, Wi-Fi® 5, 802.11ac Dual Band 1x1 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, Intel® vPro® technology support, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- No WLAN and Bluetooth®

WWAN

- Intel® XMM 7360, 4G CAT9, M.2 Card
- No support

Ports[^1]

Front Ports

- 1x USB-C® 3.2 Gen 2
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 2x serial (RS-232)

Optional Front Ports

- 2x gigabit Ethernet (RJ-45) on SE30 IO box
- 2x serial (RS232 / RS422 / RS485, SDK selectable) on SE30 IO box

Rear Ports

- 1x USB-C® 3.2 Gen 2 (support display function and power-in [20V and >45W])
- 1x USB 2.0 (for Celeron® models)
- 1x USB 3.2 Gen 2 (for i3 / i5 models only)
- 1x HDMI® (for 8145UE models)
- 1x DisplayPort™ (for 4205U / 4305UE / 8145U / 8365U models)
- 1x Ethernet (RJ-45, for Celeron® models)
- 2x Ethernet (RJ-45, for i3 / i5 models)

Optional Rear Ports

- 1x DC-in 3pin Phoenix connector on SE30 IO box
- 1x DIO (4DI / 4DO) on SE30 IO box

Notes:

[^1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

**Chassis Intrusion Switch**
Chassis intrusion switch

**Fingerprint Reader**

- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

**BIOS Security**

- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement

**MANAGEABILITY**

**System Management**

- Intel® vPro®
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

**SERVICE**

**Warranty**

**Base Warranty**

- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:

[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

**ACCESSORIES**

**Bundled Accessories**

- DP to HDMI® dongle
- DP to VGA dongle
- USB-C® to DP dongle
- USB-C® to HDMI® dongle
- USB-C® to VGA dongle
- None

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**

- Operating:
  - From 0°C (32°F) to 50°C (122°F): for the machine types of 11AK, 11AL, 11AM, 11AS, 11J3, 11J4, 11J7, and 11J8
  - From 0°C (32°F) to 35°C (95°F): for the machine types of 11AH and 11AJ
Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Silver Registered
- ErP Lot 3
- REACH
- RoHS compliant
- TCO Certified 8.0
- WEEE

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] Energy Star 8.0 and EPEAT™ are not available for the models with I/O box, No OS, or Free DOS.
[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- (Optional) TÜV Rheinland® Low Noise
- (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test

- MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation)
- None

Notes:
[1] Not for the models with I/O box.

Feature with ** means that only one offering listed under the feature is configured on selected models.

Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Optical drive *
2. Power button
3. Microphone (3.5mm)
4. Card reader *
5. Headphone / microphone combo jack (3.5mm)
6. USB-C 3.2 Gen 1
7. 2x USB 3.2 Gen 1
8. 2x USB 3.2 Gen 2
9. Line-out (3.5mm)
10. Flex IO *
11. HDMI 2.1 TMDS
12. 2x DisplayPort 1.4
13. 4x USB 2.0
14. 2x PS/2 ports (keyboard / mouse) *
15. Ethernet (RJ-45)
16. Optional ports on expansion cards *
17. Power connector

Notes:
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
## PERFORMANCE

### Processor

**Processor Family**

Intel® Pentium® or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td>-</td>
<td>6MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-12300</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz[2]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[3]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400F</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[4]</td>
<td>18MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz[5]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12600</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.8GHz[6]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[7]</td>
<td>25MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700F</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[8]</td>
<td>25MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[9]</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900F</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[10]</td>
<td>30MB</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:

[1], [2], [3], [4], [5], [6], [7], [8], [9], [10] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

### Operating System

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[1]
- No preload operating system

Notes:

[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

### Graphics

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
</table>

---

ThinkCentre M70s Gen 3 - May 30 2024 2 of 9
### Intel® UHD graphics 710
Integrated Shared
4096x2304@60Hz(DP), 4096x2160@60Hz[MDI® / Flex IO(HDMI®) / Flex IO(DP)], 3840x2160@60Hz[Flex IO(USB-C®)], 2048x1536@50Hz[Flex IO(VGA)]
2x DP 1.4 HBR2, 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)
DirectX® 12

### Intel® UHD graphics 730
Integrated Shared
4096x2304@60Hz(DP), 4096x2160@60Hz[MDI® / Flex IO(HDMI®) / Flex IO(DP)], 3840x2160@60Hz[Flex IO(USB-C®)], 2048x1536@50Hz[Flex IO(VGA)]
2x DP 1.4 HBR2, 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)
DirectX® 12

### Intel® UHD graphics 770
Integrated Shared
4096x2304@60Hz(DP), 4096x2160@60Hz[MDI® / Flex IO(HDMI®) / Flex IO(DP)], 3840x2160@60Hz[Flex IO(USB-C®)], 2048x1536@50Hz[Flex IO(VGA)]
2x DP 1.4 HBR2, 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)
DirectX® 12

### Intel® Iris® Xe MAX 100
Discrete 2GB LPDDR4X
3840x2160@60Hz(DP)
2x DP 1.4
DirectX® 12, OpenGL 4.6

---

**Notes:**

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

---

**Monitor Support**

Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI®, and 1x optional Flex IO), more displays support via discrete graphics

---

**Notes:**

[1] Onboard video ports are only available for the models with integrated graphics.

---

**Chipset**

**Chipset**

Intel® Q670 chipset

---

**Memory**

**Max Memory**[1]

Up to 128GB DDR4-3200

**Memory Slots**

Four DDR4 DIMM slots, dual-channel capable

**Memory Type**

DDR4-3200

---

**Notes:**

[1] The max memory is based on the test results with current Lenovo® memory offerings.

---

**Storage**

**Storage Support**[1][2]

Up to three drives, 1x 2.5”/3.5” HDD + 1x 2.5” HDD + 1x M.2 SSD

- 2.5” HDD up to 1TB each
- 3.5” HDD up to 2TB
- 1x M.2 SSD up to 2TB

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gbps</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gbps</td>
<td>7.2K</td>
<td>-</td>
</tr>
</tbody>
</table>

---

ThinkCentre M70s Gen 3 - May 10, 2024 3 of 9
| M.2 2242 SSD | PCIe® NVMe®, PCIe® 3.0 x4 | - | - |
| M.2 2280 SSD | PCIe® NVMe®, PCIe® 3.0 x4 | - | Opal |
| M.2 2280 SSD | PCIe® NVMe®, PCIe® 4.0 x4 Performance | - | Opal 2.0 |
| M.2 2280 SSD | PCIe® NVMe®, PCIe® 4.0 x4 Value | - | Opal 2.0 |

**RAID**

RAID 0/1 support for HDDs (RAID preset only available via special bid models)

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

[2] The max capacity of SSD/HDD is based on the test results with current Lenovo® SSD/HDD offerings.

**Removable Storage**

**Optical**

- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

**Card Reader**

- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

**Multi-Media**

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC897Q-CG codec

**Speakers**

Single speaker, 1W x1

**Power Supply**

**Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>380W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

**DESIGN**

**Input Device**

**Keyboard**

- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**

- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Mouse (PS/2 connector), black (only available via special bid)
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

**Mechanical**

**Form Factor**

SFF (8.2L)

**Dimensions (WxDxH)**
**ThinkCentre M70s Gen 3**

92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

**Weight**
Around 5.3 kg (11.7 lbs)

**Case Color**
Black

**Bays**
- 1x 2.5” disk bay
- 1x 3.5” disk bay
- 1x slim ODD bay

**Expansion Slots**
- One PCIe® 4.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
- Two PCIe® 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
- Two M.2 slots (one for WLAN, one for SSD)

**EOU**
Toolless cover, disk, optical, extension card assembly / removal

**Stand**
- Vertical stand
- No stand

**Others**
- (Optional) Dust filter
- Supports Smart Power On

---

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

[3] 2.5” HDD tray is optional, or comes with 2.5 HDD. 3.5” bay supports 2.5” / 3.5” HDD, 3.5” to 2.5 converter comes with 2nd 2.5” HDD.

---

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet***
- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe® x1
- Gigabit Ethernet, Bitland RTL8168H, 1x RJ-45, PCIe® x1
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
- No optional Ethernet

**WLAN + Bluetooth®**
- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
- No WLAN and Bluetooth®

---

**Notes:**


**Ports**

**Front Ports**
- 1x USB-C® 3.2 Gen 1 (15W charging)
- 2x USB 3.2 Gen 1
ThinkCentre M70s Gen 3

- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

Optional Front Ports
1x card reader

Rear Ports
- 4x USB 2.0
- 1x HDMI® 2.1 TMDS
- 2x DisplayPort™ 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

Optional Rear Ports
- 1x USB-C® 3.2 Gen 1 with DisplayPort™ function and 5V@3A charging (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.2 (Flex IO)
- 1x VGA (Flex IO)
- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
- 1x parallel
- 1x serial
- 1x 2nd serial
- 4x serial (via 4-port serial expansion card, PCIe® x1)
- 2x PS/2

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
- (Optional) E-lock
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Self-healing BIOS (Level 2)
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

**MANAGEABILITY**

**System Management**

- Intel® vPro® Enterprise[1]
- Intel® vPro® Essentials[2]
- Non-vPro®

**Notes:**

[1], [2] Intel® vPro® offers a superset of DASH’s defined capabilities.

**SERVICE**

**Warranty[3]**

- **Base Warranty**
  - 1-year courier or carry-in service
  - 1-year limited onsite service
  - 3-year limited onsite service
  - No base warranty

**Notes:**

[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

**ACCESSORIES**

**Bundled Accessories**

- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® cable (1.5m)
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C®)
- None

**OPERATING REQUIREMENTS**

**Operating Environment**

- **Temperature**
  - Operating: 5°C (41°F) to 35°C (95°F)
  - Storage: -40°C (-40°F) to 60°C (140°F)

- **Relative Humidity**
  - Operating: 20% to 80%
  - Storage: 10% to 90%

- **Altitude**
  - Operating: 0 m (0 ft) to 3048 m (10,000 ft)
  - Storage: 0 m (0 ft) to 12192 m (40,000 ft)

**CERTIFICATIONS**
**Green Certifications**[^1]

**Green Certifications**
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[^2]
- (Optional) EPEAT™ Gold Registered[^3]
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

---

**Notes:**

[^1]: The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

[^2], [^3]: EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

**Other Certifications**

**Other Certifications**
- (Optional) TÜV Rheinland® Low Noise
- (Optional) TÜV Rheinland® Ultra Low Noise

**Mil-Spec Test**

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

---

*Feature with ** means that only one offering listed under the feature is configured on selected models.*

*Feature with *** means that one or more offerings listed under the feature could be configured on selected models.*

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**OVERVIEW**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
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<tr>
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</tr>
<tr>
<td>7.</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
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</tr>
<tr>
<td>9.</td>
<td>Line-out (3.5mm)</td>
</tr>
<tr>
<td>10.</td>
<td>Flex IO *</td>
</tr>
<tr>
<td>11.</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>12.</td>
<td>2x DisplayPort 1.4a</td>
</tr>
<tr>
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<td>4x USB 2.0</td>
</tr>
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<td>15.</td>
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<td>Optional ports on expansion cards *</td>
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<td>Power connector</td>
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Notes:
- Items with * are only available on selected models
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PERFORMANCE

Processor

Processor Family
13th Generation Intel® Core™ i3 / i5 / i7 Processor

Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
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<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
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<td>Core i5-13500</td>
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<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021[1]
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Windows® 10 IoT Enterprise LTSC 2021 is special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI® / Flex IO(HD MI) / Flex IO(DP)), 3840x2160@60Hz(Flex IO(USB-C®)), 2048x1536@50Hz(Flex IO(VGA))</td>
<td>2x DP 1.4a (HBR2, DSC), 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
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<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI®, and 1x optional Flex IO)

Chipset
Chipset
Intel® Q670 chipset

Memory
Max Memory
Up to 128GB DDR4-3200
Memory Slots
Four DDR4 DIMM slots, dual-channel capable
Memory Type
DDR4-3200
Memory Protection
Non-ECC

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage
Storage Support
Up to three drives, 1x 2.5”/3.5” HDD + 1x 2.5” HDD + 1x M.2 SSD
• 2.5” HDD up to 1TB each
• 3.5” HDD up to 2TB
• M.2 SSD up to 2TB

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Value</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
RAID 0/1 support for HDDs (RAID preset only available via special bid models)

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] 2TB SSD is special bid only.

Removable Storage
Optical
• DVD-ROM, SATA connector, slim (9.0mm)
• DVD burner (DVD±RW), SATA connector, slim (9.0mm)
• None

Card Reader
• 3-in-1 card reader (SD, SDHC, SDXC)
• No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC897Q-CG codec

Speakers
Single speaker, 1W x1

Power Supply

<table>
<thead>
<tr>
<th>Power Supply**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Type</td>
</tr>
<tr>
<td>----------------</td>
</tr>
</tbody>
</table>

ThinkCentre M70s Gen 4 - November 28 2023
### Input Device

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

### Mechanical

**Form Factor**
SFF (8.2L)

**Dimensions (WxDxH)**
92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

**Packaging Dimensions (WxDxH)**
195 x 395 x 530 mm (7.68 x 15.55 x 20.87 inches)

**Weight**
Around 5.3 kg (11.7 lbs)

**Packaging Weight**
Around 7.6 kg (16.76 lbs)

**Case Color**
Black

**Bays**
- 1x 2.5" disk bay
- 1x 3.5" disk bay
- 1x slim ODD bay

**Expansion Slots**
- One PCIe® 4.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
- Two PCIe® 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
- Two M.2 slots (one for WLAN, one for SSD)

**EOU**
Toolless cover, disk, optical, extension card assembly / removal

**Stand**
- Vertical stand
- No stand

**Others**
- (Optional) Dust filter
- Supports Smart Power On

**Notes:**
1. The system dimensions may vary depending on configurations.
2. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
2.5" HDD tray is optional, or comes with 2.5 HDD.
3.5" bay supports 2.5" / 3.5" HDD, 3.5" to 2.5 converter comes with 2nd 2.5" HDD.

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
- No optional Ethernet

WLAN + Bluetooth®
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, Intel® vPro® technology support, M.2 Card
- No WLAN and Bluetooth®

Notes:
[1], [2]. [3] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports

Front Ports
- 1x USB-C® 3.2 Gen 1 (15W charging)
- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

Optional Front Ports
- 1x card reader

Rear Ports
- 4x USB 2.0
- 1x HDMI® 2.1 TMDS
- 2x DisplayPort™ 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

Optional Rear Ports
- 1x USB-C® 3.2 Gen 1 with DisplayPort™ function and 5V@3A charging (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.2 (Flex IO)
- 1x VGA (Flex IO)
- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
- 1x parallel
- 1x serial
- 1x 2nd serial
- 4x serial (via 4-port serial expansion card, PCIe® x1)
- 2x PS/2
- None

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
• (Optional) E-lock
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Boot without keyboard and mouse
• Individual USB port disablement
• Self-healing BIOS (Level 2)
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management
• Intel® vPro® Enterprise[1]
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Silver Registered
• (Optional) EPEAT™ Gold Registered
• ErP Lot 3
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2], [3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
• (Optional) TÜV Rheinland® Low Noise
• (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

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<td>6</td>
<td>USB-C (USB 5Gbps), data transfer only</td>
</tr>
<tr>
<td>7</td>
<td>2x USB-A (USB 5Gbps)</td>
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<tr>
<td>8</td>
<td>2x USB-A (USB 5Gbps)</td>
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<td>9</td>
<td>DisplayPort 1.4a</td>
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<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-14400F</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>20MB</td>
<td>-</td>
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<tr>
<td>Core i5-14500</td>
<td>14 (6 P-core + 8 E-core)</td>
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<td>Intel® UHD Graphics 770</td>
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<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
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<td>33MB</td>
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<tr>
<td>Intel® 300</td>
<td>2</td>
<td>4</td>
<td>3.9 GHz</td>
<td>-</td>
<td>6MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 IoT Enterprise LTSC 2024
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- No preload operating system

Graphics

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<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
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<td>DirectX® 12</td>
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<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
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<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI*)</td>
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<td>DirectX® 12</td>
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<tr>
<td>Intel® Arc™ A310</td>
<td>Discrete</td>
<td>4GB</td>
<td>5120x2880@60Hz(DP)</td>
<td>2x DisplayPort™ 1.4a</td>
<td>DirectX® 12,</td>
</tr>
</tbody>
</table>
Notes:
[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support
Monitor Support
Supports up to 2 independent displays via onboard ports (1x DP and 1x HDMI®), more displays support via discrete graphics

Memory
Memory
Max Memory[1]
Up to 64GB DDR5
Memory Slots
Two DDR5 UDIMM slots, dual-channel capable
Memory Type
• DDR5-4800
• DDR5-5200
• DDR5-5600

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage
Storage Support[1]
Up to three drives, 1x 3.5” HDD + 1x 2.5” HDD + 1x M.2 SSD
• 3.5” HDD up to 2TB
• 2.5” HDD bay is only for customer self upgrade
• M.2 SSD up to 2TB each[2]

Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td></td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
No support

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] 2.5” HDD bay is optional part, only for customer self upgrade purpose and the hard drive is sold separately. Two onboard SATA ports support up to two drives of 2.5” HDD, 3.5” HDD and ODD.

Removable Storage
Optical**
• DVD-ROM, SATA connector, slim (9.0mm)
• DVD burner (DVD±RW), SATA connector, slim (9.0mm)
• None

Card Reader
• 3-in-1 card reader (SD, SDHC, SDXC)
• No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC623-CG codec

Speakers
Single speaker, 1W x1

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Input Device

Keyboard**
- EOS Wireless Keyboard, black
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- EOS Wireless Mouse, Black
- No mouse

Mechanical

Form Factor
SFF (8.2L)

Dimensions (WxDxH)[3]
92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

Packaging Dimensions (WxDxH)
195 x 395 x 530 mm (7.68 x 15.55 x 20.87 inches)

Weight[2]
Around 5.3 kg (11.7 lbs)

Packaging Weight
Around 7.6 kg (16.76 lbs)

Case Color
Black

Bays[3]
- 1x 2.5" disk bay (optional)
- 1x 3.5" disk bay
- 1x slim ODD bay

Expansion Slots
- One PCIe® 3.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe® 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
- Two M.2 slots (one for WLAN, one for SSD)

EOU
Toolless cover, memory, disk, optical, extension card assembly / removal

Stand
- Vertical stand
- No stand

Others
• (Optional) Dust filter
• Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2.5” HDD bay is optional part, only for customer self upgrade purpose and the hard drive is sold separately. Two onboard SATA ports support up to two drives of 2.5” HDD, 3.5” HDD and ODD.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN
Optional Ethernet
• 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
• No optional Ethernet
WLAN + Bluetooth®
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
• No WLAN and Bluetooth®

Ports
Front Ports
• 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with 15W charging
• 4x USB-A (USB 5Gbps / USB 3.2 Gen 1)
• 1x headphone / microphone combo jack (3.5mm)
• 1x microphone (3.5mm)
Optional Front Ports
1x card reader
Rear Ports
• 4x USB-A (Hi-Speed USB / USB 2.0)
• 1x HDMI® 2.1 TMDS
• 1x DisplayPort™ 1.4a (HBR2, DSC)
• 1x Ethernet (RJ-45)
Optional Rear Ports
• 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via 2-port USB expansion card, PCIe® x1
• 1x parallel
• 1x serial
• 1x 2nd serial
• 4x serial (via 4-port serial expansion card, PCIe® x1)
• 2x PS/2

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY
Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
• (Optional) E-lock
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Boot without keyboard and mouse
• Certificate based BIOS authentication
• Individual USB port disablement
• Self-healing BIOS
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
• More BIOS security features, please visit BIOS Simulator

MANAGEABILITY

System Management

System Management[1]
• Intel® vPro® Enterprise
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
• DP to DVI dongle
• DP to HDMI® dongle
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- GREENGUARD®
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Other Certifications
- (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
- MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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OVERVIEW

1. Power button
2. Card reader
3. Microphone (3.5mm)
4. Headphone / microphone combo jack (3.5mm)
5. USB-C 3.2 Gen 1
6. 2x USB 3.2 Gen 1
7. 2x USB 3.2 Gen 2
8. Line-out (3.5mm)
9. 2x DisplayPort 1.4
10. HDMI 1.4b
11. Serial
12. Ethernet (RJ-45)
13. 4x USB 2.0 (Note 1)
14. Power connector

Notes:
- 4 rear USB ports are USB 3.2 Gen 1 for selected Brazil models only
- More ports are available through the optional expansion cards (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
AMD Athlon™ or AMD Ryzen™ 3 / 5 / 7 / 9 Processor

Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Athlon™ Gold PRO 3150G[1]</td>
<td>4</td>
<td>4</td>
<td>3.5GHz</td>
<td>3.9GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-2933</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Athlon™ Silver 3050G[2]</td>
<td>2</td>
<td>4</td>
<td>3.4GHz</td>
<td>3.4GHz</td>
<td>1MB L2 / 4MB L3</td>
<td>DDR4-2666</td>
<td>AMD Radeon™ Graphics</td>
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<tr>
<td>AMD Ryzen™ 3 3200G[3]</td>
<td>4</td>
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<td>4.0GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-2933</td>
<td>AMD Radeon™ Vega 8 Graphics</td>
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<tr>
<td>AMD Ryzen™ 3 4300G[4]</td>
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<td>8</td>
<td>3.8GHz</td>
<td>4.0GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
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<tr>
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<td>8</td>
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<td>4.2GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 PRO 4350G[5]</td>
<td>4</td>
<td>8</td>
<td>3.8GHz</td>
<td>4.0GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 PRO 5350G</td>
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<td>8</td>
<td>4.0GHz</td>
<td>4.2GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 4600G[6]</td>
<td>6</td>
<td>12</td>
<td>3.7GHz</td>
<td>4.2GHz</td>
<td>3MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 5600G</td>
<td>6</td>
<td>12</td>
<td>3.9GHz</td>
<td>4.4GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 3350G[7]</td>
<td>4</td>
<td>8</td>
<td>3.6GHz</td>
<td>4.0GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-2933</td>
<td>AMD Radeon™ Vega 11 Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 3400G[8]</td>
<td>4</td>
<td>8</td>
<td>3.7GHz</td>
<td>4.2GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-2933</td>
<td>AMD Radeon™ Vega 11 Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 3600[9]</td>
<td>6</td>
<td>12</td>
<td>3.6GHz</td>
<td>4.2GHz</td>
<td>3MB L2 / 32MB L3</td>
<td>DDR4-3200</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 4650G[10]</td>
<td>6</td>
<td>12</td>
<td>3.7GHz</td>
<td>4.2GHz</td>
<td>3MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 5650G</td>
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<td>12</td>
<td>3.9GHz</td>
<td>4.4GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 5700G</td>
<td>8</td>
<td>16</td>
<td>3.8GHz</td>
<td>4.6GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 3700[12]</td>
<td>8</td>
<td>16</td>
<td>3.6GHz</td>
<td>4.4GHz</td>
<td>4MB L2 / 32MB L3</td>
<td>DDR4-3200</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 4750G[13]</td>
<td>8</td>
<td>16</td>
<td>3.6GHz</td>
<td>4.4GHz</td>
<td>4MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 5750G</td>
<td>8</td>
<td>16</td>
<td>3.8GHz</td>
<td>4.6GHz</td>
<td>4MB L2 / 16MB L3</td>
<td>DDR4 3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 9 PRO 3900[14]</td>
<td>12</td>
<td>24</td>
<td>3.1GHz</td>
<td>4.3GHz</td>
<td>6MB L2 / 64MB L3</td>
<td>DDR4-3200</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
[1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12], [13], [14] End of life and not available any more.

Operating System
**Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 Pro 64
- Windows® 10 Home 64
- Windows® 10 Home 64 Single Language
- Windows® 10 IoT Enterprise
- Ubuntu Linux
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(DP), 4096x2160@24Hz(HDMI®)</td>
<td>2x DisplayPort™ 1.4,</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ Vega 8 Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(DP), 4096x2160@24Hz(HDMI®)</td>
<td>2x DisplayPort™ 1.4,</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ Vega 11 Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(DP), 4096x2160@24Hz(HDMI®)</td>
<td>2x DisplayPort™ 1.4,</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 520</td>
<td>Discrete</td>
<td>2GB GDDR5</td>
<td>4096x2160@60Hz(DP)</td>
<td>2x DP 1.2</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ RX 550X</td>
<td>Discrete</td>
<td>4GB GDDR5</td>
<td>4096x2160@60Hz(HDMI®), 3840x2160@60Hz(DP)</td>
<td>1x HDMI® 2.0, 1x DP 1.4</td>
<td>DirectX® 12, OpenGL 4.5</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6400</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)</td>
<td>1x HDMI® 2.1 FRL, 1x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Notes:
[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).
[2] AMD Radeon™ 520 is not available for MT 11R7 / 11R8 / 11R9 / 11RA.

**Monitor Support**

Monitor Support
Supports up to 3 independent displays via onboard ports (HDMI® and 2x DisplayPort™), more displays support via discrete graphics

**Chipset**

Chipset
AMD PRO 565 chipset

**Memory**

Max Memory
Up to 128GB DDR4-3200

Memory Slots
Four DDR4 DIMM slots, dual-channel capable

Memory Type
- DDR4-1866
- DDR4-2133
- DDR4-2400
- DDR4-2666
• DDR4-3200

Notes:

[1] Recommend to choose the models with more than 4GB for better performance and experience.
[2] The max memory is based on the test results with current Lenovo® memory offerings.
[3] Installed memory is actually DDR4-3200 but may run as DDR4-1866, DDR4-2133, DDR4-2400 or DDR4-2666 depending on the memory support capability of processor.

**Storage**

**Storage Support**

Up to three drives, 1x 2.5”/3.5” HDD + 1x 2.5” HDD + 1x M.2 SSD
• 2.5” HDD up to 1TB each
• 3.5” HDD up to 2TB
• M.2 SSD up to 2TB

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
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<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>Opal</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Value[2]</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD[3]</td>
<td>PCIe® NVMe®, PCIe® x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**RAID**

RAID 0/1 support for HDDs (RAID preset only available via special bid models)

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[3] PCIe® x4 SSD may be PCIe® 3.0 x4 or PCIe® 4.0 x4 as substitution. M.2 PCIe® Gen 4 SSD in the M.2 PCIe® Gen 3 slot is downgraded to PCIe® Gen 3 performance.

**Removable Storage**

**Optical**

• DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
• DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
• None

**Card Reader**

• 3-in-1 card reader (SD, SDHC, SDXC)
• No card reader

**Multi-Media**

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC623-CG codec

**Speakers**

• No speakers
• Single speaker, 1W x 1

**Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
<td>-</td>
</tr>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>
DESIGN

Input Device

Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

Mechanical

Form Factor
SFF (8.2L)

Dimensions (WxDxH)[3]
92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

Weight[2]
Around 5.3 kg (11.7 lbs)

Case Color
Black

Bays
- 1x 2.5" disk bay (bay comes with disk)
- 1x 3.5" disk bay
- 1x slim ODD bay

Expansion Slots
- One PCIe® 3.0 x16, low-profile (length < 155mm, height < 68mm)
- One PCIe® 3.0 x1, low-profile (length < 155mm, height < 68mm)
- Two M.2 slots (one for WLAN, one for SSD)
- Two dummy slots, only brackets for optional port extension

EOU
EOU design for chassis open, M.2 SSD, HDD, ODD, memory, and PCIe® extension card

Stand
- Vertical stand
- No stand

Others
- (Optional) Dust filter
- Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network[3]

Onboard Ethernet**
- Gigabit Ethernet, Realtek® RTL8111EPV, 1x RJ-45, supports Wake-on-LAN
ThinkCentre M75s Gen 2

- Gigabit Ethernet, Realtek® RTL8111HN, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet**[2]
- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe® x1
- Gigabit Ethernet, Bitland RTL8111FP, 1x RJ-45, PCIe® x1
- No optional Ethernet

WLAN + Bluetooth®**
- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9260, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card[3]
- Realtek® Wi-Fi® 6 RTL8852AE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[4]
- Intel® Wi-Fi® 6 AX200, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[5]
- No WLAN and Bluetooth®

Notes:
[1] This system does not support Power Over Ethernet (PoE). If the system is used in a PoE environment, then a Network Isolator is required to prevent possible damage to the system, PoE equipment, or both.

[2] RTL8111FP is not available for AP countries.


[5] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports

Front Ports
- 1x USB-C® 3.2 Gen 1
- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

Optional Front Ports
- 1x card reader
- None

Rear Ports[2]
- 4x USB 2.0
- 1x HDMI® 1.4b
- 2x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)
- 1x serial (9-pin)

Optional Rear Ports***
- 2x USB-C® 3.2 Gen 2 (support data transfer, via 2-port USB-C® expansion card, PCIe® x4)
- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
- 2x USB 2.0 (via 2-port adapter)
- 1x parallel
- 1x serial
- 4x serial (via 4-port serial expansion card, PCIe® x1)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY
Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
• (Optional) E-lock
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch

Fingerprint Reader
• Touch style fingerprint reader on mouse (EOL on Jan, 2023)
• No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Boot without keyboard and mouse
• Individual USB port disablement
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management[1]
• DASH 1.2
• Non-DASH

Notes:
[1] DASH 1.2 is an optional feature for the selected MTs, MT 11W1 / 11W2 / 11W3 / 11W4 do not support DASH.

SERVICE

Warranty[1]

Base Warranty**
• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
• DP to DVI dongle
• DP to Dual DP dongle
• DP to HDMI® dongle
• DP to VGA cable (1.5m)
**OPERATING REQUIREMENTS**

**Operating Environment**

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

**CERTIFICATIONS**

**Green Certifications**[^1]

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[^3]
- (Optional) EPEAT™ Gold Registered[^4]
- ErP Lot 3
- RoHS compliant
- TCO Certified 8.0

**Other Certifications**

- (Optional) TÜV Rheinland® Low Noise
- (Optional) TÜV Rheinland® Ultra Low Noise

**Mil-Spec Test**

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation)

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[^1]: The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

[^2]: ENERGY STAR® 8.0 and EPEAT™ are only available for selected MTs.

[^3],[^4]: EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.
jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore this disclaimer may not apply to you.

- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Power button
2. Optical drive *
3. Card reader *
4. Microphone (3.5mm)
5. Headphone / microphone combo jack (3.5mm)
6. USB-C (USB 5Gbps), with 15W charging
7. 4x USB-A (USB 5Gbps)
8. Line-out (3.5mm)
9. 2x DisplayPort 1.4a (HBR2, DSC)
10. HDMI 2.1 TMDS
11. 4x USB-A (Hi-Speed USB)
12. Ethernet (RJ-45)
13. Optional ports on expansion cards *
14. Power connector

Notes:
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
### PERFORMANCE

**Processor**

**Processor Family**

AMD Ryzen™ 3 / 5 / 7 8000 or Ryzen™ 3 / 5 / 7 PRO 8000 Series Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 8300G</td>
<td>4</td>
<td>8</td>
<td>3.4GHz</td>
<td>4.9GHz</td>
<td>4MB L2 / 8MB L3</td>
<td>AMD Radeon™ 740M</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 PRO 8300G</td>
<td>4</td>
<td>8</td>
<td>3.4GHz</td>
<td>4.9GHz</td>
<td>4MB L2 / 8MB L3</td>
<td>AMD Radeon™ 740M</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 8500G</td>
<td>6</td>
<td>12</td>
<td>3.5GHz</td>
<td>5.0GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 8500G</td>
<td>6</td>
<td>12</td>
<td>3.5GHz</td>
<td>5.0GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
<td>AMD Ryzen™ AI</td>
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<tr>
<td>AMD Ryzen™ 5 8600G</td>
<td>6</td>
<td>12</td>
<td>4.3GHz</td>
<td>5.0GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 760M</td>
<td>AMD Ryzen™ AI</td>
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<tr>
<td>AMD Ryzen™ 5 PRO 8600G</td>
<td>6</td>
<td>12</td>
<td>4.3GHz</td>
<td>5.0GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 760M</td>
<td>AMD Ryzen™ AI</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 8700G</td>
<td>8</td>
<td>16</td>
<td>4.2GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
<td>AMD Ryzen™ AI</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 8700G</td>
<td>8</td>
<td>16</td>
<td>4.2GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
<td>AMD Ryzen™ AI</td>
</tr>
</tbody>
</table>

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 IoT Enterprise LTSC 2024
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- No preload operating system

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 740M</td>
<td>Integrated</td>
<td>Shared</td>
<td>3840x2160@60Hz(HDMI*), 3840x2160@60Hz(DP)</td>
<td>2x DP 1.4a (HBR2, DSC), 1x HDMI* 2.1 TMDS</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 760M</td>
<td>Integrated</td>
<td>Shared</td>
<td>3840x2160@60Hz(HDMI*), 3840x2160@60Hz(DP)</td>
<td>2x DP 1.4a (HBR2, DSC), 1x HDMI* 2.1 TMDS</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>3840x2160@60Hz(HDMI*), 3840x2160@60Hz(DP)</td>
<td>2x DP 1.4a (HBR2, DSC), 1x HDMI* 2.1 TMDS</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

**Monitor Support**

**Monitor Support**

Supports up to 3 independent displays via onboard ports (2x DisplayPort™ and 1x HDMI*), more displays support via discrete graphics

**Chipset**

**Chipset**

AMD PRO665 Chipset
Memory

Max Memory\(^1\)
Up to 64GB DDR5-5200

Memory Slots
Two DDR5 UDIMM slots, dual-channel capable

Memory Type\(^2\)
DDR5-5200

Notes:
[1] The max memory is based on the test results with current Lenovo\textsuperscript{\textregistered} memory offerings.
[2] Installed memory is actually DDR5-5600 but may run as DDR5-5200 due to the memory support capability of processor.

Storage

Storage Support\(^3\)
Up to three drives, 1x 3.5" HDD + 2x M.2 SSD
• 3.5" HDD up to 2TB
• M.2 SSD up to 2TB each

Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe\textsuperscript{\textregistered} NVMe\textsuperscript{\textregistered}, PCIe\textsuperscript{\textregistered} 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID

RAID O/I support for M.2 SSDs (RAID preset only available via special bid models)\(^2\)

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo\textsuperscript{\textregistered} storage offerings.

Removable Storage

Optical
• DVD burner (DVD±RW), SATA connector, slim (9.0mm)
• None

Card Reader
• 3-in-1 card reader (SD, SDHC, SDXC)
• No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek\textsuperscript{\textregistered} ALC623-CG codec

Speakers
• No speakers
• Single speaker, 1W x1

Power Supply

Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN
### Input Device

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- No mouse

### Mechanical

**Form Factor**
SFF (8.2L)

**Dimensions (WxDxH)**
92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

**Packaging Dimensions (WxDxH)**
195 x 395 x 530 mm (7.68 x 15.55 x 20.87 inches)

**Weight**
Around 4.6 kg (10.1 lbs)

**Packaging Weight**
Around 7.5 kg (16.5 lbs)

**Case Color**
Black

**Bays**
- 1x 3.5” disk bay
- 1x slim ODD bay

**Expansion Slots**
- One PCIe® 3.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe® 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
- Three M.2 slots (one for WLAN, two for SSD)

**EOU**
Toolless cover, disk, optical, extension card assembly / removal

**Stand**
- Vertical stand
- No stand

**Others**
- (Optional) Dust filter
- Supports Smart Power On

---

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

### CONNECTIVITY

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Realtek® RTL8111FP, 1x RJ-45, supports DASH and Wake-on-LAN

**Optional Ethernet**
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
- No optional Ethernet

**WLAN + Bluetooth®**
Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
No WLAN and Bluetooth®

Notes:

Ports

Front Ports
- 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with 15W charging
- 4x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x headphone (3.5mm)
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
1x card reader

Rear Ports
- 4x USB-A (Hi-Speed USB / USB 2.0)
- 1x HDMI® 2.1 TMDS
- 2x DisplayPort™ 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

Optional Rear Ports
- 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), support data transfer, via PCIe® x4 card
- 2x USB-C® (USB 10Gbps / USB 3.2 Gen 2), support data transfer, via PCIe® x4 card
- 2x USB-A (Hi-Speed USB USB 2.0), via 2-port adapter
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via 2-port USB expansion card, PCIe® x1
- 1x parallel
- 1x serial

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
- (Optional) E-lock
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

Other Security
Pluton security processor

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

SERVICE

Warranty

ACCESSORIES

Bundled Accessories

OPERATING REQUIREMENTS

Operating Environment
Operating: 0 m (0 ft) to 3048 m (10,000 ft)
Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- GREENGUARD®
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Other Certifications
(Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Optical drive *</td>
</tr>
<tr>
<td>2.</td>
<td>Power button</td>
</tr>
<tr>
<td>3.</td>
<td>Microphone (3.5mm)</td>
</tr>
<tr>
<td>4.</td>
<td>Card reader *</td>
</tr>
<tr>
<td>5.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>6.</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>7.</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>8.</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>9.</td>
<td>Line-out (3.5mm)</td>
</tr>
<tr>
<td>10.</td>
<td>Flex IO *</td>
</tr>
<tr>
<td>11.</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>12.</td>
<td>2x DisplayPort 1.4</td>
</tr>
<tr>
<td>13.</td>
<td>4x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>14.</td>
<td>2x PS/2 ports (keyboard / mouse) *</td>
</tr>
<tr>
<td>15.</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>16.</td>
<td>Optional ports on expansion cards *</td>
</tr>
<tr>
<td>17.</td>
<td>Power connector</td>
</tr>
</tbody>
</table>

### Notes:
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
Intel® Pentium® or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td>-</td>
<td>6MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
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<td>Core i3-12300</td>
<td>4 (4 P-core + 0 E-core)</td>
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<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz[2]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
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<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[3]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 730</td>
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<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz[4]</td>
<td>18MB</td>
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</tr>
<tr>
<td>Core i5-12600</td>
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<td>12</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.8GHz[5]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
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<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[6]</td>
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<td>Core i9-12900</td>
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<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[7]</td>
<td>30MB</td>
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</tr>
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<td>Core i9-12900F</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[8]</td>
<td>30MB</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
[1], [2], [3], [4], [5], [6], [7], [8] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[1]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics***[1]

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI® / Flex IO(HDMI®) / Flex IO(DP)], 3840x2160@60Hz[Flex IO(USB-C®)], 2048x1536@50Hz[Flex IO(VGA)]</td>
<td>2x DP 1.4 HBR2, 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Graphics Type</td>
<td>Type</td>
<td>Memory</td>
<td>Resolution/Compatibility</td>
<td>DirectX 12</td>
<td>OpenGL 4.6</td>
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<tr>
<td>---------------</td>
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<td>--------------------------</td>
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<td></td>
</tr>
<tr>
<td>AMD Radeon™ RX 6400</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)</td>
<td>1x HDMI® 2.1 FRL, 1x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>Intel® Iris® Xe MAX 100</td>
<td>Discrete</td>
<td>2GB LPDDR4X</td>
<td>3840x2160@60Hz(DP)</td>
<td>2x DP 1.4</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

**Notes:**
[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

**Monitor Support**

**Monitor Support**
Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI®, and 1x optional Flex IO), more displays support via discrete graphics

**Notes:**
[1] Onboard video ports are only available for the models with integrated graphics.

**Chipset**

**Chipset**
Intel® Q670 chipset

**Memory**

**Max Memory**
Up to 128GB DDR5

**Memory Slots**
Four DDR5 UDIMM slots, dual-channel capable

**Memory Type**
- DDR5-3600
- DDR5-4000
- DDR5-4400

**Notes:**
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR5-4800 but may run as DDR5-3600, DDR5-4000, or DDR5-4400 depending on the memory support capability of processor.

**Storage**

**Storage Support**
Up to four drives, 1x 2.5”/3.5” HDD + 1x 2.5” HDD + 2x M.2 SSD
- 2.5” HDD up to 1TB
- 3.5” HDD up to 2TB
- M.2 SSD up to 2TB each

**Storage Type**
## Removable Storage

### Optical
- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

### Card Reader
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

### Multi-Media

#### Audio Chip
High Definition (HD) Audio, Realtek® ALC897Q-CG codec

#### Speakers
Single speaker, 1W x1

## Power Supply

### Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>380W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
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</table>

## DESIGN

### Input Device

#### Keyboard
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Keyboard (PS/2 connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

#### Mouse
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Mouse (PS/2 connector), black (only available via special bid)
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

Notes:
1. The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
2. The max capacity of SSD/HDD is based on the test results with current Lenovo® SSD/HDD offerings.
**Mechanical**

*Form Factor*
SFF (8.2L)

**Dimensions (WxDxH)**
92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

**Packaging Dimensions (WxDxH)**
195 x 395 x 530 mm (7.68 x 15.55 x 20.87 inches)

**Weight**
Starting at 3.824 kg (8.43 lbs)

**Packaging Weight**
7.6 kg (16.76 lbs)

**Case Color**
Black

**Bays**
- 1x 2.5” disk bay
- 1x 3.5” disk bay
- 1x slim ODD bay

**Expansion Slots**
- One PCIe® 4.0 x16 (x4 signal), low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe® 4.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe® 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
- Three M.2 slots (one for WLAN, two for SSD)

**EOU**
Toolless cover, disk, optical, extension card assembly / removal

**Stand**
- Vertical stand
- No stand

**Others**
- (Optional) Dust filter
- Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2.5” HDD tray is optional, or comes with 2.5 HDD. 3.5” bay supports 2.5” / 3.5” HDD, 3.5” to 2.5 converter comes with 2nd 2.5” HDD.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**
- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe® x1
- Gigabit Ethernet, Intel® Ethernet Server Adapter I350-T4, 4x RJ-45, PCIe® x4[1]
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
- No optional Ethernet

**WLAN + Bluetooth®**
- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[2]
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
• AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
• No WLAN and Bluetooth®

Notes:
[1] Intel® Ethernet Server Adapter I350-T4 is not available in EMEA.
[4] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports
Front Ports
• 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
• 2x USB 3.2 Gen 1
• 2x USB 3.2 Gen 2
• 1x headphone / microphone combo jack (3.5mm)
• 1x microphone (3.5mm)

Optional Front Ports
1x card reader

Rear Ports
• 4x USB 3.2 Gen 1
• 1x HDMI® 2.1 TMDS
• 2x DisplayPort™ 1.4
• 1x Ethernet (RJ-45)
• 1x line-out (3.5mm)

Optional Rear Ports
• 1x USB-C® 3.2 Gen 1 with DisplayPort™ function and 5V@3A charging (Flex IO)
• 1x HDMI® 2.1 TMDS (Flex IO)
• 1x DP 1.2 (Flex IO)
• 1x VGA (Flex IO)
• 1x USB-C® 3.2 Gen 2x2 (support data transfer, via USB-C® expansion card, PCIe® x4)
• 2x USB-C® 3.2 Gen 2 (support data transfer, via 2-port USB-C® expansion card, PCIe® x4)
• 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
• 2x USB 2.0 (via 2-port adapter)
• 1x parallel
• 1x serial
• 1x 2nd serial
• 4x serial (via 4-port serial expansion card, PCIe® x1)
• 2x PS/2

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3 / 4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
• (Optional) E-lock
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch

Fingerprint Reader
• Touch style fingerprint reader on mouse (EOL on Jan, 2023)
• No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Boot without keyboard and mouse
• Individual USB port disablement
• Self-healing BIOS (Level 2)
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management**
• Intel® vPro® Enterprise[1]
• Intel® vPro® Essentials[2]
• Non-vPro®

Notes:
[1], [2] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty[1]

Base Warranty
• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
• DP to DVI dongle
• DP to Dual DP dongle
• DP to HDMI® dongle
• DP to VGA dongle
• HDMI® to HDMI® cable (1.5m)
• HDMI® to VGA dongle
• Smart Cable (USB-A to USB-C®)
• None
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[1]

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[2]
- (Optional) EPEAT™ Gold Registered[3]
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2], [3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- (Optional) TÜV Rheinland® Low Noise
- (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th>1. Optical drive *</th>
<th>10. Flex IO *</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Power button</td>
<td>11. HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>3. Microphone (3.5mm)</td>
<td>12. 2x DisplayPort 1.4</td>
</tr>
<tr>
<td>4. Card reader *</td>
<td>13. 4x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>5. Headphone / microphone combo jack (3.5mm)</td>
<td>14. 2x PS/2 ports (keyboard / mouse) *</td>
</tr>
<tr>
<td>6. USB-C 3.2 Gen 2</td>
<td>15. Ethernet (RJ-45)</td>
</tr>
<tr>
<td>7. 2x USB 3.2 Gen 1</td>
<td>16. Optional ports on expansion cards *</td>
</tr>
<tr>
<td>8. 2x USB 3.2 Gen 2</td>
<td>17. Power connector</td>
</tr>
<tr>
<td>9. Line-out (3.5mm)</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
**PERFORMANCE**

**Processor**

**Processor Family**

Intel® Pentium® or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td>-</td>
<td>6MB</td>
<td>Intel® UHD Graphics 710</td>
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<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
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<td>P-core 3.5GHz</td>
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[1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12], [13] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[1]
- No preload operating system

Notes:

[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID,
Human Presence Detection, etc.

Graphics

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<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI* / Flex IO(HDMI*) / Flex IO(DP)), 3840x2160@60Hz(Flex IO(USB-C*)), 2048x1536@50Hz(Flex IO(VGA))</td>
<td>2x DP 1.4 HBR2, 1x HDMI* 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI* 2.1 TMDS / USB-C*)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI* / Flex IO(HDMI) / Flex IO(DP)), 3840x2160@60Hz(Flex IO(USB-C*)), 2048x1536@50Hz(Flex IO(VGA))</td>
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<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
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<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI* / Flex IO(HDMI) / Flex IO(DP)), 3840x2160@60Hz(Flex IO(USB-C*)), 2048x1536@50Hz(Flex IO(VGA))</td>
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<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6400</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI*), 7680x4320@60Hz(DP)</td>
<td>1x HDMI* 2.1 FRL, 1x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>Intel® Iris® Xe MAX 100</td>
<td>Discrete</td>
<td>2GB LPDDR4X</td>
<td>3840x2160@60Hz(DP)</td>
<td>2x DP 1.4</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support

Monitor Support

Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI*, and 1x optional Flex IO), more displays support via discrete graphics

Notes:

[1] Onboard video ports are only available for the models with integrated graphics.

Chipset

Chipset

Intel® Q670 chipset

Memory

Max Memory

Up to 128GB DDR5

Memory Slots

Four DDR5 UDIMM slots, dual-channel capable

Memory Type

- DDR5-3600
- DDR5-4000
- DDR5-4400

Notes:
The max memory is based on the test results with current Lenovo® memory offerings.

Installed memory is actually DDR5-4800 but may run as DDR5-3600, DDR5-4000, or DDR5-4400 depending on the memory support capability of processor.

Storage

Storage Support

Up to four drives, 1x 2.5”/3.5” HDD + 1x 2.5” HDD + 2x M.2 SSD
- 2.5” HDD up to 1TB
- 3.5” HDD up to 2TB
- M.2 SSD up to 2TB each

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Value</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID

RAID 0/1 support (RAID preset only available via special bid models)

Notes:

1. The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
2. The max capacity of SSD/HDD is based on the test results with current Lenovo® SSD/HDD offerings.

Removable Storage

Optical
- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

Card Reader
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC897Q-CG codec

Speakers
Single speaker, 1W x1

Power Supply

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>380W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Input Device

Keyboard
- Lenovo® Calliope Keyboard (USB connector), black
Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Keyboard (PS/2 connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Mouse (PS/2 connector), black (only available via special bid)
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

**Mechanical**

**Form Factor**
SFF (8.2L)

**Dimensions (WxDxH)**
92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

**Packaging Dimensions (WxDxH)**
195 x 395 x 530 mm (7.68 x 15.55 x 20.87 inches)

**Weight**
Around 5.3 kg (11.7 lbs)

**Packaging Weight**
7.6 kg (16.76 lbs)

**Case Color**
Black

**Bays**
- 1x 2.5” disk bay
- 1x 3.5” disk bay
- 1x slim ODD bay

**Expansion Slots**
- One PCIe® 4.0 x16 (x4 signal), low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe® 4.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
- Two PCIe® 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
- Three M.2 slots (one for WLAN, two for SSD)

**EOU**
Toolless cover, disk, optical, extension card assembly / removal

**Stand**
- Vertical stand
- No stand

**Others**
- (Optional) Dust filter
- Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2.5” HDD tray is optional, or comes with 2.5 HDD. 3.5” bay supports 2.5” / 3.5” HDD, 3.5” to 2.5 converter comes with 2nd 2.5” HDD.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN
Optional Ethernet***
- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe® x1
- Gigabit Ethernet, Bitland RTL8168H, 1x RJ-45, PCIe® x1
- Gigabit Ethernet, Intel® Ethernet Server Adapter I350-T4, 4x RJ-45, PCIe® x4[1]
- No optional Ethernet

WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card[2]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[3]
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[4]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card[5]
- No WLAN and Bluetooth®

Notes:
[1] Intel® Ethernet Server Adapter I350-T4 is not available in EMEA.
[4] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports

Front Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

Optional Front Ports
1x card reader

Rear Ports
- 4x USB 3.2 Gen 1
- 1x HDMI® 2.1 TMDS
- 2x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

Optional Rear Ports***
- 1x USB-C® 3.2 Gen 1 with DisplayPort™ function and 5V@3A charging (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.2 (Flex IO)
- 1x VGA (Flex IO)
- 1x USB-C® 3.2 Gen 2x2 (support data transfer, via USB-C® expansion card, PCIe® x4)
- 2x USB-C® 3.2 Gen 2 (support data transfer, via 2-port USB-C® expansion card, PCIe® x4)
- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
- 2x USB 2.0 (via 2-port adapter)
- 1x parallel
- 1x serial
- 1x 2nd serial
- 4x serial (via 4-port serial expansion card, PCIe® x1)
- 2x PS/2

None

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.
SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
• (Optional) E-lock
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch

Fingerprint Reader
• Touch style fingerprint reader on mouse (EOL on Jan, 2023)
• No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Boot without keyboard and mouse
• Individual USB port disablement
• Self-healing BIOS (Level 2)
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management
• Intel® vPro® Enterprise
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty
• 1-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories
• DP to DVI dongle
• DP to Dual DP dongle
OPERATING REQUIREMENTS

Operating Environment
Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)
Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%
Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2], [3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
- MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
**OVERVIEW**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Optical drive *</td>
</tr>
<tr>
<td>2</td>
<td>Power button</td>
</tr>
<tr>
<td>3</td>
<td>Microphone (3.5mm)</td>
</tr>
<tr>
<td>4</td>
<td>Card reader *</td>
</tr>
<tr>
<td>5</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>6</td>
<td>USB-C 3.2 Gen 2</td>
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<tr>
<td>7</td>
<td>2x USB 3.2 Gen 1</td>
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<tr>
<td>8</td>
<td>Line-out (3.5mm)</td>
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<tr>
<td>9</td>
<td>2x USB 3.2 Gen 2</td>
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<tr>
<td>10</td>
<td>Flex IO *</td>
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<tr>
<td>11</td>
<td>HDMI 2.1 TMDS</td>
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<tr>
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<td>2x DisplayPort 1.4a</td>
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<td>13</td>
<td>4x USB 3.2 Gen 1</td>
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<tr>
<td>14</td>
<td>2x PS/2 ports (keyboard / mouse) *</td>
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<tr>
<td>15</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>16</td>
<td>Optional ports on expansion cards *</td>
</tr>
<tr>
<td>17</td>
<td>Power connector</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
**PERFORMANCE**

**Processor**

**Processor Family**

13th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400F</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
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<tr>
<td>Core i5-13600</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.7GHz / E-core 2.0GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700F</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>-</td>
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<tr>
<td>Core i9-13900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz</td>
<td>36MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-13900F</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz</td>
<td>36MB</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see [http://www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[1]
- No preload operating system

Notes:

[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
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<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
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<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI® / Flex IO(HD MI) / Flex IO(DP)), 3840x2160@60Hz(Flex IO(USB-C®)), 2048x1536@50Hz(Flex IO(VGA))]</td>
<td>2x DP 1.4a (HBR2, DSC), 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>
Intel® UHD graphics 770

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Display Resolutions</th>
<th>DirectX Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated</td>
<td>4096x2304@60Hz (DP), 4096x2160@60Hz (HDMI®, Flex IO(DP))</td>
<td>12</td>
</tr>
<tr>
<td>Shared</td>
<td>3840x2160@60Hz (Flex IO(USB-C®)), 2048x1536@50Hz (Flex IO(VGA))</td>
<td></td>
</tr>
<tr>
<td>AMD Radeon™ RX 6400</td>
<td>7680x4320@60Hz (HDMI®), 7680x4320@60Hz (DP)</td>
<td>12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Notes:
[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support

Monitor Support

Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI®, and 1x optional Flex IO), more displays support via discrete graphics

Notes:
[1] Onboard video ports are only available for the models with integrated graphics.

Chipset

Chipset

Intel® Q670 chipset

Memory

Max Memory

Up to 128GB DDR5

Memory Slots

Four DDR5 UDIMM slots, dual-channel capable

Memory Type

- DDR5-3600
- DDR5-4000
- DDR5-4400

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR5-5600 but may run as DDR5-3600, DDR5-4000, or DDR5-4400 depending on the memory support capability of processor.

Storage

Storage Support

Up to four drives, 1x 2.5"/3.5" HDD + 1x 2.5" HDD + 2x M.2 SSD
- 2.5" HDD up to 1TB
- 3.5" HDD up to 2TB
- M.2 SSD up to 2TB each

Storage Type

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<td>2.5&quot; SATA HDD</td>
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<td>7.2K</td>
<td></td>
</tr>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
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<td>M.2 2280 SSD</td>
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<td>Opal 2.0</td>
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</tbody>
</table>

RAID

RAID 0/1 support (RAID preset only available via special bid models)
Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Optical**
- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

**Card Reader**
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC897Q-CG codec

**Speakers**
Single speaker, 1W x1

**Power Supply**

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>260W Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>380W Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

**DESIGN**

**Input Device**

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

**Mechanical**

**Form Factor**
SFF (8.2L)

**Dimensions (WxHxD)**
92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

**Packaging Dimensions (WxHxD)**
195 x 395 x 530 mm (7.68 x 15.55 x 20.87 inches)

**Weight**
Around 5.3 kg (11.7 lbs)

**Packaging Weight**
7.6 kg (16.76 lbs)

**Case Color**
Black

**Bays**
- 1x 2.5" disk bay
• 1x 3.5” disk bay
• 1x slim ODD bay

Expansion Slots
• One PCIe® 4.0 x16 (x4 signal), low-profile, length ≤ 155mm, height ≤ 70mm
• One PCIe® 4.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
• One PCIe® 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
• Three M.2 slots (one for WLAN, two for SSD)

EOU
Toolless cover, disk, optical, extension card assembly / removal

Stand
• Vertical stand
• No stand

Others
• (Optional) Dust filter
• Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2.5” HDD tray is optional, or comes with 2.5 HDD. 3.5” bay supports 2.5” / 3.5” HDD, 3.5” to 2.5 converter comes with 2nd 2.5” HDD.

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
• 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
• No optional Ethernet

WLAN + Bluetooth®**
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[1]
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[2]
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, Intel® vPro® technology support, M.2 Card[3]
• No WLAN and Bluetooth®

Notes:
[1], [2], [3] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports[1]

Front Ports
• 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
• 2x USB 3.2 Gen 1
• 2x USB 3.2 Gen 2
• 1x headphone / microphone combo jack (3.5mm)
• 1x microphone (3.5mm)

Optional Front Ports
1x card reader

Rear Ports[2]
• 4x USB 3.2 Gen 1
• 1x HDMI® 2.1 TMDS
• 2x DisplayPort™ 1.4a (HBR2, DSC)
• 1x Ethernet (RJ-45)
• 1x line-out (3.5mm)
Optional Rear Ports

- 1x USB-C® 3.2 Gen 1 with DisplayPort™ function and 5V@3A charging (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.2 (Flex IO)
- 1x VGA (Flex IO)
- 1x USB-C® 3.2 Gen 1x2 (support data transfer, via USB-C® expansion card, PCIe® x4)
- 2x USB-C® 3.2 Gen 2 (support data transfer, via 2-port USB-C® expansion card, PCIe® x4)
- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
- 2x USB 2.0 (via 2-port adapter)
- 1x parallel
- 1x serial
- 1x 2nd serial

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks

- (Optional) E-lock
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch

- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader

No fingerprint reader

BIOS Security

- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Self-healing BIOS (Level 2)
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management

- Intel® vPro® Enterprise
- Non-vPro®

Notes:
Intel® vPro® offers a superset of DASH's defined capabilities.

**SERVICE**

**Warranty**[1]

**Base Warranty**

- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:

[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to [https://smartfind.lenovo.com/](https://smartfind.lenovo.com/). To learn more details of warranty policy, please access [https://pcsupport.lenovo.com/warranty](https://pcsupport.lenovo.com/warranty).

**ACCESSORIES**

**Bundled Accessories**

**Bundled Accessories**

- DP to DVI dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C®)
- None

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

**Relative Humidity**

- Operating: 20% to 80%
- Storage: 10% to 90%

**Altitude**

- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

**CERTIFICATIONS**

**Green Certifications**[1]

**Green Certifications**

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[2]
- (Optional) EPEAT™ Gold Registered[3]
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

[2], [3] EPEAT™ is registered where applicable, please visit [epeat.net](https://www.epeat.net) for registration status by country.
Other Certifications
(Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
**OVERVIEW**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Optical drive *</td>
</tr>
<tr>
<td>2.</td>
<td>Power button</td>
</tr>
<tr>
<td>3.</td>
<td>Microphone (3.5mm)</td>
</tr>
<tr>
<td>4.</td>
<td>Card reader *</td>
</tr>
<tr>
<td>5.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>6.</td>
<td>USB-C (USB 10Gbps), data transfer only</td>
</tr>
<tr>
<td>7.</td>
<td>2x USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>8.</td>
<td>Line-out (3.5mm)</td>
</tr>
<tr>
<td>9.</td>
<td>Line-out (3.5mm)</td>
</tr>
<tr>
<td>10.</td>
<td>Flex IO *</td>
</tr>
<tr>
<td>11.</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>12.</td>
<td>2x DisplayPort 1.4a</td>
</tr>
<tr>
<td>13.</td>
<td>4x USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>14.</td>
<td>2x PS/2 ports (keyboard / mouse) *</td>
</tr>
<tr>
<td>15.</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>16.</td>
<td>Optional ports on expansion cards *</td>
</tr>
<tr>
<td>17.</td>
<td>Power connector</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
13th Generation Intel® Core™ i5 / i7 or 14th Generation Intel® Core™ i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-14400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-14500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-14600</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.7GHz / E-core 2.0GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-14900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.8GHz / P-core 5.4GHz / E-core 4.3GHz</td>
<td>36MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 IoT Enterprise LTSC 2024
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- No preload operating system

Graphics

Graphics***[1]

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI® / Flex IO(HD MI) / Flex IO(DP)), 3840x2160@60Hz(Flex IO(USB-C®)), 2048x1536@50Hz(Flex IO(VGA))]</td>
<td>2x DP 1.4a (HBR2, DSC), 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI® / Flex IO(HD MI) / Flex IO(DP)), 3840x2160@60Hz(Flex IO(USB-C®)), 2048x1536@50Hz(Flex IO(VGA))]</td>
<td>2x DP 1.4a (HBR2, DSC), 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® Arc™ A310 LP Graphics</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>5120x2880@60Hz(DP)</td>
<td>2x DisplayPort™ 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support
Monitor Support
Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI®, and 1x optional Flex IO), more displays support via discrete graphics

Chipset
Chipset
Intel® Q670 chipset

Memory
Max Memory[1]
Up to 128GB DDR5
Memory Slots
Four DDR5 UDIMM slots, dual-channel capable
Memory Type*[2]
• DDR5-3600
• DDR5-4000
• DDR5-4400

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR5-5600 but runs at DDR5-3600, DDR5-4000, DDR5-4400 due to the memory support capability of processor.

Storage
Storage Support[3]
Up to four drives, 1x 3.5” HDD + 1x 2.5” HDD + 2x M.2 SSD
• 3.5” HDD up to 2TB
• 2.5” HDD bay is only for customer self upgrade
• M.2 SSD up to 2TB each[2]
Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
RAID 0/1 support (RAID preset only available via special bid models)

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] 2.5” HDD bay is optional part, only for customer self upgrade purpose and the hard drive is sold separately.

Removable Storage
Optical**
• DVD-ROM, SATA connector, slim (9.0mm)
• DVD burner (DVD±RW), SATA connector, slim (9.0mm)
• None

Card Reader
• 3-in-1 card reader (SD, SDHC, SDXC)
• No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC897Q-CG codec
Speakers
Single speaker, 1W x1
### Power Supply

<table>
<thead>
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<tr>
<td>310W Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

### DESIGN

#### Input Device

**Keyboard**
- EOS Wireless Keyboard, black
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- EOS Wireless Mouse, Black
- No mouse

### Mechanical

**Form Factor**
SFF (8.2L)

**Dimensions (WxDxH)**
92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

**Packaging Dimensions (WxDxH)**
195 x 395 x 530 mm (7.7 x 15.6 x 20.9 inches)

**Weight**
Around 5.3 kg (11.7 lbs)

**Packaging Weight**
7.6 kg (16.76 lbs)

**Case Color**
Black

**Bays**
- 1x 2.5" disk bay (optional)
- 1x 3.5" disk bay
- 1x slim ODD bay

**Expansion Slots**
- One PCIe® 4.0 x16 (x4 signal), low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe® 4.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe® 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
- Three M.2 slots (one for WLAN, two for SSD)

**EOU**
Toolless cover, memory, disk, optical, extension card assembly / removal

**Stand**
- Vertical stand
- No stand

**Others**
- (Optional) Dust filter
- Supports Smart Power On

---

**Notes:**
[1] The system dimensions may vary depending on configurations.
The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

2.5" HDD bay is optional part

**CONNECTIVITY**

**Network**

Onboard Ethernet

Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet

- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
- No optional Ethernet

WLAN + Bluetooth®**

- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- Intel® Wi-Fi® 6E AX311, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
- No WLAN and Bluetooth®

**Ports**

*Front Ports*

- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with 15W charging
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

*Optional Front Ports*

1x card reader

*Rear Ports*

- 4x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x HDMI® 2.1 TMDS
- 2x DisplayPort™ 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

*Optional Rear Ports***

- 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with DisplayPort™ function and 5V@3A charging (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.2 (Flex IO)
- 1x VGA (Flex IO)
- 2x USB-A (Hi-Speed USB / USB 2.0), via 2-port adapter
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via 2-port USB expansion card, PCIe® x1
- 1x parallel
- 1x serial
- 1x 2nd serial

**Notes:**

1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
   - USB 2.0: 480 Mbit/s;
   - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
   - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
   - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
   - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
   - Thunderbolt™ 3/4: 40 Gbit/s.

2. For video ports on discrete graphics, please see graphics section.

**SECURITY & PRIVACY**
Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
- (Optional) E-lock
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Certificate based BIOS authentication
- Individual USB port disablement
- Self-healing BIOS (Level 2)
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- More BIOS security features, please visit BIOS Simulator

MANAGEABILITY

System Management

System Management[1]
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
- DP to DVI dongle
- DP to HDMI® dongle
- HDMI® to VGA dongle
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- GREENGUARD®
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
(Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
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## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power button</td>
</tr>
<tr>
<td>2</td>
<td>Card reader *</td>
</tr>
<tr>
<td>3</td>
<td>Microphone (3.5mm)</td>
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<tr>
<td>4</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
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<td>USB-C 3.2 Gen 1 (support data transfer and 5V@3A charging)</td>
</tr>
<tr>
<td>6</td>
<td>2x USB 3.2 Gen 1</td>
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<td>7</td>
<td>Optical drive *</td>
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<td>8</td>
<td>Line-out (3.5mm)</td>
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<td>9</td>
<td>HDMI</td>
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<td>10</td>
<td>DisplayPort 1.4</td>
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<td>11</td>
<td>Serial *</td>
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<tr>
<td>12</td>
<td>VGA</td>
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<td>Ethernet (RJ-45)</td>
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<td>Optional ports on expansion cards *</td>
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<td>19</td>
<td>Power connector</td>
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**Notes:**

- Items with * are only available on selected models
- Onboard video ports are only available for the models with integrated graphics
PERFORMANCE

Processor

Processor Family
Intel® Celeron®, Intel® Pentium®, or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

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<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
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Notes:
[1], [2], [3], [4], [5], [6], [7], [8], [9], [10] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux[1]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics***[1]
### Intel® UHD graphics 710
- Integrated Graphics
- Shared Graphics
- 3840×2160@60Hz (HDMI®), 1920x1200@60Hz (VGA), 4096x2304@60Hz (DP)
- 1x HDMI® 2.1 TMDS, 1x VGA, 1x DP 1.4 HBR2
- DirectX® 12

### Intel® UHD graphics 730
- Integrated Graphics
- Shared Graphics
- 3840×2160@60Hz (HDMI®), 1920x1200@60Hz (VGA), 4096x2304@60Hz (DP)
- 1x HDMI® 2.1 TMDS, 1x VGA, 1x DP 1.4 HBR2
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- Integrated Graphics
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- 3840×2160@60Hz (HDMI®), 1920x1200@60Hz (VGA), 4096x2304@60Hz (DP)
- 1x HDMI® 2.1 TMDS, 1x VGA, 1x DP 1.4 HBR2
- DirectX® 12

### Intel® Iris® Xe MAX 100 Graphics
- Discrete Graphics
- 2GB LPDDR4X
- 3840x2160@30Hz (HDMI®), 1920x1080@60Hz (VGA)
- 1x VGA, 1x HDMI® 1.4
- DirectX® 12, OpenGL 4.6

### Notes:
1. The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).
2. Onboard video ports are only available for the models with integrated graphics.

### Monitor Support

**Monitor Support**
Supports up to 3 independent displays via (HDMI®, DP and VGA), more displays support via discrete graphics

### Chipset

**Chipset**
Intel® B660 chipset

### Memory

**Max Memory**
Up to 64GB DDR4-3200

**Memory Slots**
Two DDR4 UDIMM slots, dual-channel capable

**Memory Type**
DDR4-3200

### Notes:
1. The max memory is based on the test results with current Lenovo® memory offerings.

### Storage

**Storage Support**
Up to two drives, 1x 2.5”/3.5” HDD + 1x M.2 SSD
- 2.5” HDD up to 1TB
- 3.5” HDD up to 2TB
- M.2 SSD up to 1TB

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
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</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**RAID**
No support

### Notes:
The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Optical**
- DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

**Card Reader**
- 7-in-1 card reader (SD, SDHC, SDXC, MMC, MS, MS-Pro, XD)
- No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC623-CG codec

**Speakers**
- No speakers
- Single speaker, 1W x1

**Power Supply**

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W Fixed</td>
<td>85%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>260W Fixed</td>
<td>90%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

**DESIGN**

**Input Device**

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

**Mechanical**

**Form Factor**
SFF (7.4L)

**Dimensions (WxDxH)**
100 x 308 x 274.8 mm (3.9 x 12.1 x 10.8 inches)

**Packaging Dimensions (WxDxH)**
195 x 390 x 500 mm (7.67 x 15.35 x 19.69 inches)

**Weight**
Around 4.5 kg (9.9 lbs)

**Packaging Weight**
Around 6.35 kg (14 lbs)

**Case Color**
Raven black

**Bays**
- 1x 2.5”/3.5” disk bay
- 1x slim ODD bay
**Expansion Slots**

- One PCIe® 4.0 x16, low-profile (length < 167.65mm, height < 68.90mm)
- One PCIe® 3.0 x1, low-profile (length < 167.65mm, height < 68.90mm)
- Two M.2 slots (one for WLAN, one for SSD)

**EOU**
No support

**Stand**
- Vertical stand
- No stand

---

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

---

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Realtek® RTL8111HN, 1x RJ-45, supports Wake-on-LAN

**WLAN + Bluetooth®**

- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, Intel® vPro® technology support, M.2 card
- Realtek® Wi-Fi® 6 RTL8852AE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- No WLAN and Bluetooth®

Notes:

[1], [2] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

**Ports**

**Front Ports**

- 1x USB-C® 3.2 Gen 1 (support data transfer and 5V@3A charging)
- 2x USB 3.2 Gen 1
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

**Optional Front Ports**

1x card reader

**Rear Ports**

- 2x USB 2.0
- 2x USB 3.2 Gen 1 (one supports Smart Power On)
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x VGA
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

**Optional Rear Ports**

- 2x USB 2.0 (via 2-port adapter)
- 1x parallel
- 1x serial
- 1x 2nd serial
- None

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the...
host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.
[3] Onboard video ports are only available for the models with integrated graphics.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
• Supervisor password
• Power-on password
• Hard disk password
• Cover presence switch
• Intel® BIOS guard
• Secure Wipe
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management
Non-vPro®

SERVICE

Warranty[1]

Base Warranty**
• 1-year courier or carry-in service
• 1-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories
Bundled Accessories

- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® dongle
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C®)
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
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Other Certifications

- (Optional) TÜV Rheinland® Low Noise
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3. Microphone (3.5mm)
4. Headphone / microphone combo jack (3.5mm)
5. USB-C 3.2 Gen 1 (data transfer, 15W charging)
6. 2x USB 3.2 Gen 1
7. Optical drive *
8. Audio line-out (3.5mm)
9. HDMI 2.1 TMDS
10. DP 1.4
11. Serial *
12. VGA
13. 2x USB 2.0
14. 1x USB 3.2 Gen 1
15. 1x USB 3.2 Gen 1 (smart power on)
16. Kensington Security Slot
17. Ethernet (RJ-45)
18. Smart cable clip slots *
19. Serial *
20. Optional ports *

Notes:
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PERFORMANCE

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</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz[11]</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:
[1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 OGG Windows® 10 Pro 64
- Ubuntu Linux[12]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics
## Monitor Support

**Monitor Support**

Supports up to 3 independent displays via (HDMI®, DP and VGA)

## Chipset

**Chipset**

Intel® B660 chipset

## Memory

**Max Memory**

Up to 64GB DDR4-3200

**Memory Slots**

Two DDR4 UDIMM slots, dual-channel capable

**Memory Type**

DDR4-3200

### Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

## Storage

**Storage Support**

Up to two drives, 1x 3.5" HDD + 1x M.2 SSD

- 3.5" HDD up to 2TB
- M.2 SSD up to 1TB

### Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

### Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

## Removable Storage

**Optical**

- DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
Card Reader
- 7-in-1 card reader (SD, SDHC, SDXC, MMC, MS, MS-Pro, XD)
- No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC623-CG codec

Speakers
- No speakers
- Single speaker, 1W x1

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>90%</td>
<td>Autosensing, 80 PLUS Gold qualified</td>
</tr>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

DESIGN

Input Device
Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse
- Lenovo® Calliope Mouse (USB connector), black
- No mouse

Mechanical
Form Factor
SFF (7.4L)

Dimensions (WxDxH)
100 x 308 x 274.8 mm (3.9 x 12.1 x 10.8 inches)

Packaging Dimensions (WxDxH)
195 x 390 x 500 mm (7.7 x 15.4 x 19.7 inches)

Weight
Around 4.5 kg (9.9 lbs)

Packaging Weight
Around 6.35 kg (14 lbs)

Case Color
Raven black

Bays
- 1x 2.5”/3.5” disk bay
- 1x slim ODD bay

Expansion Slots
- One PCIe® 4.0 x16, low-profile (length < 167.65mm, height < 68.90mm)
- One PCIe® 3.0 x1, low-profile (length < 167.65mm, height < 68.90mm)
- Two M.2 slots (one for WLAN, one for SSD)

Stand
- Vertical stand
- No stand

Others
(Optional) Smart Cable (USB-A to USB-C®)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111HN, 1x RJ-45, supports Wake-on-LAN
WLAN + Bluetooth®
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready), M.2 Card[1]
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), M.2 Card[2]
• No WLAN and Bluetooth®

Notes:
[1] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.
[2] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.

Ports
Front Ports
1x USB-C® 3.2 Gen 1 (support data transfer and 5V@3A charging)
2x USB 3.2 Gen 1
1x headphone / microphone combo jack (3.5mm)
1x microphone (3.5mm)
Optional Front Ports
1x card reader
Rear Ports
2x USB 2.0
2x USB 3.2 Gen 1 (one supports Smart Power On)
1x HDMI® 2.1 TMDS
1x DisplayPort™ 1.4
1x VGA
1x Ethernet (RJ-45)
1x line-out (3.5mm)
Optional Rear Ports
2x USB 2.0
1x parallel
1x serial
1x 2nd serial
None

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY
Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
- Supervisor password
- Power-on password
- Hard disk password
- Cover presence switch
- Individual USB port disablement
- Intel® BIOS guard
- Secure Wipe
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management
Non-vPro®

SERVICE

Warranty[^1]
Base Warranty**
- 1-year courier or carry-in service
- 1-year limited onsite service
- No base warranty

Notes:
[^1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories
Bundled Accessories
- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® dongle
- HDMI® to VGA dongle
- None

OPERATING REQUIREMENTS
Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[^1]

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[^2]
- (Optional) EPEAT™ Gold Registered[^3]
- ErP Lot 3
- RoHS compliant
- TCO Certified

Notes:
[^1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
[^2],[^3] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

Other Certifications

Other Certifications
- (Optional) TÜV Rheinland® Low Noise
- (Optional) TÜV Rheinland® Ultra Low Noise

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
**OVERVIEW**

<table>
<thead>
<tr>
<th>1. Power button</th>
<th>8. HDMI 2.1 TMDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. USB-C 3.2 Gen 2 (with DP 1.4)</td>
<td>9. USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3. 2x USB 3.2 Gen 2</td>
<td>10. 2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>4. Headphone / microphone combo jack (3.5mm)</td>
<td>11. Ethernet (RJ-45)</td>
</tr>
<tr>
<td>6. DisplayPort 1.4</td>
<td>13. Flex IO *</td>
</tr>
<tr>
<td>7. USB 3.2 Gen 1</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
* Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® Celeron® or 12th Generation Intel® U Series Core i3 / i5 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® 7305</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.1GHz / E-core 0.9GHz</td>
<td>-</td>
<td>8MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz[1]</td>
<td>10MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz[2]</td>
<td>12MB</td>
<td>DDR4-3200</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

[2, 3, 4] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System
ChromeOS

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C® with DP function), 4096x2304@60Hz(HDMI®)</td>
<td>1x DP 1.4 HBR2, 1x USB-C® with DP 1.4 funcion, 1x HDMI® 2.1 TMDS, 1x punch out port (1x HDMI® 2.1 TMDS or 1x DP 1.4)</td>
<td>DirectX® 12.1</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C® with DP function), 4096x2304@60Hz(HDMI®)</td>
<td>1x DP 1.4 HBR2, 1x USB-C® with DP 1.4 funcion, 1x HDMI® 2.1 TMDS, 1x punch out port (1x HDMI® 2.1 TMDS or 1x DP 1.4)</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support
Supports up to 4 independent displays via (onbaord USB-C®, onboard DP, onboard HDMI®, and one optional port [2nd DP / 2nd HDMI®])

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory[1]
Up to 32GB DDR4-3200
Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
One drive, up to 256GB M.2 2280 SSD or 64GB eMMC 5.1 on systemboard

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Memory</td>
<td>eMMC 5.1</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
</tr>
</tbody>
</table>

RAID
No support

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.  
[2] EMMC is pre-configured, not upgradable.

Removable Storage

Optical
None

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC5682I codec

Speakers
No speakers

Microphone
No microphone

Camera
No camera

Power Supply

Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

DESIGN

Input Device

Keyboard
- Chrome USB Keyboard, black
- No keyboard
Mouse
- USB Calliope Mouse, black
- No mouse

**Mechanical**

Form Factor
Tiny (1L)

**Dimensions (WxDxH)**[1]
178 x 182 x 34 mm (7 x 7.16 x 1.33 inches)

**Packaging Dimensions (WxDxH)**
140 x 485 x 270 (5.51 x 19.1x 10.6 inches)

**Weight**[2]
Around 1.07 kg (2.35 lbs)

**Packaging Weight**
Around 2.95 kg (6.5 lbs)

**Case Color**
Raven black

**Bays**
No bays

**Expansion Slots**
- One M.2 slot (for WLAN, models with Celeron® processor)
- Two M.2 slots (one for WLAN, one for SSD)

**EOU**
(Optional) Toolless cover and stand assembly / removal

**Stand**
- Vertical stand
- No stand

**Mounting**
- Supports VESA mount 100mm
- None

**Others**
(Optional) Power adapter cage

---

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Realtek® RTL8111K-CG, 1x RJ-45

**WLAN + Bluetooth®**
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card

**Ports**[1]

**Front Ports**
- 1x USB-C® 3.2 Gen 2 (with DP 1.4)
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

**Rear Ports**
• 4x USB 3.2 Gen 1
• 1x HDMI®-out 2.1 TMDS
• 1x DisplayPort™ 1.4
• 1x Ethernet (GbE RJ-45)

Optional Rear Ports**
• 1x HDMI® 2.1 TMDS (Flex IO)
• 1x DP 1.4 (Flex IO)
• None

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Security Chip
Google Security Chip H1

Physical Locks
Kensington® Security Slot™

BIOS Security
No support

MANAGEABILITY

System Management
System Management
Non-vPro®

SERVICE

Warranty[1]

Base Warranty
• 1-year courier or carry-in service
• 1-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
• DP to DVI dongle
• DP to HDMI® dongle
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 10668 m (35,000 ft)

CERTIFICATIONS

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

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<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power button</td>
</tr>
<tr>
<td>2</td>
<td>USB-C 3.2 Gen 2 (with DP 1.4)</td>
</tr>
<tr>
<td>3</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>4</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5</td>
<td>Power connector</td>
</tr>
<tr>
<td>6</td>
<td>DisplayPort 1.4</td>
</tr>
<tr>
<td>7</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>8</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>9</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>10</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>11</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>12</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>13</td>
<td>Flex IO *</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
**PERFORMANCE**

**Processor**

**Processor Family**
Intel® Celeron® or 12th Generation Intel® U Series Core i3 / i5 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® 7305</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.1GHz / E-core 0.9GHz</td>
<td>-</td>
<td>8MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>DDR4-3200</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i5-1235U</td>
<td>10 (2 P-core + 8 E-core)</td>
<td>12</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>DDR4-3200</td>
<td>Intel® Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

[2], [3], [4] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

**Operating System**

**Operating System**
ChromeOS

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C* with DP function), 4096x2304@60Hz(HDMI*)</td>
<td>1x DP 1.4 HBR2, 1x USB-C* with DP 1.4 funcion, 1x HDMI® 2.1 TMDS, 1x punch out port (1x HDMI® 2.1 TMDS or 1x DP 1.4)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® Iris® Xe Graphics[1]</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C* with DP function), 4096x2304@60Hz(HDMI*)</td>
<td>1x DP 1.4 HBR2, 1x USB-C* with DP 1.4 funcion, 1x HDMI® 2.1 TMDS, 1x punch out port (1x HDMI® 2.1 TMDS or 1x DP 1.4)</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

**Monitor Support**

**Monitor Support**
Supports up to 4 independent displays via (onbaord USB-C*, onboard DP, onboard HDMI®, and one optional port [2nd DP / 2nd HDMI®])

**Chipset**

**Chipset**
Intel® SoC (System on Chip) platform

**Memory**

**Max Memory**[1]
Up to 32GB DDR4-3200
ThinkCentre M60q Chromebox Enterprise

Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
One drive, up to 256GB M.2 2280 SSD or 64GB eMMC 5.1 on systemboard

Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Memory[2]</td>
<td>eMMC 5.1</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
</tr>
</tbody>
</table>

RAID
No support

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] eMMC is pre-configured, not upgradable.

Removable Storage

Optical
None

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC5682I codec

Speakers
No speakers

Microphone
No microphone

Camera
No camera

Power Supply

Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

DESIGN

Input Device
Keyboard
- Chrome USB Keyboard, black
- No keyboard
ThinkCentre M60q Chromebox Enterprise

Mouse
- USB Calliope Mouse, black
- No mouse

Mechanical
Form Factor
Tiny (1L)
Dimensions (Wx Dx H)[1]
178 x 182 x 34 mm (7 x 7.16 x 1.33 inches)
Packaging Dimensions (Wx Dx H)
140 x 485 x 270 (5.51 x 19.1 x 10.6 inches)
Weight[2]
Around 1.07 kg (2.35 lbs)
Packaging Weight
Around 2.95 kg (6.5 lbs)
Case Color
Raven black
Bays
No bays
Expansion Slots
- One M.2 slot (for WLAN, models with Celeron® processor)
- Two M.2 slots (one for WLAN, one for SSD)
EOU
(Optional) Toolless cover and stand assembly / removal
Stand
- Vertical stand
- No stand
Mounting
- Supports VESA mount 100mm
- None
Others
(Optional) Power adapter cage

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111K-CG, 1x RJ-45
WLAN + Bluetooth®
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card

Ports[1]
Front Ports
- 1x USB-C® 3.2 Gen 2 (with DP 1.4)
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
Rear Ports
• 4x USB 3.2 Gen 1
• 1x HDMI® 2.1 TMDS
• 1x DisplayPort™ 1.4
• 1x Ethernet (GbE RJ-45)

Optional Rear Ports**
• 1x HDMI® 2.1 TMDS (Flex IO)
• 1x DP 1.4 (Flex IO)
• None

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Security Chip
Google Security Chip H1

Physical Locks
Kensington® Security Slot™

BIOS Security
No support

MANAGEABILITY

System Management
System Management
Non-vPro*

SERVICE

Warranty[1]

Base Warranty
• 1-year courier or carry-in service
• 1-year limited onsite service
• No base warranty

Notes:

[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories
• DP to DVI dongle
• DP to HDMI® dongle
• None
OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 10668 m (35,000 ft)

CERTIFICATIONS

Green Certifications\(^1\)

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered\(^2\)

Notes:
\(^1\) The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
\(^2\) EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USB-C 3.2 Gen 1</td>
</tr>
<tr>
<td>2</td>
<td>USB 3.2 Gen 2 (Always On and fast charge)</td>
</tr>
<tr>
<td>3</td>
<td>USB 3.2 Gen 2</td>
</tr>
<tr>
<td>4</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>6</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>7</td>
<td>1x USB 2.0 (with smart power-on feature)</td>
</tr>
<tr>
<td>8</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>9</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>10</td>
<td>DisplayPort 1.4</td>
</tr>
<tr>
<td>11</td>
<td>Power connector</td>
</tr>
<tr>
<td>12</td>
<td>Punch out port 1 *</td>
</tr>
<tr>
<td>13</td>
<td>Punch out port 2 *</td>
</tr>
</tbody>
</table>

### Notes:
- Items with * are only available on selected models

![ThinkCentre M70q Gen 3 Diagram](image-url)
**PERFORMANCE**

**Processor**

**Processor Family**

Intel® Celeron®, Intel® Pentium®, or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

---

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® G6900T</td>
<td>2</td>
<td>2</td>
<td>2.8GHz</td>
<td></td>
<td>4MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Pentium® Gold G7400T</td>
<td>2</td>
<td>4</td>
<td>3.1GHz</td>
<td></td>
<td>6MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100T</td>
<td>8</td>
<td>P-core 2.2GHz</td>
<td>P-core 4.1GHz[^1]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
<td></td>
</tr>
<tr>
<td>Core i3-12300T</td>
<td>8</td>
<td>P-core 2.3GHz</td>
<td>P-core 4.2GHz[^2]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
<td></td>
</tr>
<tr>
<td>Core i5-12400T</td>
<td>12</td>
<td>P-core 1.8GHz</td>
<td>P-core 4.2GHz[^3]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 730</td>
<td></td>
</tr>
<tr>
<td>Core i5-12500T</td>
<td>12</td>
<td>P-core 2.0GHz</td>
<td>P-core 4.4GHz[^4]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 770</td>
<td></td>
</tr>
<tr>
<td>Core i5-12600T</td>
<td>12</td>
<td>P-core 2.1GHz</td>
<td>P-core 4.6GHz[^5]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 770</td>
<td></td>
</tr>
<tr>
<td>Core i7-12700T</td>
<td>20</td>
<td>P-core 1.4GHz / E-core 1.0GHz</td>
<td>Max Turbo up to 4.7GHz / P-core 4.6GHz / E-core 3.4GHz[^6]</td>
<td>25MB</td>
<td>Intel® UHD Graphics 770</td>
<td></td>
</tr>
<tr>
<td>Core i9-12900T</td>
<td>24</td>
<td>P-core 1.4GHz / E-core 1.0GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[^7]</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

[^1], [^2], [^3], [^4], [^5], [^6], [^7] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

**Operating System**

**Operating System**[^1]

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[^1]
- No preload operating system

Notes:

[^1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

**Graphics**

**Graphics**[^1]

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C® with DP function)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4a (HBR2, DSC), 2x punch out ports([2x HDMI®/VGA/DP] or [USB-C® with DP function, HDMI®/VGA/DP])</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>
Intel® UHD graphics 730
Integrated Shared
4096x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C® with DP function)
1x HDMI® 2.1 TMDS, 1x DP 1.4a (HBR2, DSC), 2x punch out ports ([2x HDMI®/VGA/DP] or [USB-C® with DP function, HDMI®/VGA/DP])
DirectX® 12

Intel® UHD graphics 770
Integrated Shared
4096x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C® with DP function)
1x HDMI® 2.1 TMDS, 1x DP 1.4a (HBR2, DSC), 2x punch out ports ([2x HDMI®/VGA/DP] or [USB-C® with DP function, HDMI®/VGA/DP])
DirectX® 12

Monitor Support
Monitor Support
Supports up to 4 independent displays via (onboard DP, onboard HDMI®, punch out port 1 [VGA / HDMI® / DP / USB-C®], and punch out port 2 [VGA / HDMI® / DP])

Chipset
Chipset
Intel® Q670 chipset

Memory
Max Memory (1)
Up to 64GB DDR4-3200
Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable
Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage
Storage Support (1)
Up to two drives. 1x 2.5” HDD + 1x M.2 SSD
• 2.5” HDD up to 1TB
• M.2 SSD up to 2TB
Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
No support

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage
Optical
• DVD-ROM, slim (9.0mm), via USB external ODD box
• DVD burner (DVD±RW), slim (9.0mm), via USB external ODD box
• None
Card Reader
No card reader

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Realtek® ALC256VB codec

Speakers**
- Premium single speaker, 2W x1
- Single speaker, 2W x1

**Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>135W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>300W</td>
<td>Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

Notes:

[1] The optional 90W adapter may increase performance scores when 12500T/12400T CPUs are installed.

**DESIGN**

**Input Device**

Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Fingerprint Mouse (USB connector), black (EOL on Jan, 2023)
- No mouse

**Mechanical**

Form Factor
Tiny (1L)

Dimensions (WxDxH)**[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>179 x 182.9 x 36.5 mm with rubber feet (7.05 x 7.2 x 1.44 inches)</td>
</tr>
<tr>
<td>Tiny &amp; ODD</td>
<td>204.2 x 186.6 x 64 mm with rubber feet (8.04 x 7.35 x 2.52 inches with rubber feet)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)**[2]

- Tiny only: 490 x 250 x 130 mm (19.29 x 9.84 x 5.12 inches)
- Tiny & ODD: 490 x 268 x 166 mm (19.29 x 10.55 x 6.54 inches)

Weight**[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>Around 1.25 kg (2.76 lbs)</td>
</tr>
<tr>
<td>With VESA mount &amp; ODD box</td>
<td>Around 1.74 kg (3.84 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight**[4]

- Tiny only: Around 3.2 kg (7.05 lbs)
Tiny & ODD: Around 3.9 kg (8.6 lbs)

Case Color
Raven black

Bays
1x 2.5" disk bay

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

EOU
(Optional) Toolless cover (toolless chassis screw required), stand, optional 2.5” HDD bracket assembly / removal

Stand
• Vertical stand
• No stand

IO Box
No IO box

Mounting
• VESA mount bracket kit, supports VESA mount 75mm and 100mm
• None

Others
• (Optional) Dust filter
• (Optional) Power adapter cage
• Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The new packages take effect from September 2023. The old packages are:
Tiny only: 500 x 150 x 280 mm (19.69 x 5.91 x 11.02 inches)
Tiny & ODD: 500 x 175 x 280 mm (19.69 x 6.89 x 11.02 inches)
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[4] The new packages take effect from September 2023. The old package are:
Tiny only: 2.85 kg (6.28 lbs)
Tiny & ODD: 3.58 kg (7.89 lbs)

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet[*]
• 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, supports Wake-on-LAN
• No optional Ethernet

WLAN + Bluetooth®**
• Realtek® RTL8822CE, Wi-Fi® 5, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
• Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[4]
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, Intel® vPro® technology support, M.2 Card[3]
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[4]
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card[5]
• No WLAN and Bluetooth®

Notes:
Ports

Front Ports
- 1x USB-C® 3.2 Gen 1 (support data transfer and 5V@0.9A charging)
- 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
- 1x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
None

Rear Ports
- 1x USB 2.0
- 1x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

Optional Rear Ports**
- Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® 2.0 with DisplayPort™ function)
- Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / RJ-45)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

Fingerprint Reader
- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Certificate based BIOS authentication
- Cover presence switch
- Individual USB port disablement
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY
System Management

System Management
• Intel® vPro® Enterprise\[1\]
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories
• DP to DVI dongle
• DP to Dual DP dongle
• DP to HDMI® dongle
• DP to VGA dongle
• HDMI® to HDMI® dongle
• HDMI® to VGA dongle
• None

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

ENVIRONMENTAL

Sustainability

Material[1]
85% PCC recycled plastic used in product chassis
95% PCC recycled plastic used in USB keyboard/mouse
90% PIC recycled plastic EPE cushion or 90% PCC recycled plastic thermal shell with 30% OBP material
30% OBP used in bag
FSC certified paper in packaging

Notes:
PIC: Post Industry Content, recycled materials from internal factories.
EPE: Expanded Polyethylene.
OBP: Ocean Bound Plastic, reducing plastic spill into the sea.
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

Green Certifications
• (Optional) EPEAT™ Gold Registered[2]
• ENERGY STAR® 8.0
• ErP Lot 3 and Lot 7
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
• (Optional) TÜV Rheinland® Low Noise
• (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation)

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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# OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USB-C 3.2 Gen 1</td>
</tr>
<tr>
<td>2</td>
<td>USB 3.2 Gen 2 (Always On and fast charge)</td>
</tr>
<tr>
<td>3</td>
<td>USB 3.2 Gen 2</td>
</tr>
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<td>4</td>
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</tr>
<tr>
<td>6</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>7</td>
<td>1x USB 2.0 (with smart power-on feature)</td>
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<td>HDMI 2.1 TMDS</td>
</tr>
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<td>USB 3.2 Gen 1</td>
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<tr>
<td>10</td>
<td>DisplayPort 1.4a</td>
</tr>
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<td>11</td>
<td>Power connector</td>
</tr>
<tr>
<td>12</td>
<td>Punch out port 1 *</td>
</tr>
<tr>
<td>13</td>
<td>Punch out port 2 *</td>
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Notes:
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PERFORMANCE

Processor

Processor Family
13th Generation Intel® Core™ i3 / i5 / i7 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
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<td>P-core 1.4GHz / E-core 1.0GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz(5)</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:

[1], [2], [3], [4], [5] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux(1)
- No preload operating system

Notes:

[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C® with DP function)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4a (HBR2, DSC), 2x punch out ports ([2x HDMI®/VGA/DP] or [USB-C® with DP function, HDMI®/VGA/DP])</td>
<td>DirectX® 12</td>
</tr>
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<td>DirectX® 12</td>
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Monitor Support

**Monitor Support**

Supports up to 4 independent displays via (onboard DP, onboard HDMI®, punch out port 1 [VGA / HDMI®, DP / USB-C®], and punch out port 2 [VGA / HDMI® / DP])
**Chipset**

Intel® Q670 chipset

**Memory**

Max Memory\(^{[1]}\)
Up to 64GB DDR4-3200

Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:

\(^{[1]}\) The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

Storage Support\(^{[1]}\)
Up to two drives, 1x 2.5” HDD + 1x M.2 SSD
- 2.5” HDD up to 1TB
- M.2 SSD up to 2TB

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td></td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
No support

Notes:

\(^{[1]}\) The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

Optical
None

Card Reader
No card reader

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Realtek® ALC256VB codec

Speakers**
- Premium single speaker, 2W x1
- Single speaker, 2W x1

**Power Supply**

Power Supply**\(^{[1]}\)

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
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</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>135W</td>
<td>Adapter</td>
<td>90%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>
Notes:
[1] When work with TIO monitor, an appropriate power adapter is needed. Customer may need to:
• Order a Tiny for TIO MT (12E5, 12E6 or 12E8) models
• Or for Intel® Core™ i5/i7 models order an additional 135W power adapter, for Intel® Core™ i3 models order an additional 90W power adapter. If original power adapter is less than 135W (i5/i7 models) or 90W (i3 models).

DESIGN

Input Device

Keyboard**
• Lenovo® Calliope Keyboard (USB connector), black
• Lenovo® Calliope Wireless Keyboard, black
• Lenovo® Traditional Keyboard (USB connector), black
• No keyboard

Mouse**
• Lenovo® Calliope Mouse (USB connector), black
• Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
• No mouse

Mechanical

Form Factor
Tiny (1L)

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>179 x 182.9 x 36.5 mm with rubber feet (7.05 x 7.2 x 1.44 inches)</td>
</tr>
<tr>
<td>Tiny &amp; ODD</td>
<td>204.2 x 186.6 x 64 mm with rubber feet (8.04 x 7.35 x 2.52 inches with rubber feet)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)**[2]

• Tiny only: 490 x 250 x 130 mm (19.29 x 9.84 x 5.12 inches)
• Tiny & ODD: 490 x 268 x 166 mm (19.29 x 10.55 x 6.54 inches)

Weight[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>Around 1.25 kg (2.76 lbs)</td>
</tr>
<tr>
<td>With VESA mount &amp; ODD box</td>
<td>Around 1.74 kg (3.84 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight**[4]

• Tiny only: Around 3.2 kg (7.05 lbs)
• Tiny & ODD: Around 3.9 kg (8.6 lbs)

Case Color
Raven black

Bays
• 1x 2.5” disk bay (optional, or bay comes with disk)
• No bays

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

EOU
(Optional) toolless chassis open (toolless chassis screw required) and toolless M.2 SSD, HDD, memory assembly / removal

Stand
• Vertical stand
• No stand

IO Box
No IO box

Mounting
• VESA mount bracket kit, supports VESA mount 75mm and 100mm
Others

- (Optional) Dust filter
- (Optional) Power adapter cage

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The new packages take effect from September 2023. The old packages are:
   - Tiny only: 490 x 268 x 141 mm (19.29 x 10.55 x 5.55 inches)
   - Tiny & ODD: 490 x 268 x 166 mm (19.29 x 10.55 x 6.54 inches)
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[4] The new packages take effect from September 2023. The old package are:
   - Tiny only: 2.85 kg (6.28 lbs)
   - Tiny & ODD: 3.58 kg (7.89 lbs)

CONNECTIVITY

Network

Onboard Ethernet

- Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet

- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, supports Wake-on-LAN[1]
- No optional Ethernet

WLAN + Bluetooth®

- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[2]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[3]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card[4]
- No WLAN and Bluetooth®

Notes:

Ports[1]

Front Ports

- 1x USB-C® 3.2 Gen 1 (support data transfer and 5V@0.9A charging)
- 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
- 1x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports

None

Rear Ports

- 1x USB 2.0
- 1x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)

Optional Rear Ports***

- Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® 2.0 with DisplayPort™ function)
- Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / RJ-45)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the
host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Certificate based BIOS authentication
• Cover presence switch
• Individual USB port disablement
• Secure Boot
• Self-healing BIOS
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management
• Intel® vPro® Enterprise[1]
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty
• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

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- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® dongle
- HDMI® to VGA dongle
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

ENVIRONMENTAL

Sustainability

Material
- 85% PCC recycled plastic used in product chassis
- 95% PCC recycled plastic used in USB keyboard/mouse
- 90% PIC recycled plastic EPE cushion or 90% PCC recycled plastic thermal shell with 30% OBP material
- 30% OBP used in bag
- FSC certified paper in packaging

Notes:
PIC: Post Industry Content, recycled materials from internal factories.
EPE: Expanded Polyethylene.
OBP: Ocean Bound Plastic, reducing plastic spill into the sea.
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ENERGY STAR® 8.0
- ErP Lot 3 and Lot 7
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**Processor**

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13th / 14th Generation Intel® Core™ i3 / i5 / i7 Processor, or Intel® 300T Processor

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<td>20</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.8GHz / E-core 3.4GHz</td>
<td>24MB</td>
</tr>
<tr>
<td>Core i5-14600T</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 5.1GHz / E-core 3.6GHz</td>
<td>24MB</td>
</tr>
<tr>
<td>Core i7-14700T</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.0GHz / E-core 3.7GHz</td>
<td>33MB</td>
</tr>
<tr>
<td>Intel® 300T</td>
<td>2</td>
<td>4</td>
<td>3.4 GHz</td>
<td>-</td>
<td>6MB</td>
</tr>
</tbody>
</table>

**Operating System**

**Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 IoT Enterprise LTSC 2024
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- No preload operating system

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C® with DP function)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4a (HBR2, DSC), 2x punch out ports([2x HDMI®/VGA/DP] or [USB-C® with DP function, HDMI®/VGA/DP])</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C® with DP function)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4a (HBR2, DSC), 2x punch out ports([2x HDMI®/VGA/DP] or [USB-C® with DP function, HDMI®/VGA/DP])</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>
Monitor Support

Monitor Support
Supports up to 4 independent displays via (onboard DP, onboard HDMI®, punch out port 1 [VGA / HDMI® / DP / USB-C®], and punch out port 2 [VGA / HDMI® / DP])

Chipset

Chipset
Intel® Q670 chipset

Memory

Max Memory
Up to 64GB (2x 32GB DDR5 SO-DIMM)

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
• DDR5-4800
• DDR5-5200
• DDR5-5600

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
Dual SSD mode: up to two drives, 2x M.2 SSD
• M.2 2280 SSD up to 2TB

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>Opal</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>Opal</td>
</tr>
</tbody>
</table>

RAID
RAID 0/1 support for SSDs

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage

Optical
None

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC233VB or Conexant CX11771 codec

Speakers
• Premium single speaker, 2W x1
• Single speaker, 2W x1
Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>135W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

Notes:
[1] 135w power adapter is essential if optional USB-C® port is selected

When work with TIO monitor, an appropriate power adapter is needed. Customer may need to:
• Order a Tiny for TIO MT (12TF or 12TG) models
• Or order an additional 135W power adapter, if original power adapter is 90W

DESIGN

Input Device

Keyboard**
• EOS Wireless Keyboard, black
• Lenovo® Calliope Keyboard (USB connector), black
• Lenovo® Traditional Keyboard (USB connector), black
• No keyboard

Mouse**
• Lenovo® Calliope Mouse (USB connector), black
• EOS Wireless Mouse, Black
• No mouse

Mechanical

Form Factor
Tiny (1L)

Dimensions (WxDxH)[5]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>179 x 182.9 x 36.5 mm with rubber feet (7.05 x 7.2 x 1.44 inches with rubber feet)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
490 x 128 x 250 mm (19.29 x 5.04 x 9.84 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>Around 1.25 kg (2.76 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
Around 2.848 kg (6.28 lbs)

Case Color
Raven black

Bays
No bays

Expansion Slots
Three M.2 slots (one for WLAN, two for SSD)

EOU
• (Optional) Toolless cover and stand assembly / removal
• No support

Stand
Vertical stand
No stand

IO Box
No IO box

Mounting
- Supports VESA mount 100mm
- None

Others
- (Optional) Dust filter
- (Optional) Power adapter cage

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, supports Wake-on-LAN
- No optional Ethernet

WLAN + Bluetooth®
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
- No WLAN and Bluetooth®

WWAN
No support

Ports

Front Ports
- 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with 5V@0.9A charging
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), with Always On and 5V@2.1A charging
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
None

Rear Ports
- 1x USB-A (Hi-Speed USB / USB 2.0)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)

Optional Rear Ports
- Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® (Hi-Speed USB) with DisplayPort™ function)
- Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / RJ-45)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;  
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;  
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;  
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;  
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;  
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Certificate based BIOS authentication
• Cover presence switch
• Individual USB port disablement
• Secure Boot
• Secure Wipe
• Self-healing BIOS
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management[1]
• Intel® vPro® Enterprise
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS
**Operating Environment**

**Temperature**
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

**Relative Humidity**
- Operating: 20% to 80%
- Storage: 10% to 90%

**Altitude**
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

**ENVIRONMENTAL**

**Sustainability**

**Material**\(^{[1]}\)
- 85% PCC recycled plastic used in product chassis
- 95% PCC recycled plastic used in USB keyboard/mouse
- 90% PIC recycled plastic EPE cushion or 90% PCC recycled plastic thermal shell with 30% OBP material
- 30% OBP used in bag
- FSC certified paper in packaging

**Notes:**
- PIC: Post Industry Content, recycled materials from internal factories.
- EPE: Expanded Polyethylene.
- OBP: Ocean Bound Plastic, reducing plastic spill into the sea.
- FSC: Forest Stewardship Council.

**CERTIFICATIONS**

**Green Certifications**\(^{[1]}\)

**Green Certifications**
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ENERGY STAR® 8.0
- ErP Lot 3 and Lot 7
- RoHS compliant
- TCO Certified

**Notes:**
- [1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

**Other Certifications**

**Other Certifications**
- (Optional) TÜV Rheinland® Ultra Low Noise

**Mil-Spec Test**
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Humidity, Sand and Dust, Vibration, Shock, Solar Radiation, Contamination by Fluids, Salt Fog, Temperature Shock)

- Feature with ** means that only one offering listed under the feature is configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
### OVERVIEW

1. **Power button**
2. **USB-C 3.2 Gen 1**
3. **USB 3.2 Gen 2**
4. **Headphone / microphone combo jack (3.5mm)**
5. **Power connector**
6. **DisplayPort 1.4**
7. **USB 3.2 Gen 1**
8. **HDMI 1.4b**
9. **USB 3.2 Gen 1**
10. **Optional port 1 (VGA is shown)**
11. **2x USB 2.0**
12. **Optional port 2 (serial is shown)**
13. **Ethernet (RJ-45)**
PERFORMANCE

Processor Family
AMD Athlon™ or AMD Ryzen™ 3 / 5 / 7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Athlon™ Gold PRO 3150GE</td>
<td>4</td>
<td>4</td>
<td>3.3GHz</td>
<td>3.8GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-2933</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Athlon™ Silver 3050GE</td>
<td>2</td>
<td>4</td>
<td>3.4GHz</td>
<td>3.4GHz</td>
<td>1MB L2 / 4MB L3</td>
<td>DDR4-2666</td>
<td>AMD Radeon™ Graphics</td>
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<tr>
<td>AMD Athlon™ Silver PRO 3125GE</td>
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<td>DDR4-2666</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 3200GE</td>
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<td>3.3GHz</td>
<td>3.8GHz</td>
<td>2MB L2 / 4MB L3</td>
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<td>AMD Radeon™ Vega 8 Graphics</td>
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<tr>
<td>AMD Ryzen™ 3 4300GE</td>
<td>4</td>
<td>8</td>
<td>3.5GHz</td>
<td>4.0GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 5300GE</td>
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<td>3.6GHz</td>
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<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 PRO 4350GE</td>
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<td>3.5GHz</td>
<td>4.0GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 PRO 5350GE</td>
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<td>8</td>
<td>3.6GHz</td>
<td>4.2GHz</td>
<td>2MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 4600GE</td>
<td>6</td>
<td>12</td>
<td>3.3GHz</td>
<td>4.2GHz</td>
<td>3MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 5600GE</td>
<td>6</td>
<td>12</td>
<td>3.4GHz</td>
<td>4.4GHz</td>
<td>3MB L2 / 16MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
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<tr>
<td>AMD Ryzen™ 5 PRO 3350GE</td>
<td>4</td>
<td>8</td>
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<td>3.9GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-2933</td>
<td>AMD Radeon™ Vega 11 Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 4650GE</td>
<td>6</td>
<td>12</td>
<td>3.3GHz</td>
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<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 4700GE</td>
<td>8</td>
<td>16</td>
<td>3.1GHz</td>
<td>4.3GHz</td>
<td>4MB L2 / 8MB L3</td>
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</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 Pro 64
- Windows® 10 Home 64
- Windows® 10 Home 64 Single Language
- Windows® 10 IoT Enterprise
- Windows® 10 IoT Enterprise LTSC 2021
**Ubuntu Linux**
**IGEL Linux**
**No preload operating system**

Notes:

[1] The device is preload with a free evaluation license. The evaluation license will be valid for a period of 90 days.

### Graphics

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
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<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>3840x2160@30Hz or 2560x1440@60Hz(HDMI*), 1920x1200@60Hz(VGA), 3840x2160(DP)@60Hz</td>
<td>1x HDMI*, 1x DisplayPort™ 1.4, 1x optional port (VGA / 2nd DP / USB-C® / 2nd HDMI® / dual DP)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ Vega 8 Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>3840x2160@30Hz or 2560x1440@60Hz(HDMI*), 1920x1200@60Hz(VGA), 3840x2160(DP)@60Hz</td>
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<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

### Monitor Support

**Monitor Support**

Supports up to 3 independent displays via onboard ports (DisplayPort™ + HDMI*) and optional ports (VGA / 2nd DP / 2nd HDMI® / USB-C® / 2x DP)

### Chipset

**Chipset**

AMD PRO 500 chipset

### Memory

**Max Memory**

Up to 64GB DDR4-3200

**Memory Slots**

Two DDR4 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR4-3200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

[2] Installed memory is actually 3200MT/s but may run as 2666MT/s, 2933MT/s or 3200MT/s depending on the memory support capability of processor.

### Storage

**Storage Support**

Up to two drives, 1x 2.5" HDD + 1x M.2 SSD

- 2.5" HDD up to 1TB
- M.2 SSD up to 1TB

**Storage Type**
Disk Type | Interface | RPM | Security
--- | --- | --- | ---
2.5" SATA HDD | SATA 6Gb/s | 5.4K | -
2.5" SATA HDD | SATA 6Gb/s | 7.2K | -
M.2 2242 SSD | PCIe® NVMe®, PCIe® 3.0 x2 | - | -
M.2 2280 SSD | PCIe® NVMe®, PCIe® 3.0 x4 | - | Opal
M.2 2280 SSD | PCIe® NVMe®, PCIe® 4.0 x4 | - | Opal 2.0

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage
Optical**
- DVD-ROM, slim (9.0mm), via USB external ODD box
- DVD burner (DVD±RW), slim (9.0mm), via USB external ODD box
- None

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC222 codec
Speakers
Single speaker, 1.5W x1

Power Supply
Power Supply**

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W Adapter</td>
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<td>Autosensing</td>
</tr>
<tr>
<td>90W Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
</tbody>
</table>

DESIGN

Input Device
Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

Mechanical
Form Factor
Tiny (1L)

Dimensions (WxDxH)[3]

<table>
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<td>179 x 183 x 34.5 / 37 mm with rubber feet (7.05 x 7.2 x 1.36 / 1.5 inches with rubber feet)</td>
</tr>
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Packaging Dimensions (WxDxH)[3]
- Tiny only: 490 x 250 x 130 mm (19.29 x 9.84 x 5.12 inches)
- Tiny & ODD: 490 x 268 x 166 mm (19.29 x 10.55 x 6.54 inches)

Weight[3]
Models

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>1.25 kg (2.76 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight

- Tiny only: Around 3.2 kg (7.05 lbs)
- Tiny & ODD: Around 3.9 kg (8.6 lbs)

Case Color

Black

Bays

1x 2.5\" disk bay

Expansion Slots

- One M.2 slot (for SSD)
- One M.2 slot (for WLAN)

EOU

(Optional) toolless chassis open (toolless chassis screw required) and toolless M.2 SSD, HDD, memory assembly / removal

Stand

- Vertical stand
- No stand

Mounting

- VESA mount bracket kit, supports VESA mount 75mm and 100mm
- None

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The new packages take effect from September 2023. The old packages are:
Tiny only: 500 x 150 x 280 mm (19.69 x 5.91 x 11.02 inches)
Tiny & ODD: 500 x 175 x 280 mm (19.69 x 6.89 x 11.02 inches)
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[4] The new packages take effect from September 2023. The old package are:
Tiny only: 2.85 kg (6.28 lbs)
Tiny & ODD: 3.58 kg (7.89 lbs)

CONNECTIVITY

Network

Onboard Ethernet
- Gigabit Ethernet, Realtek® RTL8111FP, 1x RJ-45, supports DASH and Wake-on-LAN
- Gigabit Ethernet, Realtek® RTL8111HN, 1x RJ-45, supports Wake-on-LAN

WLAN + Bluetooth®

- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9260, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- Realtek® Wi-Fi® 6 RTL8852AE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX200, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- No WLAN and Bluetooth®

Notes:


Ports

Front Ports

- 1x USB-C® 3.2 Gen 1 (support data transfer)
- 1x USB 3.2 Gen 2 (Always On and fast charge)
- 1x headphone / microphone combo jack (3.5mm)
Rear Ports

- 2x USB 2.0
- 2x USB 3.2 Gen 1
- 1x HDMI® 1.4b
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

Optional Rear Ports

- Optional port 1 (one of VGA / 2nd DisplayPort™ / 2nd HDMI® / serial / USB-C® 3.2 Gen 1 with DisplayPort™ function)
- Optional port 2 (serial)
- 2x USB 3.2 Gen 1 (occupies port 1 and 2)
- 4x USB 3.2 Gen 1 (share one USB 3.2 Gen 1 bandwidth, occupy port 1 and 2)
- 2x DisplayPort™ (occupies port 1 and 2)
- 1x parallel

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement

MANAGEABILITY

System Management

System Management
- DASH 1.2
- Non-DASH

SERVICE

Warranty

Base Warranty
- 1-year courier or carry-in service
- 1-year limited onsite service
3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories
• DP to DVI dongle
• DP to Dual DP dongle
• DP to HDMI® dongle
• DP to VGA cable (1.5m)
• DP to VGA dongle
• HDMI® to HDMI® cable (1.5m)
• HDMI® to VGA dongle
• VGA cable
• None

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[1]

Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Silver Registered[2]
• (Optional) EPEAT™ Gold Registered[3]
• ErP Lot 3
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2], [3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed
• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>2.</td>
<td>USB-A (USB 10Gbps)</td>
</tr>
<tr>
<td>3.</td>
<td>USB-A (USB 10Gbps), Always On</td>
</tr>
<tr>
<td>4.</td>
<td>USB-C (USB 10Gbps), data transfer only</td>
</tr>
<tr>
<td>5.</td>
<td>Power connector</td>
</tr>
<tr>
<td>6.</td>
<td>DisplayPort 1.4a</td>
</tr>
<tr>
<td>7.</td>
<td>USB-A (USB 10Gbps)</td>
</tr>
<tr>
<td>8.</td>
<td>HDMI</td>
</tr>
<tr>
<td>9.</td>
<td>USB-A (Hi-Speed USB), with Smart Power On</td>
</tr>
<tr>
<td>10.</td>
<td>USB-A (Hi-Speed USB)</td>
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<tr>
<td>11.</td>
<td>USB-A (Hi-Speed USB)</td>
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<tr>
<td>12.</td>
<td>Ethernet (GbE RJ-45)</td>
</tr>
<tr>
<td>13.</td>
<td>Punch out port 1 *</td>
</tr>
<tr>
<td>14.</td>
<td>Punch out port 2 *</td>
</tr>
</tbody>
</table>

Notes:

• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
AMD Ryzen™ 3 / 5 8000 or Ryzen™ 3 / 5 / 7 PRO 8000 Series Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
<th>AI Engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 8300GE</td>
<td>4</td>
<td>8</td>
<td>3.5GHz</td>
<td>4.9GHz</td>
<td>4MB L2 / 8MB L3</td>
<td>AMD Radeon™ 740M</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 PRO 8300GE</td>
<td>4</td>
<td>8</td>
<td>3.5GHz</td>
<td>4.9GHz</td>
<td>4MB L2 / 8MB L3</td>
<td>AMD Radeon™ 740M</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 8500GE</td>
<td>6</td>
<td>12</td>
<td>3.4GHz</td>
<td>5.0GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 8500GE</td>
<td>6</td>
<td>12</td>
<td>3.4GHz</td>
<td>5.0GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 740M</td>
<td>-</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 8600GE</td>
<td>6</td>
<td>12</td>
<td>3.9GHz</td>
<td>5.0GHz</td>
<td>6MB L2 / 16MB L3</td>
<td>AMD Radeon™ 760M</td>
<td>AMD Ryzen™ AI</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 8700GE</td>
<td>8</td>
<td>16</td>
<td>3.6GHz</td>
<td>5.1GHz</td>
<td>8MB L2 / 16MB L3</td>
<td>AMD Radeon™ 780M</td>
<td>AMD Ryzen™ AI</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 IoT Enterprise LTSC 2024
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- No preload operating system

Graphics

Graphics**(1)

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>TGP</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ 740M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>3840x2160@60Hz(HDMI®), 3840x2160@60Hz(DP), 1920x1200@60Hz(VGA), 3840x2160@60Hz(USB-C® with DP function)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 760M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>3840x2160@60Hz(HDMI®), 3840x2160@60Hz(DP), 1920x1200@60Hz(VGA), 3840x2160@60Hz(USB-C® with DP function)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ 780M</td>
<td>Integrated</td>
<td>Shared</td>
<td>Share CPU TDP</td>
<td>3840x2160@60Hz(HDMI®), 3840x2160@60Hz(DP), 1920x1200@60Hz(VGA), 3840x2160@60Hz(USB-C® with DP function)</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support

Monitor Support

Supports up to 3 independent displays via onboard ports (DisplayPort™ + HDMI®) and optional ports (VGA / 2nd DP / 2nd...
**Chipset**

AMD PRO 600 chipset

**Memory**

Max Memory

Up to 32GB (2x 16GB DDR5 SO-DIMM); 64GB (2x 32GB) is special bids only

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type

DDR5-5200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

[2] Installed memory is actually DDR5-5600 but will run at DDR5-5200 due to the memory support capability of processor.

**Storage**

Storage Support

Up to two drives, 2x M.2 2280 SSD, up to 1TB each

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD[2]</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

[2] 1TB Performance SSD is special bids only.

**Removable Storage**

Optical
None

Card Reader
None

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Realtek® ALC233 codec

Speakers
- No speakers
- Single speaker

**Power Supply**

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>No power supply</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**DESIGN**
Input Device

Keyboard
- EOS Wireless Keyboard, black
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse
- Lenovo® Calliope Mouse (USB connector), black
- EOS Wireless Mouse, Black
- No mouse

Mechanical

Form Factor
Tiny (1L)

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>179 x 182.9 x 36.5 mm with rubber feet (7.05 x 7.2 x 1.44 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
494 x 250 x 128 mm (19.45 x 9.84 x 5.04 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>Around 1.25 kg (2.76 lbs)</td>
</tr>
</tbody>
</table>

Case Color
Black

Expansion Slots
Three M.2 slots (one for WLAN, two for SSD)

EOU
(Optional) toolless chassis open (toolless chassis screw required) and toolless M.2 SSD, memory assembly / removal

Stand
- Vertical stand
- No stand

IO Box
No IO box

Mounting
- VESA mount bracket kit, supports VESA mount 75mm and 100mm
- None

Others
- (Optional) Dust filter
- (Optional) Power adapter cage

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111FP, 1x RJ-45, supports DASH and Wake-on-LAN
Optional Ethernet
No optional Ethernet

**WLAN + Bluetooth®**
- MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
- No WLAN and Bluetooth®

Notes:
[1], [2], [3] Wi-Fi® 6E full features might be limited by country-level restrictions.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports

Front Ports
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), with Always On and 5V@2.1A charging
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
None

Rear Ports
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x HDMI® 2.1 TMDS
- 1x Ethernet (RJ-45)
- 1x DisplayPort™ 1.4 (HBR2, DSC)
- 3x USB-A (Hi-Speed USB / USB 2.0)

Optional Rear Ports
- Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® 3.2 Gen 1 with DisplayPort™ functions)
- 2x USB 3.2 Gen 1 ports (share one USB 3.2 Gen 1 bandwidth, occupy optional port 1 and 2)
- 2x DP (occupies port 1 and 2)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

Fingerprint Reader
No fingerprint reader
BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement

MANAGEABILITY

System Management
System Management
  • DASH
  • Non-DASH

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty
Base Warranty
  • 1-year courier or carry-in service
  • 1-year limited onsite service
  • 3-year limited onsite service
  • No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories
Bundled Accessories
  • DP to DVI dongle
  • DP to Dual DP dongle
  • DP to HDMI® dongle
  • DP to VGA cable (1.5m)
  • DP to VGA dongle
  • HDMI® to VGA dongle
  • None

OPERATING REQUIREMENTS

Operating Environment
Temperature
  • Operating: 5°C (41°F) to 35°C (95°F)
  • Storage: -40°C (-40°F) to 60°C (140°F)
Relative Humidity
  • Operating: 20% to 80%
  • Storage: 10% to 90%
Altitude
  • Operating: 0 m (0 ft) to 3048 m (10,000 ft)
CERTIFICATIONS

Green Certifications

(Optional) ENERGY STAR® 8.0
(Optional) EPEAT™ Gold Registered
ErP Lot 3
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

(Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
# OVERVIEW

| 1. | Headphone / microphone combo jack (3.5mm) |
| 2. | USB 3.2 Gen 2 |
| 3. | USB 3.2 Gen 2 (Always On and fast charge) |
| 4. | USB-C 3.2 Gen 2 |
| 5. | Power connector |
| 6. | DisplayPort 1.4 |
| 7. | USB 3.2 Gen 1 |
| 8. | HDMI |
| 9. | USB 3.2 Gen 1 (with Smart Power On feature) |
| 10. | USB 3.2 Gen 2 |
| 11. | USB 3.2 Gen 2 |
| 12. | Ethernet (RJ-45) |
| 13. | Punch out port 1 * |
| 14. | Punch out port 2 * |

Notes:
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® Celeron®, Intel® Pentium®, or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® G6900T</td>
<td>2</td>
<td>2</td>
<td>2.8GHz</td>
<td>-</td>
<td>4MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Pentium® Gold G7400T</td>
<td>2</td>
<td>4</td>
<td>3.1GHz</td>
<td>-</td>
<td>6MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100T</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 2.2GHz</td>
<td>P-core 4.1GHz(^{[1]})</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-12300T</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 2.3GHz</td>
<td>P-core 4.2GHz(^{[2]})</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
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<tr>
<td>Core i5-12400T</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz</td>
<td>P-core 4.2GHz(^{[3]})</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12500T</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.0GHz</td>
<td>P-core 4.4GHz(^{[4]})</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12600T</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.1GHz</td>
<td>P-core 4.6GHz(^{[5]})</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700T</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 1.4GHz / E-core 1.0GHz</td>
<td>Max Turbo up to 4.7GHz / P-core 4.6GHz / E-core 3.4GHz(^{[6]})</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900T</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 1.4GHz / E-core 1.0GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz(^{[7]})</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:
[1], [2], [3], [4], [5], [6], [7] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**[1]**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux
- Red Hat Enterprise Linux 8.6 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

Notes:
[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI*), 1920x1200@60Hz(VGA),</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4, 2x punch out ports([2x</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>
Monitor Support

Monitor Support
Supports up to 4 independent displays via (onboard DP, onboard HDMI®, punch out port 1 [VGA / HDMI® / DP / USB-C®], and punch out port 2 [VGA / HDMI® / DP])

Chipset

Chipset
Intel® Q670 chipset

Memory

Max Memory\(^1\)
Up to 64GB DDR5-4800

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
DDR5-4800

Notes:
\(^1\) The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support\(^2\)
Up to three drives, 1x 2.5" HDD + 2x M.2 SSD
• 2.5" HDD up to 1TB
• M.2 SSD up to 2TB each

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>500GB / 1TB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x2</td>
<td>-</td>
<td>128GB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID

RAID 0/1 support for M.2 SSDs (RAID preset only available via special bid models)

Notes:
\(^2\) The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage

Optical**
• DVD-ROM, slim (9.0mm), via USB external ODD box
ThinkCentre M80q Gen 3

- DVD burner (DVD±RW), slim (9.0mm), via USB external ODD box
- None

**Card Reader**
No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC256VB codec

**Speakers**
- Premium single speaker, 2W x1
- Single speaker, 2W x1

**Microphone**
No microphone

**Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>135W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>No power supply</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**DESIGN**

**Input Device**

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Fingerprint Mouse (USB connector), black (EOL on Jan, 2023)
- No mouse

**Mechanical**

**Form Factor**
Tiny (1L)

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>179 x 182.9 x 36.5 mm with rubber feet (7.05 x 7.2 x 1.44 inches)</td>
</tr>
<tr>
<td>Tiny &amp; ODD</td>
<td>204.2 x 186.6 x 64 mm with rubber feet (8.04 x 7.35 x 2.52 inches with rubber feet)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
- Tiny only: 490 x 250 x 130 mm (19.29 x 9.84 x 5.12 inches)
- Tiny & ODD: 490 x 268 x 166 mm (19.29 x 10.55 x 6.54 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>1.25 kg (2.76 lbs)</td>
</tr>
<tr>
<td>With VESA mount &amp; ODD box</td>
<td>1.74 kg (3.84 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
Tiny only: Around 3.2 kg (7.05 lbs)  
Tiny & ODD: Around 3.9 kg (8.6 lbs)

**Case Color**
- Black

**Bays**
- 1x 2.5" disk bay

**Expansion Slots**
- Two M.2 PCIe® Gen 4x4 slots (for SSD)
- One M.2 slot (for WLAN)

**EOU**
- (Optional) toolless chassis open (toolless chassis screw required) and toolless M.2 SSD, HDD, memory assembly / removal
- No support

**Stand**
- Vertical stand
- No stand

**IO Box**
- No IO box

**Mounting**
- VESA mount bracket kit, supports VESA mount 75mm and 100mm
- None

**Others**
- (Optional) Dust filter
- (Optional) Power adapter cage

---

**Notes:**

[1] The system dimensions may vary depending on configurations.
[2] The new packages take effect from September 2023. The old packages are:
   - Tiny only: 500 x 150 x 280 mm (19.69 x 5.91 x 11.02 inches)
   - Tiny & ODD: 500 x 175 x 280 mm (19.69 x 6.89 x 11.02 inches)
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[4] The new packages take effect from September 2023. The old package are:
   - Tiny only: 2.85 kg (6.28 lbs)
   - Tiny & ODD: 3.58 kg (7.89 lbs)

---

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
- Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, supports Wake-on-LAN
- No optional Ethernet

**WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[2]
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card[3]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card[4]
- No WLAN and Bluetooth®

---

[1], [3], [4] Bluetooth® 5.3 requires Windows® 11.
**Ports**

Front Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer)
- 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
- 1x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
None

Rear Ports
- 2x USB 3.2 Gen 1 (one supports Smart Power On)
- 2x USB 3.2 Gen 2
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

Optional Rear Ports
- Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® 3.2 Gen 1 with DisplayPort™ functions)
- Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / RJ-45)
- 2x USB 3.2 Gen 1 (share one USB 3.2 Gen 1 bandwidth, occupies port 1 and 2)
- 4x USB 3.2 Gen 1 (share one USB 3.2 Gen 1 bandwidth, occupy port 1 and 2)
- 1x 2.5GbE RJ-45, via RTL8125BGS

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

**SECURITY & PRIVACY**

**Security**

Security Chip
- Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
- Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
- Chassis intrusion switch

Fingerprint Reader
- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Certificate based BIOS management
- Cover presence switch
- Individual USB port disablement
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

**MANAGEABILITY**
System Management
System Management
• Intel® vPro® Enterprise
• Intel® vPro® Essentials
• Non-vPro®

Notes:
[1], [2] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE
Warranty
Base Warranty
• 1-year courier or carry-in service
• 1-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES
Bundled Accessories
• DP to DVI dongle
• DP to Dual DP dongle
• DP to HDMI® dongle
• DP to VGA dongle
• HDMI® to HDMI® cable (1.5m)
• HDMI® to VGA dongle
• None

OPERATING REQUIREMENTS
Operating Environment
Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)
Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%
Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

ENVIRONMENTAL
Sustainability
Material
85% PCC recycled plastic used in product chassis
95% PCC recycled plastic used in USB keyboard/mouse
90% PIC recycled plastic EPE cushion or 90% PCC recycled plastic thermal shell with 30% OBP material
30% OBP used in bag
FSC certified paper in packaging

Notes:
PIC: Post Industry Content, recycled materials from internal factories.
EPE: Expanded Polyethylene.
OBP: Ocean Bound Plastic, reducing plastic spill into the sea.
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Silver Registered[2]
• ErP Lot 3
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
(Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>2</td>
<td>USB 3.2 Gen 2</td>
</tr>
<tr>
<td>3</td>
<td>USB 3.2 Gen 2 (Always On and fast charge)</td>
</tr>
<tr>
<td>4</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>5</td>
<td>Power connector</td>
</tr>
<tr>
<td>6</td>
<td>DisplayPort 1.4a</td>
</tr>
<tr>
<td>7</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>8</td>
<td>HDMI</td>
</tr>
<tr>
<td>9</td>
<td>USB 3.2 Gen 1 (with Smart Power On feature)</td>
</tr>
<tr>
<td>10</td>
<td>USB 3.2 Gen 2</td>
</tr>
<tr>
<td>11</td>
<td>USB 3.2 Gen 2</td>
</tr>
<tr>
<td>12</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>13</td>
<td>Punch out port 1 *</td>
</tr>
<tr>
<td>14</td>
<td>Punch out port 2 *</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models.
PERFORMANCE

Processor

Processor Family

13th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor, 35W

Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-13100T</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.2GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400T</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 1.3GHz / E-core 1.0GHz</td>
<td>P-core 4.4GHz / E-core 3.0GHz</td>
<td>20MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13500T</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.6GHz / E-core 3.2GHz</td>
<td>24MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-13600T</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.4GHz</td>
<td>24MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700T</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 1.4GHz / E-core 1.0GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz</td>
<td>30MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-13900T</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 1.1GHz / E-core 0.8GHz</td>
<td>Max Turbo up to 5.3GHz / P-core 5.1GHz / E-core 3.9GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[1]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C® with DP function)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4a (HBR2, DSC), 2x punch out ports[2x HDMI®/VGA/DP] or [USB-C® with DP function, HDMI®/VGA/DP]</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C® with DP function)</td>
<td>1x HDMI® 2.1 TMDS, 1x DP 1.4a (HBR2, DSC), 2x punch out ports[2x HDMI®/VGA/DP] or [USB-C® with DP function, HDMI®/VGA/DP]</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Monitor Support
Monitor Support
Supports up to 4 independent displays via (onboard DP, onboard HDMI®, punch out port 1 [VGA / HDMI® / DP / USB-C*], and punch out port 2 [VGA / HDMI® / DP]).

Chipset
Chipset
Intel® Q670 chipset

Memory
Max Memory[1]
Up to 64GB (2x 32GB DDR5 SO-DIMM)
Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable
Memory Type*[2]
• DDR5-4800
• DDR5-5200
• DDR5-5600

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR5-5600 but may run as DDR5-4800, DDR5-5200, or DDR5-5600 depending on the memory support capability of processor.

Storage
Storage Support[3]
Up to three drives, 1x 2.5" HDD + 2x M.2 SSD
• 2.5" HDD up to 1TB
• M.2 SSD up to 2TB each
Storage Type***

<table>
<thead>
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<th>RPM</th>
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<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe*, PCIe 4.0 x4</td>
<td>-</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe*, PCIe 4.0 x4 Performance</td>
<td>-</td>
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<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
None

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage
Optical
None
Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC256VB codec
Speakers**
• Premium single speaker, 2W x1
• Single speaker, 2W x1
Microphone
No microphone
Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
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<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>135W</td>
<td>Adapter</td>
<td>90%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>No power supply</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

DESIGN

Input Device

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

Mechanical

Form Factor
Tiny (1L)

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>179 x 182.9 x 36.5 mm with rubber feet (7.05 x 7.2 x 1.44 inches)</td>
</tr>
<tr>
<td>Tiny &amp; ODD</td>
<td>204.2 x 186.6 x 64 mm with rubber feet (8.04 x 7.35 x 2.52 inches with rubber feet)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)[2]
- Tiny only: 490 x 250 x 130 mm (19.29 x 9.84 x 5.12 inches)
- Tiny & ODD: 490 x 268 x 166 mm (19.29 x 10.55 x 6.54 inches)

Weight[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>1.25 kg (2.76 lbs)</td>
</tr>
<tr>
<td>With VESA mount &amp; ODD box</td>
<td>1.74 kg (3.84 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight[4]
- Tiny only: Around 3.2 kg (7.05 lbs)
- Tiny & ODD: Around 3.9 kg (8.6 lbs)

Case Color
- Black

Bays
- 1x 2.5” disk bay (optional, or bay comes with disk)
- No bays

Expansion Slots
- Two M.2 PCIe® Gen 4x4 slots (for SSD)
- One M.2 slot (for WLAN)

EOU
- (Optional) toolless chassis open (toolless chassis screw required) and toolless M.2 SSD, HDD, memory assembly / removal
- No support
Stand
- Vertical stand
- No stand

IO Box
No IO box

Mounting
- VESA mount bracket kit, supports VESA mount 75mm and 100mm
- None

Others
- (Optional) Dust filter
- (Optional) Power adapter cage

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The new packages take effect from September 2023. The old packages are:
Tiny only: 500 x 150 x 280 mm (19.69 x 5.91 x 11.02 inches)
Tiny & ODD: 500 x 175 x 280 mm (19.69 x 6.89 x 11.02 inches)
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[4] The new packages take effect from September 2023. The old package are:
Tiny only: 2.85 kg (6.28 lbs)
Tiny & ODD: 3.58 kg (7.89 lbs)

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45
- No optional Ethernet

WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[2]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card[3]
- No WLAN and Bluetooth®

Notes:

Ports[1]

Front Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer)
- 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
- 1x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
None

Rear Ports
- 2x USB 3.2 Gen 1 (one supports Smart Power On)
- 2x USB 3.2 Gen 2
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)
Optional Rear Ports

- Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® 3.2 Gen 1 with DisplayPort™ functions)
- Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / RJ-45)
- 2x USB 3.2 Gen 1 (share one USB 3.2 Gen 1 bandwidth, occupies port 1 and 2)
- 4x USB 3.2 Gen 1 (share one USB 3.2 Gen 1 bandwidth, occupy port 1 and 2)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security

- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Certificate based BIOS management
- Cover presence switch
- Individual USB port disablement
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management

- Intel® vPro® Enterprise with Intel® AMT 16[1]
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty**

- 1-year courier or carry-in service
- 1-year limited onsite service
3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories
• DP to DVI dongle
• DP to Dual DP dongle
• DP to HDMI® dongle
• DP to VGA dongle
• HDMI® to HDMI® cable (1.5m)
• HDMI® to VGA dongle
• None

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

ENVIRONMENTAL

Sustainability

Material
85% PCC recycled plastic used in product chassis
95% PCC recycled plastic used in USB keyboard/mouse
90% PIC recycled plastic EPE cushion or 90% PCC recycled plastic thermal shell with 30% OBP material
30% OBP used in bag
FSC certified paper in packaging

Notes:
PIC: Post Industry Content, recycled materials from internal factories.
EPE: Expanded Polyethylene.
OBP: Ocean Bound Plastic, reducing plastic spill into the sea.
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications

Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Silver Registered
ThinkCentre M80q Gen 4

- (Optional) EPEAT™ Gold Registered[3]
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2], [3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

(Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test

MIL-STD-810H military test passed

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Headphone / microphone combo jack (3.5mm) 8. HDMI
2. USB 3.2 Gen 2 9. USB 3.2 Gen 1 (with Smart Power On feature)
3. USB 3.2 Gen 2 (Always On and fast charge) 10. USB 3.2 Gen 2
4. USB-C 3.2 Gen 2 11. USB 3.2 Gen 2
5. Power connector 12. Ethernet (RJ-45)
6. DisplayPort 1.4 13. Punch out port 1 *
7. USB 3.2 Gen 1 14. Punch out port 2 *

Notes:
• Items with * are only available on selected models
## PERFORMANCE

### Processor

**Processor Family**

Intel® Celeron®, Intel® Pentium®, or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

### Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® G6900</td>
<td>2</td>
<td>2</td>
<td>3.4GHz</td>
<td></td>
<td>4MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Celeron® G6900T</td>
<td>2</td>
<td>2</td>
<td>2.8GHz</td>
<td></td>
<td>4MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 710</td>
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<tr>
<td>Pentium® Gold G7400</td>
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<td>4</td>
<td>3.7GHz</td>
<td></td>
<td>6MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 710</td>
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<tr>
<td>Pentium® Gold G7400T</td>
<td>2</td>
<td>4</td>
<td>3.1GHz</td>
<td></td>
<td>6MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 710</td>
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<tr>
<td>Core i3-12100</td>
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<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz [1]</td>
<td>12MB</td>
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<td>Core i3-12100T</td>
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<td>Intel® UHD Graphics 730</td>
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<tr>
<td>Core i3-12300</td>
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<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz [3]</td>
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<td>P-core 4.2GHz [4]</td>
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<tr>
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<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz [5]</td>
<td>18MB</td>
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<tr>
<td>Core i5-12400T</td>
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<td>P-core 1.8GHz</td>
<td>P-core 4.2GHz [6]</td>
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<td>DDR5-4800</td>
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<tr>
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<td>Core i5-12500T</td>
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<td>Core i5-12600</td>
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<td>P-core 3.3GHz</td>
<td>P-core 4.8GHz [9]</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12600T</td>
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<td>12</td>
<td>P-core 2.1GHz</td>
<td>P-core 4.6GHz [10]</td>
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<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
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<td>20</td>
<td>P-core 2.1GHz</td>
<td>P-core 1.6GHz</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700T</td>
<td>12</td>
<td>20</td>
<td>P-core 1.4GHz</td>
<td>P-core 4.8GHz</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16</td>
<td>24</td>
<td>P-core 2.4GHz</td>
<td>P-core 1.8GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900T</td>
<td>16</td>
<td>24</td>
<td>P-core 1.4GHz</td>
<td>P-core 4.8GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:

[1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12], [13], [14] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.
### Operating System

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux
- Red Hat Enterprise Linux 8.6 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](#))
- No preload operating system

---

**Notes:**

[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.

### Graphics

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI*), 1920x1200@60Hz(VGA), 4096x2160@60Hz(DP), 4096x2160@60Hz(USB-C* with DP function)</td>
<td>1x HDMI* 2.1 TMDS, 1x DP 1.4, 2x punch out ports((2x HDMI*/VGA/DP) or [USB-C* with DP function, HDMI*/VGA/DP])</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI*), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP), 4096x2304@60Hz(USB-C* with DP function)</td>
<td>1x HDMI* 2.1 TMDS, 1x DP 1.4, 2x punch out ports((2x HDMI*/VGA/DP) or [USB-C* with DP function, HDMI*/VGA/DP])</td>
<td>DirectX® 12</td>
</tr>
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<td>Intel® UHD graphics 770</td>
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<td>1x HDMI* 2.1 TMDS, 1x DP 1.4, 2x punch out ports((2x HDMI*/VGA/DP) or [USB-C* with DP function, HDMI*/VGA/DP])</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® Iris® Xe MAX 100</td>
<td>Discrete</td>
<td>2GB LPDDR4X</td>
<td>3840x2160@60Hz(DP)</td>
<td>2x DP 1.4</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

### Monitor Support

**Monitor Support**

Supports up to 4 independent displays via (onboard DP, onboard HDMI*, punch out port 1 [VGA / HDMI* / DP / USB-C*], and punch out port 2 [VGA / HDMI* / DP])

### Chipset

**Chipset**

Intel® Q670 chipset

### Memory

**Max Memory**

Up to 64GB DDR5-4800

**Memory Slots**

Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR5-4800

---

**Notes:**

ThinkCentre M90q Gen 3 - May 20 2024
The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

**Storage Support**

Up to three drives, 1x 2.5" HDD + 2x M.2 SSD
- 2.5" HDD up to 1TB
- M.2 SSD up to 2TB each

<table>
<thead>
<tr>
<th>Storage Type** ***</th>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>500GB / 1TB</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe NVMe*, PCIe 3.0 x2</td>
<td>-</td>
<td>128GB</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe*, PCIe 4.0 x4</td>
<td>-</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe*, PCIe 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
<td></td>
</tr>
</tbody>
</table>

RAID

RAID 0/1 support for M.2 SSDs (RAID preset only available via special bid models)

Notes:

The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Optical**
- DVD-ROM, slim (9.0mm), via USB external ODD box
- DVD burner (DVD±RW), slim (9.0mm), via USB external ODD box
- None

**Card Reader**

No card reader

**Multi-Media**

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC256VB codec

**Speakers**
- Premium single speaker, 2W x1
- Single speaker, 2W x1

**Power Supply**

**Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
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<tr>
<td>65W</td>
<td>Adapter</td>
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<tr>
<td>90W</td>
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</tr>
<tr>
<td>135W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>230W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>No power supply</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
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</table>

**DESIGN**

**Input Device**

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard
Mouse

- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Fingerprint Mouse (USB connector), black (EOL on Jan, 2023)
- No mouse

Mechanical

Form Factor
Tiny (1L)

Dimensions (WxDxH)[3]

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Weight[3]

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</table>

Packaging Weight[4]

- Tiny only: Around 3.2 kg (7.05 lbs)
- Tiny & ODD: Around 3.9 kg (8.6 lbs)

Case Color
Black

Bays
1x 2.5" disk bay

Expansion Slots
- One PCIe® 4.0 x8, low-profile
- Two M.2 PCIe® Gen 4x4 slots (for SSD)
- One M.2 slot (for WLAN)

EOU
- (Optional) toolless chassis open (toolless chassis screw required) and toolless M.2 SSD, HDD, memory assembly / removal
- No support

Stand
- Vertical stand
- No stand

IO Box
No IO box

Mounting
- VESA mount bracket kit, supports VESA mount 75mm and 100mm
- None

Others
- (Optional) Dust filter
- (Optional) Power adapter cage

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The new packages take effect from September 2023. The old packages are:
Tiny only: 500 x 150 x 280 mm (19.69 x 5.91 x 11.02 inches)
Tiny & ODD: 500 x 175 x 280 mm (19.69 x 6.89 x 11.02 inches)
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of
component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

[4] The new packages take effect from September 2023. The old package are:
Tiny only: 2.85 kg (6.28 lbs)
Tiny & ODD: 3.58 kg (7.89 lbs)

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
• Gigabit Ethernet, Intel® Ethernet Server Adapter I350-T4, 4x RJ-45, PCIe® x4
• 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, supports Wake-on-LAN
• No optional Ethernet

WLAN + Bluetooth®

• Realtek® Wi-Fi® 6 RTL8852AE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, Intel® vPro® technology support, M.2 Card
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
• Realtek® Wi-Fi® 6E RTL8852CE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
• AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
• No WLAN and Bluetooth*

Notes:
[1] Intel® Ethernet Server Adapter I350-T4 is not available in EMEA.
[2], [3], [6], [7], [8] Bluetooth® 5.3 requires Windows® 11.

Ports

Front Ports
• 1x USB-C® 3.2 Gen 2 (support data transfer)
• 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
• 1x USB 3.2 Gen 2
• 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
None

Rear Ports
• 2x USB 3.2 Gen 1 (one supports Smart Power On)
• 2x USB 3.2 Gen 2
• 1x HDMI® 2.1 TMD
• 1x DisplayPort™ 1.4
• 1x Ethernet (RJ-45)

Optional Rear Ports
• Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® 3.2 Gen 1 with DisplayPort™ functions)
• Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / RJ-45)
• 2x USB 3.2 Gen 1 (share one USB 3.2 Gen 1 bandwidth, occupies port 1 and 2)
• 2x USB 3.2 Gen 1 (share one USB 3.2 Gen 1 bandwidth, occupy port 1 and 2)
• 1x 2.5GbE RJ-45, via RTL8125BGS
• 4x GbE RJ-45, via additional PCIe® adapter

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

Fingerprint Reader
- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Certificate based BIOS management
- Cover presence switch
- Individual USB port disablement
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise[1]
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories
Bundled Accessories

- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® cable (1.5m)
- HDMI® to VGA dongle
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

ENVIRONMENTAL

Sustainability

Material
- 85% PCC recycled plastic used in product chassis
- 95% PCC recycled plastic used in USB keyboard/mouse
- 90% PIC recycled plastic EPE cushion or 90% PCC recycled plastic thermal shell with 30% OBP material
- 30% OBP used in bag
- FSC certified paper in packaging

Notes:

CERTIFICATIONS

Green Certifications

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com. [2], [3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
(Optional) TÜV Rheinland® Ultra Low Noise
Mil-Spec Test
MIL-STD-810H military test passed

- Feature with ** means that only one offering listed under the feature is configured on selected models.

- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>2</td>
<td>USB 3.2 Gen 2</td>
</tr>
<tr>
<td>3</td>
<td>USB 3.2 Gen 2 (Always On and fast charge)</td>
</tr>
<tr>
<td>4</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>5</td>
<td>Power connector</td>
</tr>
<tr>
<td>6</td>
<td>DisplayPort 1.4a</td>
</tr>
<tr>
<td>7</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>8</td>
<td>HDMI</td>
</tr>
<tr>
<td>9</td>
<td>USB 3.2 Gen 1 (with Smart Power On feature)</td>
</tr>
<tr>
<td>10</td>
<td>USB 3.2 Gen 2</td>
</tr>
<tr>
<td>11</td>
<td>USB 3.2 Gen 2</td>
</tr>
<tr>
<td>12</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>13</td>
<td>Punch out port 1 *</td>
</tr>
<tr>
<td>14</td>
<td>Punch out port 2 *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
## PERFORMANCE

### Processor

**Processor Family**
13th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor, 35W or 65W

#### Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-13100T</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.2GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400T</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 1.3GHz / E-core 1.0GHz</td>
<td>P-core 4.4GHz / E-core 3.0GHz</td>
<td>20MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-13500T</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.6GHz / E-core 1.2GHz</td>
<td>P-core 4.6GHz / E-core 3.2GHz</td>
<td>24MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-13600</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.7GHz / E-core 2.0GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-13600T</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.4GHz</td>
<td>24MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700T</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 1.4GHz / E-core 1.0GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz</td>
<td>30MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-13900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-13900T</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 1.1GHz / E-core 0.8GHz</td>
<td>Max Turbo up to 5.3GHz / P-core 5.1GHz / E-core 3.9GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

**Notes:**

[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

### Operating System

#### Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[1]
- No preload operating system

**Notes:**

[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

### Graphics

#### Graphics**
## ThinkCentre M90q Gen 4

### Monitor Support

**Monitor Support**

Supports up to 4 independent displays via (onboard DP, onboard HDMI®, punch out port 1 [VGA / HDMI® / DP / USB-C®], and punch out port 2 [VGA / HDMI® / DP]).

### Chipset

**Chipset**

Intel® Q670 chipset

### Memory

**Max Memory**[1]

Up to 64GB (2x 32GB DDR5 SO-DIMM)

**Memory Slots**

Two DDR5 SO-DIMM slots, dual-channel capable

**Memory Type**[2]

- DDR5-4800
- DDR5-5200
- DDR5-5600

**Notes:**

[1] The max memory is based on the test results with current Lenovo® memory offerings.

[2] Installed memory is actually DDR5-5600 but may run as DDR5-4800, DDR5-5200, or DDR5-5600 depending on the memory support capability of processor.

### Storage

**Storage Support**[3]

Up to three drives, 1x 2.5” HDD + 2x M.2 SSD

- 2.5” HDD up to 1TB
- M.2 SSD up to 2TB each

**Storage Type**[**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**RAID**

None

**Notes:**

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

### Removable Storage

**Optical**

---

---
ThinkCentre M90q Gen 4

- DVD-ROM, slim (9.0mm), via USB external ODD box
- DVD burner (DVD±RW), slim (9.0mm), via USB external ODD box
- None

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC256VB codec

Speakers**
- Premium single speaker, 2W x1
- Single speaker, 2W x1

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>135W</td>
<td>Adapter</td>
<td>90%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>230W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>No power supply</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

DESIGN

Input Device

Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

Mechanical

Form Factor
Tiny (1L)

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>179 x 182.9 x 36.5 mm with rubber feet (7.05 x 7.2 x 1.44 inches)</td>
</tr>
<tr>
<td>Tiny &amp; ODD</td>
<td>204.2 x 186.6 x 64 mm with rubber feet (8.04 x 7.35 x 2.52 inches with rubber feet)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)[2]
- Tiny only: 490 x 250 x 130 mm (19.29 x 9.84 x 5.12 inches)
- Tiny & ODD: 490 x 268 x 166 mm (19.29 x 10.55 x 6.54 inches)

Weight[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>1.25 kg (2.76 lbs)</td>
</tr>
<tr>
<td>With VESA mount &amp; ODD box</td>
<td>1.74 kg (3.84 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight[4]
- Tiny only: Around 3.2 kg (7.05 lbs)
Tiny & ODD: Around 3.9 kg (8.6 lbs)

Case Color
Black

Bays
1x 2.5" disk bay (optional, or bay comes with disk)
No bays

Expansion Slots
One PCIe® 4.0 x8, low-profile
Two M.2 PCIe® Gen 4x4 slots (for SSD)
One M.2 slot (for WLAN)

EOU
(Optional) toolless chassis open (toolless chassis screw required) and toolless M.2 SSD, HDD, memory assembly / removal
No support

Stand
Vertical stand
No stand

IO Box
No IO box

Mounting
VESA mount bracket kit, supports VESA mount 75mm and 100mm
None

Others
(Optional) Dust filter
(Optional) Power adapter cage

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The new packages take effect from September 2023. The old packages are:
Tiny only: 500 x 150 x 280 mm (19.69 x 5.91 x 11.02 inches)
Tiny & ODD: 500 x 175 x 280 mm (19.69 x 6.89 x 11.02 inches)
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[4] The new packages take effect from September 2023. The old package are:
Tiny only: 2.85 kg (6.28 lbs)
Tiny & ODD: 3.58 kg (7.89 lbs)

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet**
2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45
Gigabit Ethernet, Intel® Ethernet Server Adapter I350-T4, 4x RJ-45, PCIe® x4
No optional Ethernet

WLAN + Bluetooth®**
Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[1]
Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[2]
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card[3]
No WLAN and Bluetooth®

Notes:
Bluetooth® 5.2 requires Windows® 11.

**Ports[1]**

**Front Ports**
- 1x USB-C® 3.2 Gen 2 (support data transfer)
- 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
- 1x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

**Optional Front Ports**
None

**Rear Ports**
- 2x USB 3.2 Gen 1 (one supports Smart Power On)
- 2x USB 3.2 Gen 2
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)

**Optional Rear Ports**
- Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® 3.2 Gen 1 with DisplayPort™ functions)
- Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / RJ-45)
- 1x Thunderbolt™ 4 (supports data transfer, Power Delivery 3.0 and DisplayPort™ 1.4, via Thunderbolt™ expansion card, PCIe® x4)
- 2x USB 3.2 Gen 1 (share one USB 3.2 Gen 1 bandwidth, occupies port 1 and 2)
- 4x USB 3.2 Gen 1 (share one USB 3.2 Gen 1 bandwidth, occupy port 1 and 2)
- 4x GbE RJ-45, via additional PCIe® adapter
- 4x serial (via 4-port serial expansion card, PCIe® x1)

**Notes:**
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

**SECURITY & PRIVACY**

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**
Kensington® Security Slot™, 3 x 7 mm

**Chassis Intrusion Switch**
Chassis intrusion switch

**Fingerprint Reader**
No fingerprint reader

**BIOS Security**
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Certificate based BIOS management
- Cover presence switch
- Individual USB port disablement
- Self-healing BIOS
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

- Intel® vPro® Enterprise
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty**
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:

[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® cable (1.5m)
- HDMI® to VGA dongle
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

ENVIRONMENTAL

Sustainability

Material
- 85% PCC recycled plastic used in product chassis
95% PCC recycled plastic used in USB keyboard/mouse
90% PIC recycled plastic EPE cushion or 90% PCC recycled plastic thermal shell with 30% OBP material
30% OBP used in bag
FSC certified paper in packaging

Notes:
PIC: Post Industry Content, recycled materials from internal factories.
EPE: Expanded Polyethylene.
OBP: Ocean Bound Plastic, reducing plastic spill into the sea.
FSC: Forest Stewardship Council.

CERTIFICATIONS

Green Certifications[^1]
Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Silver Registered[^2]
• (Optional) EPEAT™ Gold Registered[^3]
• ErP Lot 3
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
[2], [3] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

Other Certifications
Other Certifications
(Optional) TÜV Rheinland® Ultra Low Noise
Mil-Spec Test
MIL-STD-810H military test passed

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Headphone / microphone combo jack (3.5mm)
2. USB-C 3.2 Gen 2 (support data transfer and 5V@0.9A charging)
3. USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
4. Power button
5. Power-in
6. DisplayPort 1.4
7. USB 3.2 Gen 2
8. HDMI 2.1 TMDS
9. USB 2.0
10. USB 2.0
11. USB 3.2 Gen 2
12. Ethernet (RJ-45)
13. Punch out port *

Notes:
• Items with * are only available on selected models
**PERFORMANCE**

**Processor**

**Processor Family**
12th Generation Intel® Core™ i3, or 13th Generation Intel® Core™ i5 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz[^1]</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
</tbody>
</table>

Notes:
[^1], [^2] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux[^1]
- No preload operating system

Notes:
[^1] The pre-installed IGEL OS version is 11.08.240
The device is preload with a free evaluation license. The evaluation license will be valid for a period of 90 days.

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(DP), 4096x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA)</td>
<td>1x DP 1.4, 1x HDMI® 2.1 TMDS, 1x punch out port (1x VGA or 1x DP 1.4)</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

**Monitor Support**

**Monitor Support**

Supports up to 3 independent displays via (onboard DP, onboard HDMI®, punch out port 1 [VGA / DP])

**Chipset**

**Chipset**

Intel® SoC (System on Chip) platform

**Memory**

**Max Memory[^3]**

Up to 32GB DDR4-3200

**Memory Slots**

Two DDR4 SO-DIMM slots, dual-channel capable

**Memory Type**

DDR4-3200
Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
Up to two drives, 1x 2.5” HDD + 1x M.2 SSD
• 2.5” HDD up to 1TB
• M.2 SSD up to 1TB

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] 2.5” HDD bracket kit only comes with pre-configured HDD models.

Removable Storage

Optical
None

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC256 codec

Speakers
Single speaker, 2W x1

Microphone
No microphone

Power Supply

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>135W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>No power supply</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
[1] The optional 90w adapter may increase performance scores when i5-13420H CPUs are installed.

When work with TIO monitor, an appropriate power adapter is needed. Customer may need to:
• Order a Tiny for TIO MT (12LQ, 12LR) models
• Or for Intel® Core™ i5 models order an additional 135W power adapter, for Intel® Core™ i3 models order an additional 90W power adapter. If original power adapter is less than 135W (i5 models) or 90W (i3 models).

DESIGN

Input Device

Keyboard
Lenovo® Calliope Keyboard (USB connector), black
• No keyboard
Mouse
• Lenovo® Calliope Mouse (USB connector), black
• No mouse

Mechanical
Form Factor
Tiny (1L)

Dimensions (WxDxH)\[1\]
179 x 182.9 x 36.5 mm (7.05 x 7.2 x 1.44 inches)

Packaging Dimensions (WxDxH)\[2\]
494 x 250 x 130 mm (19.45 x 9.84 x 5.12 inches)

Weight\[3\]
Around 1.11 kg (2.45 lbs)

Packaging Weight\[4\]
Around 3.2 kg (7.05 lbs)

Case Color
Black

Bays
1x 2.5” disk bay (optional, or bay comes with disk)

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

EOU
(Optional) Toolless cover (toolless chassis screw required), stand, optional 2.5” HDD bracket assembly / removal

Stand
• Vertical stand
• No stand

Mounting
• Supports VESA mount 100mm
• None

Cooling System (Fan & Cooler)
1x system fan

Others
(Optional) Power adapter cage

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The new package takes effect from November 2023. The old package is:
140 x 262 x 500 mm (5.51 x 10.31 x 19.69 inches)
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[4] The new package takes effect from November 2023. The old package is:
Around 5.18 kg (11.42 lbs)

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111K-CG, 1x RJ-45

WLAN + Bluetooth®
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card\[1\]
Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card

No WLAN and Bluetooth®

Notes:

Ports

Front Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer and 5V@0.9A charging)
- 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
None

Rear Ports
- 2x USB 2.0
- 2x USB 3.2 Gen 2
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

Optional Rear Ports
Punch out port (one of VGA / DisplayPort™ 1.4 / serial)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Security Chip
Firmware TPM 2.0 integrated in SoC

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

BIOS Security
- Supervisor password
- Administrator password
- Hard disk password
- Boot sequence control
- Cover presence switch
- Individual USB port disablement
- Intel® BIOS guard
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management
None

SERVICE

Warranty[^1]

Base Warranty**
- 1-year courier or carry-in service
- 1-year limited onsite service
- No base warranty

Notes:
[^1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to [https://smartfind.lenovo.com/](https://smartfind.lenovo.com/). To learn more details of warranty policy, please access [https://pcsupport.lenovo.com/warranty](https://pcsupport.lenovo.com/warranty).

ACCESSORIES

Bundled Accessories

Bundled Accessories
- DP to DVI dongle
- DP to VGA dongle

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 20% to 90%

Altitude
- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 10668 m (35,000 ft)

CERTIFICATIONS

Green Certifications[^1]

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered[^2]
- ErP Lot 3 and Lot 7
- RoHS compliant
- TCO Certified 9.0

Notes:
[^1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
[^2] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

Other Certifications

Other Certifications
(Optional) TÜV Rheinland® Ultra Low Noise
Feature with ** means that only one offering listed under the feature is configured on selected models.

Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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OVERVIEW

1. Headphone / microphone combo jack (3.5mm)
2. USB-C 3.2 Gen 2 (support data transfer and 5V@0.9A charging)
3. USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
4. Power button
5. Power-in
6. DisplayPort 1.4
7. USB 3.2 Gen 2
8. HDMI 2.1 TMDS
9. USB 2.0
10. USB 2.0
11. USB 3.2 Gen 2
12. Ethernet (RJ-45)
13. Punch out port *

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Intel® Celeron® or 12th Generation Intel® Core™ i3 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® 7305</td>
<td>5 (1 P-core + 4 E-core)</td>
<td>6</td>
<td>P-core 1.1GHz / E-core 0.9GHz</td>
<td>P-core 1.1GHz / E-core 0.9GHz</td>
<td>8MB</td>
<td>Intel® UHD Graphics</td>
</tr>
<tr>
<td>Core i3-1215U</td>
<td>6 (2 P-core + 4 E-core)</td>
<td>8</td>
<td>P-core 1.2GHz / E-core 0.9GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>10MB</td>
<td>Intel® UHD Graphics</td>
</tr>
</tbody>
</table>

Notes:
[1], [2] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
- Windows® 10 IoT Enterprise (Thin Client)[^1]
- IGEL Linux[^2]
- LeTOS™ V2 (Lenovo® Terminal Operating System, Linux-based)[^3]
- No preload operating system

Notes:
[^1] Windows® 10 IoT Enterprise (Thin Client) is EOL
[^2] The pre-installed IGEL OS version is 11.08.240
[^3] The device is preload with a free evaluation license. The evaluation license will be valid for a period of 90 days.
[^3] LeTOS™ V2 (Lenovo® Terminal Operating System, Linux-based) is EOL

Graphics

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(DP), 4096x2160@60Hz(HDMI*), 1920x1200@60Hz(VGA)</td>
<td>1x DP 1.4, 1x HDMI® 2.1 TMDS, 1x punch out port (1x VGA or 1x DP 1.4)</td>
<td>DirectX® 12.1</td>
</tr>
</tbody>
</table>

Monitor Support

Monitor Support
Supports up to 3 independent displays via (onboard DP, onboard HDMI*, punch out port 1 [VGA / DP])

Chipset

Chipset
Intel® SoC (System on Chip) platform

Memory

Max Memory[^4]
- Models with Intel® Celeron® processor: Up to 16GB DDR4-3200
- Models with Intel® Core™ processor: Up to 32GB DDR4-3200

Memory Slots
- Models with Intel® Core™ processor: Two DDR4 SO-DIMM slots, dual-channel capable
- Models with Intel® Celeron® processor: One DDR4 SO-DIMM slot, dual-channel capable

Memory Type
DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support
One drive, 256GB M.2 2280 SSD

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage

Optical
None

Card Reader
No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC256 codec

Speakers
Single speaker, 2W x1

Microphone
No microphone

Power Supply

Power Supply**[1]

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>65W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>90W</td>
<td>Adapter</td>
<td>89%</td>
<td>Autosensing</td>
</tr>
<tr>
<td>No power supply</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
[1] When work with TIO monitor, an appropriate power adapter is needed. Customer may need to:
  • Order a Tiny for TIO MT (12LK, 12LK, 12M3, 12M4) models
  • Or order an additional 90W power adapter. If original power adapter is less than 90W.

DESIGN

Input Device

Keyboard
• Lenovo® Calliope Keyboard (USB connector), black
• No keyboard

Mouse
• Lenovo® Calliope Mouse (USB connector), black
• No mouse

Mechanical

Form Factor
**Tiny (1L)**

**Dimensions (WxDxH)[1]**
179 x 182.9 x 36.5 mm (7.05 x 7.2 x 1.44 inches)

**Packaging Dimensions (WxDxH)[2]**
494 x 250 x 130 mm (19.45 x 9.84 x 5.12 inches)

**Weight[3]**
Around 1.11 kg (2.45 lbs)

**Packaging Weight[4]**
Around 3.2 kg (7.05 lbs)

**Case Color**
Black

**Bays**
No bays

**Expansion Slots**
Two M.2 slots (one for WLAN, one for SSD)

**EOU**
- No support
- (Optional) Toolless cover (toolless chassis screw required), stand, optional 2.5” HDD bracket assembly / removal

**Stand**
- Vertical stand
- No stand

**Mounting**
- Supports VESA mount 100mm
- None

**Cooling System (Fan & Cooler)**
- No System Fan
- 1x system fan

**Others**
(Optional) Power adapter cage

___

**Notes:**

[1] The system dimensions may vary depending on configurations.
[2] The new package takes effect from November 2023. The old package is: 140 x 262 x 500 mm (5.51 x 10.31 x 19.69 inches)
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

---

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Realtek® RTL8111K-CG, 1x RJ-45

**WLAN + Bluetooth®**
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[2]
- No WLAN and Bluetooth®

___

**Notes:**

[1], [2] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

**Ports[1]**
Front Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer and 5V@0.9A charging)
- 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
None

Rear Ports
- 2x USB 2.0
- 2x USB 3.2 Gen 2
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

Optional Rear Ports
- Punch out port (one of VGA / DisplayPort™ 1.4 / serial)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

[2] Punch out ports only available on i3 models.

SECURITY & PRIVACY

Security
Security Chip
Firmware TPM 2.0 integrated in SoC

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

BIOS Security
- Supervisor password
- Administrator password
- Hard disk password
- Boot sequence control
- Cover presence switch
- Individual USB port disablement
- Intel® BIOS guard
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management
None

SERVICE

Warranty[1]
**Base Warranty**
- 1-year courier or carry-in service
- 1-year limited onsite service
- No base warranty

**Notes:**
[1] The warranty upgrades may be bundled with some models, please check the "included upgrade" column in the specific model's configurations. For more service extensions, please go to [https://smartfind.lenovo.com/](https://smartfind.lenovo.com/). To learn more details of warranty policy, please access [https://pcsupport.lenovo.com/warranty](https://pcsupport.lenovo.com/warranty).

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**
- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

**Relative Humidity**
- Operating: 20% to 80%
- Storage: 10% to 90%

**Altitude**
- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 10668 m (35,000 ft)

**CERTIFICATIONS**

**Green Certifications**
- (Optional) ENERGY STAR® 8.0
- ErP Lot 3 and Lot 7
- RoHS compliant
- TCO Certified 9.0

**Other Certifications**
- (Optional) TÜV Rheinland® Ultra Low Noise

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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### OVERVIEW

<p>| | | | | | | | | | | | | | | | |</p>
<table>
<thead>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
<td>10</td>
<td>USB-A (USB 10Gbps)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>USB-A (USB 10Gbps)</td>
<td>11</td>
<td>Ethernet (GbE RJ-45)</td>
<td></td>
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<tr>
<td>3</td>
<td>USB-A (USB 10Gbps), Always On</td>
<td>12</td>
<td>Punch out port 1 *</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>USB-C (USB 20Gbps)</td>
<td>13</td>
<td>Punch out port 2 *</td>
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<tr>
<td>5</td>
<td>DisplayPort 1.4a</td>
<td>14</td>
<td>DisplayPort 1.4a</td>
<td></td>
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</tr>
<tr>
<td>6</td>
<td>USB-A (USB 5Gbps)</td>
<td>15</td>
<td>HDMI 2.1a FRL</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>HDMI 2.1 TMDS</td>
<td>16</td>
<td>DisplayPort 1.4a</td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>USB-A (USB 5Gbps)</td>
<td>17</td>
<td>DisplayPort 1.4a</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9</td>
<td>USB-A (USB 10Gbps)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
14th Generation Intel® Core™ i5 / i7 / i9 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-14500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-14500T</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.8GHz / E-core 3.4GHz</td>
<td>24MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700T</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 1.3GHz / E-core 0.9GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.0GHz / E-core 3.7GHz</td>
<td>33MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-14900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.8GHz / P-core 5.4GHz / E-core 4.3GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-14900T</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 1.1GHz / E-core 0.8GHz</td>
<td>Max Turbo up to 5.5GHz / P-core 5.1GHz / E-core 4.0GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

NPU

NPU

- Discrete NPU card
- None

Graphics

Graphics***[1]

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI*), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP)</td>
<td>1x HDMI* 2.1 TMDS, 1x DP 1.4a (HBR2, DSC), 2x punch out ports (2x HDMI*/VGA/DP)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 4060</td>
<td>Discrete</td>
<td>8G GDDR6</td>
<td>7680x4320@60Hz(HDMI*), 7680x4320@60Hz(DP)</td>
<td>1x HDMI* 2.1a FRL, 3x DP 1.4a (HBR3, DSC)</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support

Monitor Support

Supports up to 8 independent displays. 4 displays support via onboard ports (1x DP, 1x HDMI* + 2x optional port [VGA / DP / HDMI*]), 4 displays support via discrete graphics ports (3x DP + 1x HDMI*)
Chipset
Intel® Q670 chipset

Memory
Max Memory\(^{[1]}\)
Up to 64GB DDR5-5200

Memory Slots
Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type
• DDR5-4800
• DDR5-5200
• DDR5-5600

Memory Protection
Non-ECC

Notes:
\(^{[1]}\) The max memory is based on the test results with current Lenovo® memory offerings.

Storage
Storage Support\(^{[2]}\)
Dual SSD mode: up to two drives, 2x M.2 SSD
• M.2 2280 SSD up to 2TB

Storage Type***
<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
RAID 0/1 support for SSDs

Notes:
\(^{[2]}\) The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage
Optical
None

Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio

Speakers
Single speaker, 2W x1

Power Supply
Power Supply

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>350W Fixed</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN
**Input Device**

**Keyboard**
- EOS Wireless Keyboard, black
- Lenovo® Calliope Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- EOS Wireless Mouse, Black
- No mouse

**Mechanical**

**Form Factor**
Tiny (3.6L)

**Dimensions (WxDxH)**
195 x 191 x 108 mm (7.68 x 7.52 x 4.25 inches)

**Packaging Dimensions (WxDxH)**
538 x 240 x 290 mm (21.18 x 9.45 x 11.42 inches)

**Weight**
Around 3.5 kg (7.72 lbs)

**Packaging Weight**
Around 5.7 kg (12.57 lbs)

**Case Color**
Luna grey

**Expansion Slots**
Four M.2 slots (one for WLAN, one for AI Card, two for SSD)

**EOU**
EOU design for M.2 SSD and memory installation.

---

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

---

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**
No optional Ethernet

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
- Intel® Wi-Fi® 7 BE200, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3 (Bluetooth® 5.4 hardware ready), Intel® vPro® technology support, M.2 Card
- No WLAN and Bluetooth®

**Ports**

**Front Ports**
- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2), one supports 5V@2.1A charging
- 1x headphone / microphone combo jack (3.5mm)
- 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), data transfer only

**Rear Ports**
• 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
• 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
• 1x HDMI® 2.1 TMDS
• 1x Ethernet (GbE RJ-45)
• 1x HDMI® 2.1a FRL
• 4x DisplayPort™ 1.4a

Optional Rear Ports
• Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® (USB 5Gbps) with DisplayPort™ function)
• Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / 2.5GbE RJ-45)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Firmware TPM 2.0 integrated in chipset

Physical Locks
Kensington® Security Slot™

Chassis Intrusion Switch
Chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Individual USB port disablement
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management[1]
• Intel® vPro® Enterprise
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
• 1-year courier or carry-in service
• 1-year limited onsite service
Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

ENVIRONMENTAL

Sustainability

Material
- 50% Recycled & 50% Hydroelectric Aluminum
- 35% PCC recycled PC/ABS with coconut shell powder
- 85% PCC recycled plastic used in product chassis
- 95% PCC recycled plastic used in USB keyboard/mouse
- 90% PIC recycled plastic EPE cushion
- 30% OBP used in bag
- FSC certified paper in packaging

CERTIFICATIONS

Green Certifications

Green Certifications
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- GREENGUARD®
- RoHS compliant
- TCO Certified

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Other Certifications
- (Optional) TÜV Rheinland® Low Noise

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
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OVERVIEW

1. Power connector
2. DisplayPort
3. USB-B 3.1 Gen 1
4. USB 3.1 Gen 1

Notes:
• USB 3.1 Gen 1 (only available when a Tiny is installed or a PC is connected)
PERFORMANCE

Panel
In-Plane Switching (IPS)

Backlight
WLED

Display Size
21.5 inches

Max View Area
WxH: 476.1 x 267.8 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.24795 x 0.24795 mm

Dot / Pixel Per Inch
102 dpi

Brightness
250 cd/m²

Contrast Ratio
- Dynamic Contrast Ratio: 3000000:1
- Contrast Ratio: 1000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms
- Off Mode: 14 ms

Refresh Rate
60Hz

Color Gamut
72% NTSC

Color Support
16.7 Million

Color Depth
8-bit

Screen Surface Treatment
Anti-glare

Operating System

Operating System
- Windows® 11 Support
- Windows® 10 Support
- Windows® 7 Support

Multi-Media

Camera
HD 720p, with dual microphone and ThinkShutter

Microphone
Dual-microphone array
Speakers
Stereo speakers, 2W x2

Power Supply
Power Consumption
Typical / Max: 14W / 25W
Voltage Required
AC 100 to 240 V (40-60Hz)

DESIGN

Display
Touchscreen
• (Optional) Advanced In-cell Touch (AIT), supports 10-point touch (for models 11GTPAT1 and 11GTPAR1 only)
• Non-touch

Mechanical
ThinkCentre® M Series Support
P340 / P330 / P320 / P360 / M90q / M80q / M70q / M75q / M920(x) / M720 / M910(x) / M710 / M715 / M900(x) / M700 / M630e / M625 / M600 Tiny / M90n / M75n Nano (with TiO kit)

Bezel Width
• Top / side: 2mm
• Bottom: 22.1mm

Buttons
• Brightness button
• Exit button
• Menu button
• Mode-switching button
• Power button

Cable Management
Support

Case Color
Black

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with full function monitor stand</td>
<td>489 x 220.4 x 568.2 mm (19.26 x 8.68 x 22.37 inches)</td>
</tr>
<tr>
<td>Models without stand</td>
<td>489 x 65.3 x 339 mm (19.26 x 2.57 x 13.35 inches)</td>
</tr>
</tbody>
</table>

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models without stand</td>
<td>Around 3.41 kg (7.52 lbs)</td>
</tr>
<tr>
<td>Models with full function monitor stand</td>
<td>Around 6.58 kg (14.51 lbs)</td>
</tr>
</tbody>
</table>

Mounting
Supports VESA mount 100mm

Stand
Full function monitor stand, supports -5° to +30° tilt, left & right 45° swivel, up to 150mm lift, -5° to 90° pivot

In the Box
• 1x Power adapter
• Power cable
• Detachable stand
• Quick Setup Guide
• TiO (monitor)
Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports[1]
Rear Ports
• 1x USB-B 3.1 Gen 1, USB upstream
• 1x DisplayPort™
• 1x power connector
Left Ports[2]
• 1x USB 3.1 Gen 1 (on TIO)
  The availability and version depends on the Tiny installed or the PC connected via USB upstream port (USB-B 3.1 Gen 1)
• Side ports offered by installed Tiny (on Tiny)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
  USB 2.0: 480 Mbit/s;
  USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
  USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
  USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
  USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
  Thunderbolt™ 3/4: 40 Gbit/s.
[2] The availability and version depends on the Tiny installed or the PC connected via USB upstream port.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™, 3 x 7 mm

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]

Certifications
• ENERGY STAR® 8.0
• EPEAT™ Silver Registered[2]
• ErP Lot 5
• GREENGUARD®
• RoHS compliant
• TCO Certified 8.0
• TCO edge 2.0
• WEEE

Notes:
The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

**Other Certifications**

- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light

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## OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>2</td>
<td>Power-in</td>
</tr>
<tr>
<td>3</td>
<td>HDMI 1.4</td>
</tr>
<tr>
<td>4</td>
<td>DP 1.2</td>
</tr>
<tr>
<td>5</td>
<td>USB-B 3.2 Gen 1</td>
</tr>
<tr>
<td>6</td>
<td>USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
- In-Plane Switching (IPS)

Backlight
- WLED

Display Size
- 21.5 inches

Max View Area
- WxH: 476.1 x 267.8 mm (18.74 x 10.54 inches)

Resolution
- 1920 x 1080

Aspect Ratio
- 16:9

Pixel Pitch
- 0.248 x 0.248 mm

Dot / Pixel Per Inch
- 102 dpi

Brightness
- 250 cd/m²

Contrast Ratio
  - Dynamic Contrast Ratio: 3000000:1
  - Contrast Ratio: 1000:1

View Angle (H / V)
- Horizontal: 178°, Vertical: 178°

Response Time
  - Extreme Mode: 4 ms
  - Normal Mode: 6 ms

Refresh Rate
- 60Hz

Color Gamut
- 99% sRGB

Color Support
- 16.7 Million

Color Depth
- 8-bit (6-bit+FRC)

Screen Surface Treatment
- Anti-glare

Curvature
- Flat Panel

Operating System

Operating System
  - Windows® 11 Support
  - Windows® 10 Support

Multi-Media

Camera
- FHD 1080p

Microphone
- Integrated microphone
ThinkCentre Tiny-In-One 22 Gen 5

Speakers
Stereo speakers, 3W x2

Power Supply

Power Consumption
• Typical / Max: 13.4W / 33W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 10W
• Energy Star TEC: 32.3kWh
• External Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Special Features
• Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
• KVM Switch
• Natural Low Blue Light

DESIGN

Display

Touchscreen
• Capacitive-type multi-touch, supports 10-point touch (for MT 12N9 only)
• Non-touch

Mechanical

ThinkCentre® M Series Support
ThinkCentre® Tiny, ThinkStation® Tiny from 4th Generation

Bezel Width
• Side: 2mm
• Top / Bottom: 2mm / 46mm

Case Color
Raven black

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>489.3 x 207.6 x 357.3 mm (19.26 x 8.17 x 14.07 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>489.3 x 207.6 x 512.3 mm (19.26 x 8.17 x 20.17 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>489.3 x 72.8 x 339.1 mm (19.26 x 2.87 x 13.3 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
568 x 176 x 422 mm (22.36 x 6.93 x 16.61 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.5 kg (12.1 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.2 kg (7.1 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
8.1 kg (17.86 lbs)

Mounting
Supports VESA mount 100mm

Stand

Supports -5° to +23.5° tilt, left & right 45 swivel, -5° to +90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- Power Adapter (90W)
- Power cable (1.0 m)
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x USB 3.2 Gen 1
- 1x USB-B 3.2 Gen 1, USB upstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™, 3 x 7 mm and 2.5 x 6 mm

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- EU Energy Label (D-class)
- RoHS compliant
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification
Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Power connector  
2. DisplayPort  
3. USB-B 3.1 Gen 1  
4. USB 3.1 Gen 1

Notes:  
• USB 3.1 Gen 1 (only available when a Tiny is installed or a PC is connected)
### PERFORMANCE

**Panel**

In-Plane Switching (IPS)

**Backlight**

WLED

**Display Size**

23.8 inches

**Max View Area**

WxH: 527 x 296.5 mm

**Resolution**

1920 x 1080

**Aspect Ratio**

16:9

**Pixel Pitch**

0.2745 x 0.2745 mm

**Dot / Pixel Per Inch**

92.6 dpi

**Brightness**

250 cd/m²

**Contrast Ratio**

- Dynamic Contrast Ratio: 3000000:1
- Contrast Ratio: 1000:1

**View Angle (H / V)**

Horizontal: 178°, Vertical: 178°

**Response Time**

- Extreme Mode: 4 ms
- Normal Mode: 6 ms
- Off Mode: 14 ms

**Refresh Rate**

60Hz

**Color Gamut**

72% NTSC

**Color Support**

16.7 Million

**Color Depth**

8-bit

**Screen Surface Treatment**

Anti-glare

### Operating System

**Operating System**

- Windows® 11 Support
- Windows® 10 Support
- Windows® 7 Support

### Multi-Media

**Camera**

- FHD 1080p, with dual microphone and Think Shutter
- IR + RGB camera, with dual microphone and ThinkShutter

**Microphone**
ThinkCentre Tiny-In-One 24 Gen 4

Dual-microphone array

Speakers
Stereo speakers, 2W x2

Power Supply

Power Consumption
Typical / Max: 15W / 27W

Voltage Required
AC 100 to 240 V (40-60Hz)

DESIGN

Display

Touchscreen
• (Optional) Advanced In-cell Touch (AIT), supports 10-point touch (for models 11GCPAT1 and 11GCPAR1 only)
• Non-touch

Mechanical

ThinkCentre® M Series Support
P340 / P330 / P320 / P360 / M90q / M80q / M70q / M75q / M920(x) / M720 / M910(x) / M710 / M715 / M900(x) / M700 / M630e / M625 / M600 Tiny / M90n / M75n Nano (with TIO kit)

Bezel Width
• Top / side: 2mm
• Bottom: 22.1mm

Buttons
• Brightness button
• Exit button
• Menu button
• Mode-switching button
• Power button
• Volume button

Cable Management

Support

Case Color
Black

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with full function monitor stand</td>
<td>539.8 x 230.4 x 596.9 mm (21.25 x 9.07 x 23.5 inches)</td>
</tr>
<tr>
<td>Models without stand</td>
<td>539.8 x 65.3 x 367.6 mm (21.25 x 2.57 x 14.47 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)

602 x 160 x 422 mm (23.70 x 6.3 x 16.61 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models without stand</td>
<td>Around 3.61 kg (7.96 lbs)</td>
</tr>
<tr>
<td>Models with full function monitor stand</td>
<td>Around 6.66 kg (14.68 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
7.6 kg (16.8 lbs)

Mounting
Supports VESA mount 100mm

Stand

Full function monitor stand, supports -5° to +30° tilt, left & right 45° swivel, up to 150mm lift, -5° to 90° pivot

In the Box
1x Power adapter
• Power cable
• Detachable stand
• Quick Setup Guide
• TIO (monitor)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
• 1x USB-B 3.1 Gen 1, USB upstream
• 1x DisplayPort™
• 1x power connector

Left Ports
• 1x USB 3.1 Gen 1 (on TIO)
  The availability and version depends on the Tiny installed or the PC connected via USB upstream port (USB-B 3.1 Gen 1)
• Side ports offered by installed Tiny (on Tiny)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s
Thunderbolt™ 3/4: 40 Gbit/s.
[2] The availability and version depends on the Tiny installed or the PC connected via USB upstream port.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® 8.0
• EPEAT™ Silver Registered
• ErP Lot 5
• GREENGUARD®
• RoHS compliant
Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light

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OVERVIEW

1. Kensington Security Slot
2. Power-in
3. HDMI 1.4
4. DP 1.2
5. USB-B 3.2 Gen 1
6. USB 3.2 Gen 1
PERFORMANCE

Panel

In-Plane Switching (IPS)

Backlight

WLED

Display Size

23.8 inches

Max View Area

WxH: 527.0 x 296.4 mm (20.75 x 11.67 inches)

Resolution

1920 x 1080

Aspect Ratio

16:9

Pixel Pitch

0.275 x 0.275 mm

Dot / Pixel Per Inch

93 dpi

Brightness

250 cd/m²

Contrast Ratio

- Dynamic Contrast Ratio: 3000000:1
- Contrast Ratio: 1000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate

60Hz

Color Gamut

99% sRGB

Color Support

16.7 Million

Color Depth

8-bit (6-bit+FRC)

Screen Surface Treatment

Anti-glare

Curvature

Flat Panel

Operating System

Operating System

- Windows® 11 Support
- Windows® 10 Support

Multi-Media

Camera

FHD 1080p

Microphone

Integrated microphone
Speakers
Stereo speakers, 3W x2

Power Supply
Power Consumption
- Typical / Max: 14W / 34W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 11.9W
- Energy Star TEC: 37.9kWh
- External Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

DESIGN

Display
Touchscreen
- Capacitive-type multi-touch, supports 10-point touch (for MT 12NB only)
- Non-touch

Mechanical
ThinkCentre® M Series Support
ThinkCentre® Tiny, ThinkStation® Tiny from 4th Generation

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 46mm

Case Color
Raven black

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.8 x 207.6 x 384.6 mm (21.25 x 8.17 x 15.14 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.8 x 207.6 x 539.6 mm (21.25 x 8.17 x 21.24 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.8 x 72.8 x 367.6 mm (21.25 x 2.87 x 14.47 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
620 x 187 x 420 mm (24.41 x 7.36 x 16.54 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.0 kg (13.2 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.7 kg (8.2 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
9.5 kg (20.9 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, -5° to +90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- Power Adapter (90W)
- Power cable (1.0 m)
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x USB 3.2 Gen 1
- 1x USB-B 3.2 Gen 1, USB upstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™, 3 x 7 mm and 2.5 x 6 mm

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- EU Energy Label (D-class)
- RoHS compliant
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification
Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Other Certifications

• Eyesafe® Certified 2.0
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. 2x USB 3.1 Gen 1
2. Headphone / microphone combo jack (3.5mm)
3. HDMI 1.4
4. Power connector
5. DisplayPort
6. USB-B 3.1 Gen 1

Notes:
- USB 3.1 Gen 1 (only available when a Tiny is installed or a PC is connected)
Performance

Panel
In-Plane Switching (IPS)

Backlight
WLED

Display Size
27 inches

Max View Area
WxH: 596.7 x 335.7 mm

Resolution
2560 x 1440

Aspect Ratio
16:9

Pixel Pitch
0.2331 x 0.2331 mm

Dot / Pixel Per Inch
109 dpi

Brightness
350 cd/m²

Contrast Ratio
• Dynamic Contrast Ratio: 3000000:1
• Contrast Ratio: 1000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
• Off Mode: 14 ms

Refresh Rate
60Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support
• Windows® 7 Support

Multi-Media

Camera
IR + RGB camera, with dual microphone, ThinkShutter, and LED indicator. Supports Window Hello and Facial Recognition

Microphone
Dual-microphone array

Speakers
Stereo speakers, 2W x2
Power Supply
Power Consumption
Typical / Max: 37W / 57W

DESIGN

Display
Touchscreen
Non-touch

Mechanical
ThinkCentre® M Series Support
ThinkCentre® Tiny, ThinkCentre® Nano, and ThinkStation Tiny

Bezel Width
• Top / side: 2mm
• Bottom: 23.3mm

Buttons
• Brightness button
• Exit button
• Menu button
• Mode-switching button
• Power button
• Volume button

Cable Management
Support

Case Color
Black

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models with full function monitor stand</td>
<td>614 x 329 x 554.25 mm (24.17 x 12.95 x 21.82 inches)</td>
</tr>
<tr>
<td>Models without stand</td>
<td>614 x 73.89 x 413.1 mm (24.17 x 2.91 x 16.26 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
782 x 172 x 469 mm (30.79 x 77.00 x 18.46 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models without stand</td>
<td>Around 4.90 kg (10.82 lbs)</td>
</tr>
<tr>
<td>Models with full function monitor stand</td>
<td>Around 7.95 kg (17.53 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
9.75 kg (21.5 lbs)

Mounting
Supports VESA mount 100mm

Stand
Full function monitor stand, supports -5° to +30° tilt, left & right 45° swivel, up to 110mm lift, -5° to +90° pivot

In the Box
• 1x Power adapter
• Power cable
• Detachable stand
• TIO (monitor)

Notes:
[1] The system dimensions may vary depending on configurations.
The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x USB-B 3.1 Gen 1, USB upstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x power connector

Left Ports
- 2x USB 3.1 Gen 1 (on TIO)
  - The availability and version depends on the Tiny installed or the PC connected via USB upstream port (USB-B 3.1 Gen 1)
- 1x headphone / microphone combo jack (on TIO)
- Side ports offered by installed Tiny (on Tiny)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] The USB ports are enabled by installing a Tiny or connecting USB upstream port; the audio port is enabled by installing a Tiny or connecting USB upstream, DisplayPort™(in), or HDMI®(in) port.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Silver Registered
- RoHS compliant
- TCO edge 2.0
- ULE Gold
- WEEE

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-
Other Certifications

- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light

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## OVERVIEW

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power connector</td>
<td>6</td>
<td>USB 3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>DP 1.2</td>
<td>7</td>
<td>USB 3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>HDMI 1.4</td>
<td>8</td>
<td>Audio line-out (3.5mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>VGA</td>
<td>9</td>
<td>USB 3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>USB-B 3.0</td>
<td>10</td>
<td>USB 3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel

In-Plane Switching (IPS)

Backlight
WLED

Display Size
21.5 inches

Max View Area
WxH: 476.1 x 267.8 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.2479 x 0.2579 mm

Dot / Pixel Per Inch
102 dpi

Brightness
250 cd/m²

Contrast Ratio
Contrast Ratio: 1000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
• Off Mode: 14 ms

Refresh Rate
60Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Color Depth
8-bit

Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support

Power Supply

Power Consumption
Typical / Max: 15W / 48W

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features
Special Features
Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

DESIGN

Mechanical
ThinkCentre® M Series Support
ThinkCentre® Tiny, ThinkStation® Tiny

Bezel Width
Side: 2mm

Buttons
• Input Source Switch button
• Menu stick
• Power button

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>489 x 223 x 369 mm (19.25 x 8.78 x 14.53 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>489 x 223 x 494 mm (19.25 x 8.78 x 19.45 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>489.3 x 46.4 x 292.7 mm (19.3 x 1.8 x 11.5 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
577 x 187 x 442 mm (22.72 x 7.36 x 17.40 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.05 kg (13.34 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
7.58 kg (16.71 lbs)

Mounting
Supports VESA mount 100mm

Stand
• TIO Flex stand, supports -5° to +23° tilt, up to 125mm lift
• Build in DisplayPort™ cable for monitor
• Build in DisplayPort™ connector for Tiny
• Build in USB-A connector for Tiny
• Build in USB-B cable for monitor

In the Box
• Monitor Head
• Power cable
• TIO Flex stand
• User’s guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY
Ports

Rear Ports
- 1x USB-B 3.0, USB upstream
- 4x USB 3.0, USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x VGA
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
- Kensington® Security Slot™, 3 x 7 mm

SERVICE

Warranty

Base Warranty
- TIO Flex stand: 1-year CRU warranty
- Monitor: 3 years limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[2]
- RoHS compliant
- TCO Certified
- TCO edge

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)
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# OVERVIEW

<table>
<thead>
<tr>
<th>1. DisplayPort 1.2</th>
<th>6. USB 3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. HDMI 1.4</td>
<td>7. Audio-out (3.5mm)</td>
</tr>
<tr>
<td>3. VGA</td>
<td>8. USB 3.0</td>
</tr>
<tr>
<td>4. USB-B 3.0</td>
<td>9. USB 3.0</td>
</tr>
<tr>
<td>5. USB 3.0</td>
<td></td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
In-Plane Switching (IPS)
Backlight
WLED
Display Size
23.8 inches
Max View Area
WxH: 527 x 296.5 mm
Resolution
1920 x 1080
Aspect Ratio
16:9
Pixel Pitch
0.275 x 0.275 mm
Dot / Pixel Per Inch
93 dpi
Brightness
250 cd/m²
Contrast Ratio
Contrast Ratio: 1000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms
Refresh Rate
60Hz
Color Gamut
99% sRGB
Color Support
16.7 Million
Color Depth
8-bit
Screen Surface Treatment
Anti-glare

Operating System
Operating System
- Windows® 11 Support
- Windows® 10 Support

Power Supply
Power Consumption
Typical / Max: 14W / 56W
Voltage Required
AC 100 to 240 V (47-63Hz)

Special Features
Special Features
Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® Tiny, ThinkStation® Tiny

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 17.3mm

Buttons
- Input Source Switch button
- Menu stick
- Power button

Cable Management

Case Color
Raven black

Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.8 x 223 x 386.78 mm (21.25 x 8.78 x 15.23 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.8 x 223 x 511.78 mm (21.25 x 8.78 x 20.15 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.80 x 49.00 x 321.40 mm (21.25 x 1.93 x 12.65 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
619 x 187 x 421 mm (24.37 x 7.36 x 16.57 inches)

Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.3 kg (13.89 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.1 kg (6.83 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
8.61 kg (18.98 lbs)

Mounting
Supports VESA mount 100mm

Stand
- TIO Flex stand, supports -5° to +23° tilt, up to 125mm lift
- Build in DisplayPort™ cable for monitor
- Build in DisplayPort™ connector for Tiny
- Build in USB-A connector for Tiny
- Build in USB-B cable for monitor

In the Box
- Monitor Head
- Power cable
- TIO Flex stand
- User’s guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
CONNECTIVITY

Ports

Rear Ports
- 1x USB-B 3.0, USB upstream
- 4x USB 3.0, USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x VGA
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

SERVICE

Warranty

Base Warranty
- TIO Flex stand: 1-year CRU warranty
- Monitor: 3 years limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Silver Registered
- RoHS compliant
- TCO Certified
- TCO edge

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## OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Joystick</td>
<td>7</td>
<td>USB-B 3.2 Gen 1</td>
</tr>
<tr>
<td>2</td>
<td>Source Key</td>
<td>8</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3</td>
<td>Power connector</td>
<td>9</td>
<td>Audio-out (3.5mm)</td>
</tr>
<tr>
<td>4</td>
<td>HDMI 1.4</td>
<td>10</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>5</td>
<td>DP 1.2</td>
<td>11</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>6</td>
<td>VGA</td>
<td>12</td>
<td>USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
In-Plane Switching (IPS)

Backlight
WLED

Display Size
27 inches

Max View Area
WxH: 596.7 x 335.3 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.3114 x 0.3114 mm

Dot / Pixel Per Inch
82 dpi

Brightness
300 cd/m²

Contrast Ratio
• Dynamic Contrast Ratio: 3000000:1
• Contrast Ratio: 1000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
• Off Mode: 14 ms

Refresh Rate
60Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support

Power Supply

Power Consumption
Typical / Max: 24W / 65W

Voltage Required
AC 100 to 240 V (47-63Hz)

Special Features

Special Features
Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
DESIGN

Mechanical
ThinkCentre® M Series Support
ThinkCentre® Tiny, ThinkStation® Tiny

Bezel Width
• Side: 2mm
• Top / Bottom: 2mm / 17.6mm

Buttons
• Input Source Switch button
• Menu stick
• Power button

Case Color
Raven black

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>611x 223 x 426 mm (24.09 x 8.78 x 16.78 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>611 x 223 x 551 mm (24.09 x 8.78 x 21.7 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>611.9 x 50.0 x 362.5 mm (24.09 x 1.97 x 14.27 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
715 x 160 x 527 mm (28.15 x 6.30 x 20.75 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>7.90 kg (17.42 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.9 kg (10.8 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
10.24 kg (22.58 lbs)

Mounting
Supports VESA mount 100mm

Stand
• TIO Flex stand, supports -5° to +23° tilt, up to 125mm lift
• Build in DisplayPort™ cable for monitor
• Build in DisplayPort™ connector for Tiny
• Build in USB-A connector for Tiny
• Build in USB-B cable for monitor

In the Box
• Monitor Head
• Power cable
• TIO Flex stand
• User's guide

Notes:
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[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports[1]

Rear Ports
• 1x USB-B 3.2 Gen 1, USB upstream
• 4x USB 3.1 Gen 1 (1x BC), USB downstream
• 1x HDMI® 1.4
• 1x DisplayPort™ 1.2
• 1x VGA
• 1x audio-out (3.5mm)
• 1x power connector

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™, 3 x 7 mm

SERVICE

Warranty

Base Warranty
• TIO Flex stand: 1-year CRU warranty
• Monitor: 3 years limited warranty

CERTIFICATIONS

Green Certifications[1]

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• ENERGY STAR® Certified
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• RoHS compliant
• TCO Certified
• TCO edge

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OVERVIEW

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<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power button</td>
</tr>
<tr>
<td>2.</td>
<td>Optical drive *</td>
</tr>
<tr>
<td>3.</td>
<td>Card reader *</td>
</tr>
<tr>
<td>4.</td>
<td>Microphone (3.5mm)</td>
</tr>
<tr>
<td>5.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>6.</td>
<td>USB-C 3.2 Gen 1</td>
</tr>
<tr>
<td>7.</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>8.</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>9.</td>
<td>Line-out (3.5mm)</td>
</tr>
<tr>
<td>10.</td>
<td>Flex IO *</td>
</tr>
<tr>
<td>11.</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>12.</td>
<td>2x DisplayPort 1.4</td>
</tr>
<tr>
<td>13.</td>
<td>4x USB 2.0</td>
</tr>
<tr>
<td>14.</td>
<td>2x PS/2 ports (keyboard / mouse) *</td>
</tr>
<tr>
<td>15.</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>16.</td>
<td>Serial *</td>
</tr>
<tr>
<td>17.</td>
<td>Optional ports on expansion cards *</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
Intel® Pentium® or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td>-</td>
<td>6MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-12300</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz[2]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[3]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400F</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[4]</td>
<td>18MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz[5]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12600</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.8GHz[6]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[7]</td>
<td>25MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700F</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[8]</td>
<td>25MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[9]</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900F</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[10]</td>
<td>30MB</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
[1], [2], [3], [4], [5], [6], [7], [8], [9], [10] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[1]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics***[1]

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
</table>

ThinkCentre M70t Gen 3 - March 29 2024
<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory Type</th>
<th>Memory Slots</th>
<th>Memory Slots Type</th>
<th>DirectX™</th>
<th>OpenGL 4.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI® / Flex IO(HDMI®) / Flex IO(DP)], 3840x2160@60Hz[Flex IO(USB-C®)], 2048x1536@50Hz[Flex IO(VGA)]</td>
<td>2x DP 1.4 HBR2, 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI® / Flex IO(HDMI®) / Flex IO(DP)], 3840x2160@60Hz[Flex IO(USB-C®)], 2048x1536@50Hz[Flex IO(VGA)]</td>
<td>2x DP 1.4 HBR2, 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI® / Flex IO(HDMI®) / Flex IO(DP)], 3840x2160@60Hz[Flex IO(USB-C®)], 2048x1536@50Hz[Flex IO(VGA)]</td>
<td>2x DP 1.4 HBR2, 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3050</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@120Hz(DP)(2)</td>
<td>1x HDMI® 2.1 FRL, 3x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6400</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)</td>
<td>1x HDMI® 2.1 FRL, 1x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6500XT</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)</td>
<td>1x HDMI® 2.1, 1x DP 1.4</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>Intel® Iris® Xe MAX 100</td>
<td>Discrete</td>
<td>2GB LPDDR4X</td>
<td>3840x2160@60Hz(DP)</td>
<td>2x DP 1.4</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Notes:
[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).
[2] Requires two DisplayPort™ 1.4a links and DSC compression.

**Monitor Support**

Monitor Support(1)
Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI®, and 1x optional Flex IO), more displays support via discrete graphics

Notes:
[1] Onboard video ports are only available for the models with integrated graphics.

**Chipset**

Chipset
Intel® Q670 chipset

**Memory**

Max Memory(2)
Up to 128GB DDR4-3200

Memory Slots
Four DDR4 DIMM slots, dual-channel capable

Memory Type
DDR4-3200

Notes:
The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

**Storage Support**[1][2]

Up to three drives, 1x 2.5”/3.5” HDD + 1x 2.5” HDD + 1x M.2 SSD
- 2.5” HDD up to 1TB each
- 3.5” HDD up to 2TB
- M.2 SSD up to 2TB

**Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe NVMe®, PCIe 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe®, PCIe 3.0 x4</td>
<td>-</td>
<td>Opal</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe®, PCIe 4.0 x4 Performance</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe®, PCIe 4.0 x4 Value</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**RAID**

RAID 0/1 support for HDDs (RAID preset only available via special bid models)

**Notes:**
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] The max capacity of SSD/HDD is based on the test results with current Lenovo® SSD/HDD offerings.

**Removable Storage**

**Optical**
- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

**Card Reader**
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC897Q-CG codec

**Speakers**
Single speaker, 2W x1

**Power Supply**

**Power Supply***

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W</td>
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<td>380W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

**DESIGN**

**Input Device**

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
Mechanical

Form Factor
Tower (13.6L)

Dimensions (WxDxH)[1]
145 x 296 x 346 mm (5.7 x 11.7 x 13.6 inches)

Weight[2]
Around 5.9 kg (13.0 lbs)

Case Color
Black

Bays[3]
- 1x 2.5” disk bay
- 1x 3.5” disk bay
- 1x slim ODD bay

Expansion Slots
- One PCIe® 4.0 x16, full-height, length ≤ 209mm, height ≤ 117.5mm
- Two PCIe® 3.0 x1, full-height, (length ≤ 185mm, height ≤ 100mm) or (length ≤ 118mm, height ≤ 110mm)
- Two M.2 slots (one for WLAN, one for SSD)

EOU
Toolless cover, disk, optical, extension card assembly / removal

Stand
No stand

Others
- (Optional) Dust filter
- Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2.5” HDD tray is optional, or comes with 2.5 HDD. 3.5” bay supports 2.5” / 3.5” HDD, 3.5” to 2.5 converter comes with 2nd 2.5” HDD.

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet***
- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe® x1
- Gigabit Ethernet, Bitland RTL8168H, 1x RJ-45, PCIe® x1
- 2.5 Gigabit Ethernet, Realtek® RTL8125BG, 1x RJ-45, PCIe® x1
- No optional Ethernet

WLAN + Bluetooth®***
- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
- No WLAN and Bluetooth

Notes:
- Bluetooth® 5.3 requires Windows® 11.
- Bluetooth® 5.2 requires Windows® 11.

Ports

Front Ports
- 1x USB-C® 3.2 Gen 1 (15W charging)
- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

Optional Front Ports
1x card reader

Rear Ports
- 4x USB 2.0
- 1x HDMI® 2.1 TMDS
- 2x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

Optional Rear Ports
- 1x USB-C® 3.2 Gen 1 with DisplayPort™ function and 5V@3A charging (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.2 (Flex IO)
- 1x VGA (Flex IO)
- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
- 1x parallel
- 1x serial
- 1x 2nd serial
- 4x serial (via 4-port serial expansion card, PCIe® x1)
- 2x PS/2

Notes:
- The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
  - USB 2.0: 480 Mbit/s;
  - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
  - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
  - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
  - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
  - Thunderbolt™ 3/4: 40 Gbit/s.
- For video ports on discrete graphics, please see graphics section.

Security & Privacy

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
- (Optional) E-lock
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop
Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Self-healing BIOS (Level 2)
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management**
- Intel® vPro® Enterprise[^1]
- Intel® vPro® Essentials[^2]
- Non-vPro®

Notes:
[^1], [^2] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[^1]
Base Warranty**
- 1-year courier or carry-in service
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
[^1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® cable (1.5m)
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C*)
- None

OPERATING REQUIREMENTS
Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Silver Registered
• (Optional) EPEAT™ Gold Registered
• ErP Lot 3
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2], [3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
• (Optional) TÜV Rheinland® Low Noise
• (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power button</td>
</tr>
<tr>
<td>2.</td>
<td>Optical drive *</td>
</tr>
<tr>
<td>3.</td>
<td>Card reader *</td>
</tr>
<tr>
<td>4.</td>
<td>Microphone (3.5mm)</td>
</tr>
<tr>
<td>5.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>6.</td>
<td>USB-C 3.2 Gen 1</td>
</tr>
<tr>
<td>7.</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>8.</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>9.</td>
<td>Line-out (3.5mm)</td>
</tr>
<tr>
<td>10.</td>
<td>Flex IO *</td>
</tr>
<tr>
<td>11.</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>12.</td>
<td>2x DisplayPort 1.4a</td>
</tr>
<tr>
<td>13.</td>
<td>4x USB 2.0</td>
</tr>
<tr>
<td>14.</td>
<td>2x PS/2 ports (keyboard / mouse) *</td>
</tr>
<tr>
<td>15.</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>16.</td>
<td>Serial *</td>
</tr>
<tr>
<td>17.</td>
<td>Optional ports on expansion cards *</td>
</tr>
</tbody>
</table>

### Notes:
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
13th Generation Intel® Core™ i3 / i5 / i7 Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400F</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-13600</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.7GHz / E-core 2.0GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700F</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.
[2], [3] Special bid only.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021[1]
- Ubuntu Linux[2]
- No preload operating system

Notes:
[1] Special bid only.
[2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics***

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI* / Flex IO(HD MI) / Flex IO(DP)], 3840x2160@60Hz[Flex IO(USB-C*)], 2048x1536@50Hz[Flex IO(VGA)]</td>
<td>2x DP 1.4a (HBR2, DSC), 1x HDMI* 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI* 2.1 TMDS / USB-C*)</td>
<td>DirectX® 12</td>
</tr>
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<td>Intel® UHD graphics 770</td>
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<td>DirectX® 12</td>
</tr>
</tbody>
</table>
### NVIDIA® GeForce RTX™ 3050
- **Discrete**
- **8GB GDDR6**
- **7680x4320@60Hz (HDMI®), 7680x4320@120Hz (DP)**
- **1x HDMI® 2.1 FRL, 3x DP 1.4a**
- DirectX® 12, OpenGL 4.6

### AMD Radeon™ RX 6400
- **Discrete**
- **4GB GDDR6**
- **7680x4320@60Hz (HDMI®), 7680x4320@60Hz (DP)**
- **1x HDMI® 2.1 FRL, 1x DP 1.4a**
- DirectX® 12, OpenGL 4.6

#### Notes:
1. The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).
2. Requires two DisplayPort™ 1.4a links and DSC compression.

### Monitor Support
- **Monitor Support**
- Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI®, and 1x optional Flex IO), more displays support via discrete graphics

#### Notes:
1. Onboard video ports are only available for the models with integrated graphics.

### Chipset
- **Chipset**
- Intel® Q670 chipset

### Memory
- **Max Memory**
- Up to 128GB DDR4-3200
- **Memory Slots**
- Four DDR4 DIMM slots, dual-channel capable
- **Memory Type**
- DDR4-3200

#### Notes:
1. The max memory is based on the test results with current Lenovo® memory offerings.

### Storage
- **Storage Support**
- Up to three drives, 1x 2.5”/3.5” HDD + 1x 2.5” HDD + 1x M.2 SSD
- 2.5” HDD up to 1TB each
- 3.5” HDD up to 2TB
- M.2 SSD up to 2TB
- **Storage Type**

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</table>

**RAID**
- RAID 0/1 support for HDDs (RAID preset only available via special bid models)
Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] 2TB SSD is special bid only.

### Removable Storage

**Optical**
- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

**Card Reader**
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

### Multi-Media

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC897Q-CG codec

**Speakers**
Single speaker, 2W x1

### Power Supply

**Power Supply**

<table>
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<td>Fixed</td>
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<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

### DESIGN

**Input Device**

**Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

### Mechanical

**Form Factor**
Tower (13.6L)

**Dimensions (WxDxH)**
145 x 296 x 346 mm (5.7 x 11.7 x 13.6 inches)

**Packaging Dimensions (WxDxH)**
245 x 395 x 530 mm (9.65 x 15.55 x 20.87 inches)

**Weight**
Around 5.9 kg (13.0 lbs)

**Packaging Weight**
8.3 kg (18.29 lbs)

**Case Color**
Black
Bays
• 1x 2.5” disk bay[3]
• 1x 3.5” disk bay[4]
• 1x slim ODD bay

Expansion Slots
• One PCIe® 4.0 x16, full-height, length ≤ 209mm, height ≤ 117.5mm
• Two PCIe® 3.0 x1, full-height, (length ≤ 185mm, height ≤ 100mm) or (length ≤ 118mm, height ≤ 110mm)
• Two M.2 slots (one for WLAN, one for SSD)

EOU
Toolless cover, disk, optical, extension card assembly / removal

Others
• (Optional) Dust filter
• Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2.5” HDD tray is optional, or comes with 2.5 HDD.
[4] 3.5” bay supports 2.5” / 3.5” HDD, 3.5” to 2.5 converter comes with 2nd 2.5” HDD.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
• 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
• No optional Ethernet

WLAN + Bluetooth®**
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[1]
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[2]
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, Intel® vPro® technology support, M.2 Card[3]
• No WLAN and Bluetooth®

Notes:
[1], [2], [3] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports[1]

Front Ports
• 1x USB-C® 3.2 Gen 1 (15W charging)
• 2x USB 3.2 Gen 1
• 2x USB 3.2 Gen 2
• 1x headphone / microphone combo jack (3.5mm)
• 1x microphone (3.5mm)

Optional Front Ports
1x card reader

Rear Ports[2]
• 4x USB 2.0
• 1x HDMI® 2.1 TMDS
• 2x DisplayPort™ 1.4a (HBR2, DSC)
• 1x Ethernet (RJ-45)
• 1x line-out (3.5mm)

Optional Rear Ports***
• 1x USB-C® 3.2 Gen 1 with DisplayPort™ function and 5V@3A charging (Flex IO)
1x HDMI® 2.1 TMDS (Flex IO)
1x DP 1.2 (Flex IO)
1x VGA (Flex IO)
2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
1x parallel
1x serial
1x 2nd serial
4x serial (via 4-port serial expansion card, PCIe® x1)
2x PS/2

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified
Physical Locks
- (Optional) E-lock
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop
Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch
Fingerprint Reader
No fingerprint reader
BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Self-healing BIOS (Level 2)
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE
Warranty

**Base Warranty**

- 1-year courier or carry-in service
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:

[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to [https://smartfind.lenovo.com/](https://smartfind.lenovo.com/). To learn more details of warranty policy, please access [https://pcsupport.lenovo.com/warranty](https://pcsupport.lenovo.com/warranty).

**ACCESSORIES**

**Bundled Accessories**

- DP to DVI dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® cable (1.5m)
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C®)
- None

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

**Relative Humidity**

- Operating: 20% to 80%
- Storage: 10% to 90%

**Altitude**

- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

**CERTIFICATIONS**

**Green Certifications**

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

[2], [3] EPEAT™ is registered where applicable, please visit [epeat.net](http://peat.net) for registration status by country.

**Other Certifications**

Other Certifications
**Mil-Spec Test**

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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OVERVIEW

1. Power button
2. Optical drive *
3. Card reader *
4. Microphone (3.5mm)
5. Headphone / microphone combo jack (3.5mm)
6. USB-C (USB 5Gbps), data transfer only
7. 2x USB-A (USB 5Gbps)
8. 2x USB-A (USB 5Gbps)
9. DisplayPort 1.4a
10. HDMI 2.1 TMDS
11. 2x PS/2 ports (keyboard / mouse) *
12. 4x USB-A (Hi-Speed USB)
13. Ethernet (RJ-45)
14. Serial *
15. Optional ports on expansion cards *
16. Power connector

Notes:
• Items with * are only available on selected models
• More ports are available through the optional expansion cards (not shown on the sample product above)
PERFORMANCE

Processor Family
13th / 14th Generation Intel® Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i3-14100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.7GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-14400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-14400F</td>
<td>10 (6 P-core + 4 E-core)</td>
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<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>20MB</td>
<td>-</td>
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<tr>
<td>Core i5-14500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
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<td>P-core 2.7GHz / E-core 2.0GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
<td>Intel® UHD Graphics 770</td>
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<tr>
<td>Core i7-14700F</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
<td>-</td>
</tr>
<tr>
<td>Intel® 300</td>
<td>2</td>
<td>4</td>
<td>3.9 GHz</td>
<td>-</td>
<td>6MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 IoT Enterprise LTSC 2024
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- No preload operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI®)</td>
<td>1x DP 1.4a (HBR2, DSC), 1x HDMI® 2.1 TMDS</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI®)</td>
<td>1x DP 1.4a (HBR2, DSC), 1x HDMI® 2.1 TMDS</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI®)</td>
<td>1x DP 1.4a (HBR2, DSC), 1x HDMI® 2.1</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>
### Monitor Support

Monitor Support

Supports up to 2 independent displays via onboard ports (1x DP and 1x HDMI*), more displays support via discrete graphics

### Chipset

**Chipset**

Intel® Q670 chipset

### Memory

**Max Memory**

Up to 64GB DDR5

**Memory Slots**

Two DDR5 UDIMM slots, dual-channel capable

**Memory Type**

- DDR5-4800
- DDR5-5200
- DDR5-5600

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

### Storage

**Storage Support**

Up to three drives, 1x 3.5" HDD + 1x 2.5" HDD + 1x M.2 SSD
- 3.5" HDD up to 2TB
- 2.5" HDD bay is only for customer self upgrade
- M.2 SSD up to 2TB each

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**RAID**

No support

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

[2] 2.5" HDD bay is optional part, only for customer self upgrade purpose and the hard drive is sold separately. Two onboard SATA ports support up to two drives of 2.5" HDD, 3.5" HDD and ODD.

### Removable Storage
Optical
- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

Card Reader
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC623-CG codec

Speakers
Single speaker, 2W x1

Power Supply

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>260W Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>380W Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Input Device
Keyboard
- EOS Wireless Keyboard, black
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse
- Lenovo® Calliope Mouse (USB connector), black
- EOS Wireless Mouse, Black
- No mouse

Mechanical
Form Factor
Tower (13.6L)

Dimensions (WxDxH)
145 x 296 x 346 mm (5.7 x 11.7 x 13.6 inches)

Packaging Dimensions (WxDxH)
245 x 395 x 530 mm (9.65 x 15.55 x 20.87 inches)

Weight
Around 5.9 kg (13.0 lbs)

Packaging Weight
8.3 kg (18.29 lbs)

Case Color
Black

Bays
- 1x 2.5" disk bay (optional)
- 1x 3.5" disk bay
- 1x slim ODD bay
Expansion Slots
- One PCIe® 3.0 x16, full-height, length ≤ 209mm, height ≤ 117.5mm
- One PCIe® 3.0 x1, full-height, (length ≤ 185mm, height ≤ 100mm) or (length ≤ 118mm, height ≤ 110mm)
- Two M.2 slots (one for WLAN, one for SSD)

EOU
Toolless cover, memory, disk, optical, extension card assembly / removal

Others
- (Optional) Dust filter
- Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2.5” HDD bay is optional part, only for customer self upgrade purpose and the hard drive is sold separately. Two onboard SATA ports support up to two drives of 2.5" HDD, 3.5" HDD and ODD.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
- No optional Ethernet

WLAN + Bluetooth®
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
- No WLAN and Bluetooth®

Ports[1]
Front Ports
- 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with 15W charging
- 4x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

Optional Front Ports
1x card reader

Rear Ports[2]
- 4x USB-A (Hi-Speed USB / USB 2.0)
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)

Optional Rear Ports[3]
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via 2-port USB expansion card, PCIe® x1
- 1x parallel
- 1x serial
- 1x 2nd serial
- 4x serial (via 4-port serial expansion card, PCIe® x1)
- 2x PS/2

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be
slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
- (Optional) E-lock
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Certificate based BIOS authentication
- Individual USB port disablement
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- More BIOS security features, please visit BIOS Simulator

MANAGEABILITY

System Management
System Management
- Intel® vPro® Enterprise
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty
Base Warranty
- 1-year courier or carry-in service
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

- DP to DVI dongle
- DP to HDMI® dongle
- HDMI® to HDMI® cable (1.5m)
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C®)
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- GREENGUARD®
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

- (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
### OVERVIEW

1. Power button
2. Card reader *
3. Microphone (3.5mm)
4. Headphone / microphone combo jack (3.5mm)
5. USB-C 3.2 Gen 1
6. 2x USB 3.2 Gen 1
7. 2x USB 3.2 Gen 2
8. Line-out (3.5mm)
9. 2x DisplayPort 1.4
10. HDMI 1.4b
11. Serial
12. Ethernet (RJ-45)
13. 4x USB 2.0
14. Power connector
15. Serial *
16. Optional ports on expansion cards *

**Notes:**
- Items with * are only available on selected models
### PERFORMANCE

**Processor**

**Processor Family**
AMD Athlon™ or AMD Ryzen™ 3 / 5 / 7 / 9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Athlon™ Gold PRO 3150G[1]</td>
<td>4</td>
<td>4</td>
<td>3.5GHz</td>
<td>3.9GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-2933</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Athlon™ Silver 3050GE[2]</td>
<td>2</td>
<td>4</td>
<td>3.4GHz</td>
<td>3.4GHz</td>
<td>1MB L2 / 4MB L3</td>
<td>DDR4-2666</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 3 3200G[3]</td>
<td>4</td>
<td>4</td>
<td>3.6GHz</td>
<td>4.0GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-2933</td>
<td>AMD Radeon™ Vega 8 Graphics</td>
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<tr>
<td>AMD Ryzen™ 3 4300G[4]</td>
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<td>8</td>
<td>3.8GHz</td>
<td>4.0GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
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<tr>
<td>AMD Ryzen™ 3 5300G</td>
<td>4</td>
<td>8</td>
<td>4.0GHz</td>
<td>4.2GHz</td>
<td>2MB L2 / 8MB L3</td>
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<td>AMD Radeon™ Graphics</td>
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<tr>
<td>AMD Ryzen™ 3 PRO 4350G[5]</td>
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<td>4.0GHz</td>
<td>2MB L2 / 4MB L3</td>
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<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
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<td>AMD Ryzen™ 5 PRO 5650G</td>
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<td>3MB L2 / 16MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
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<tr>
<td>AMD Ryzen™ 7 4700G[10]</td>
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<td>4MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
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<tr>
<td>AMD Ryzen™ 7 5700G</td>
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<td>AMD Radeon™ Graphics</td>
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<td>AMD Ryzen™ 7 PRO 3700[12]</td>
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<td>4MB L2 / 32MB L3</td>
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<td>AMD Ryzen™ 7 PRO 4750G[13]</td>
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<td>3.6GHz</td>
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<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
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<td>AMD Ryzen™ 7 PRO 5750G</td>
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<td>4MB L2 / 16MB L3</td>
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<tr>
<td>AMD Ryzen™ 9 PRO 3900[14]</td>
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<td>24</td>
<td>3.1GHz</td>
<td>4.3GHz</td>
<td>6MB L2 / 64MB L3</td>
<td>DDR4-3200</td>
<td>-</td>
</tr>
</tbody>
</table>

### Notes:

[1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12], [13], [14] End of life and not available any more.

**Operating System**
Operating System

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 Pro 64
- Windows® 10 Home 64
- Windows® 10 Home 64 Single Language
- Windows® 10 IoT Enterprise
- Ubuntu Linux
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Radeon™ Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(DP), 4096x2160@24Hz(HDMI®)</td>
<td>2x DisplayPort™ 1.4, 1x HDMI® 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ Vega 8 Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(DP), 4096x2160@24Hz(HDMI®)</td>
<td>2x DisplayPort™ 1.4, 1x HDMI® 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ Vega 11 Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(DP), 4096x2160@24Hz(HDMI®)</td>
<td>2x DisplayPort™ 1.4, 1x HDMI® 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ RX 520</td>
<td>Discrete</td>
<td>2GB</td>
<td>4096x2160@60Hz(DP)</td>
<td>2x DP 1.2</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ RX 550X</td>
<td>Discrete</td>
<td>4GB</td>
<td>4096x2160@60Hz(HDMI®), 2048x1536@85Hz(VGA), 3840x2160@60Hz(DP)</td>
<td>1x HDMI® 2.0, 1x VGA, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6400</td>
<td>Discrete</td>
<td>4GB</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)</td>
<td>1x HDMI® 2.1 FRL, 1x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Notes:
[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).
[2] AMD Radeon™ 520 is not available for MT 11RB / 11RC / 11RD / 11RE.

Monitor Support

Monitor Support
Supports up to 3 independent displays via onboard ports (HDMI® and 2x DisplayPort™), more displays support via discrete graphics

Chipset

 Chipset
AMD PRO 565 chipset

Memory

Max Memory
Up to 128GB DDR4-3200

Memory Slots
Four DDR4 DIMM slots, dual-channel capable

Memory Type
- DDR4-1866
- DDR4-2133
- DDR4-2400
• DDR4-2666
• DDR4-3200

Notes:
[1] Recommend to choose the models with more than 4GB for better performance and experience.
[2] The max memory is based on the test results with current Lenovo® memory offerings.
[3] Installed memory is actually DDR4-3200 but may run as DDR4-1866, DDR4-2133, DDR4-2400 or DDR4-2666 depending on the memory support capability of processor.

Storage

Storage Support
Up to three drives, 1x 2.5”/3.5” HDD + 1x 2.5” HDD + 1x M.2 SSD
• 2.5” HDD up to 1TB each
• 3.5” HDD up to 2TB
• M.2 SSD up to 2TB

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td></td>
</tr>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td></td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe* NVMe*, PCIe* 3.0 x2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe* NVMe*, PCIe* 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe* NVMe*, PCIe* 3.0 x4</td>
<td>-</td>
<td>Opal</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe* NVMe*, PCIe* 4.0 x4 Value</td>
<td>-</td>
<td>Opal</td>
</tr>
</tbody>
</table>

RAID
RAID 0/1 support for HDDs (RAID preset only available via special bid models)

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage

Optical
• DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
• DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
• None

Card Reader
• 3-in-1 card reader (SD, SDHC, SDXC)
• No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC623-CG codec

Speakers
• No speakers
• Single speaker, 2W x1

Power Supply

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
<td>-</td>
</tr>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>
Input Device

Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

Mechanical

Form Factor
Tower (13.6L)

Dimensions (WxDxH)[3]
145 x 296 x 346 mm (5.7 x 11.7 x 13.6 inches)

Weight[2]
Around 5.9 kg (13 lbs)

Case Color
Black

Bays
- 1x 2.5” disk bay (bay comes with disk)
- 1x 3.5” disk bay
- 1x slim ODD bay

Expansion Slots
- One PCIe® 3.0 x16, full-height (length < 215mm)
- One PCIe® 3.0 x1, full-height (length < 215mm)
- Two M.2 slots (one for WLAN, one for SSD)
- Two dummy slots, only brackets for optional port extension

EOU
EOU design for chassis open, M.2 SSD, ODD, memory, and PCIe® extension card

Others
- (Optional) Dust filter
- Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network[3]

Onboard Ethernet**
- Gigabit Ethernet, Realtek® RTL8111EPV, 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Realtek® RTL8111HN, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet**[2]
- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe® x1
- Gigabit Ethernet, Bitland RTL8111FP, 1x RJ-45, PCIe® x1
- No optional Ethernet

WLAN + Bluetooth®**
- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
Intel® Wireless-AC 9260, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
• MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
• Realtek® Wi-Fi® 6 RTL8852AE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
• Intel® Wi-Fi® 6 AX200, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
• No WLAN and Bluetooth®

Notes:
[1] This system does not support Power Over Ethernet (PoE). If the system is used in a PoE environment, then a Network Isolator is required to prevent possible damage to the system, PoE equipment, or both.
[2] RTL8111FP is not available for AP countries.
[3], [4], [5] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports

Front Ports
• 1x USB-C® 3.2 Gen 1
• 2x USB 3.2 Gen 1
• 2x USB 3.2 Gen 2
• 1x headphone / microphone combo jack (3.5mm)
• 1x microphone (3.5mm)

Optional Front Ports
• 1x card reader
• None

Rear Ports
• 4x USB 2.0
• 1x HDMI® 1.4b
• 2x DisplayPort™ 1.4
• 1x Ethernet (RJ-45)
• 1x line-out (3.5mm)
• 1x serial (9-pin)

Optional Rear Ports
• 2x USB-C® 3.2 Gen 2 (support data transfer, via 2-port USB-C® expansion card, PCIe® x4)
• 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
• 2x USB 2.0 (via 2-port adapter)
• 1x parallel
• 1x serial
• None

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
• (Optional) E-lock
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop
Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

DASH 1.2
- Non-DASH

Notes:
[1] DASH 1.2 is an optional feature for the selected MTs, MT 11W5/11W6/11W7/11W8 do not support DASH.

SERVICE

Warranty

Base Warranty
- 1-year courier or carry-in service
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA cable (1.5m)
- DP to VGA dongle
- HDMI® to DVI dongle
- HDMI® to HDMI® cable (1.5m)
- HDMI® to VGA dongle
- None

OPERATING REQUIREMENTS

Operating Environment
Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 8.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] ENERGY STAR® 8.0 and EPEAT™ are only available for MT 11KB/11KC.
[3], [4] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- (Optional) TÜV Rheinland® Low Noise
- (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
# OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power button</td>
</tr>
<tr>
<td>2.</td>
<td>Optical drive *</td>
</tr>
<tr>
<td>3.</td>
<td>Card reader *</td>
</tr>
<tr>
<td>4.</td>
<td>Microphone (3.5mm)</td>
</tr>
<tr>
<td>5.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>6.</td>
<td>USB-C 3.2 Gen 2</td>
</tr>
<tr>
<td>7.</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>8.</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>9.</td>
<td>Line-out (3.5mm)</td>
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<tr>
<td>10.</td>
<td>Flex IO *</td>
</tr>
<tr>
<td>11.</td>
<td>HDMI 2.1 TMDS</td>
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<tr>
<td>12.</td>
<td>2x DisplayPort 1.4</td>
</tr>
<tr>
<td>13.</td>
<td>2x PS/2 ports (keyboard / mouse) *</td>
</tr>
<tr>
<td>14.</td>
<td>4x USB 3.2 Gen 1</td>
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<tr>
<td>15.</td>
<td>Ethernet (RJ-45)</td>
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<tr>
<td>16.</td>
<td>Serial *</td>
</tr>
<tr>
<td>17.</td>
<td>Optional ports on expansion cards *</td>
</tr>
<tr>
<td>18.</td>
<td>Power connector</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
PERFORMANCE

Processor
Processor Family
Intel® Pentium® or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td>-</td>
<td>6MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-12300</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz[2]</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[3]</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz[4]</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12600</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.8GHz[5]</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[6]</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[7]</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900F</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[8]</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
[1], [2], [3], [4], [5], [6], [7], [8] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turbo Boost/ for more information.

Operating System
Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[1]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics
Graphics***[1]

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI® / Flex IO(HDMI®) /</td>
<td>2x DP 1.4 HBR2, 1x HDMI® 2.1 TMDS, 1x</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>
### ThinkCentre M80t Gen 3

<table>
<thead>
<tr>
<th>Model</th>
<th>Graphics Type</th>
<th>Integrated/Shared</th>
<th>Resolution/Refresh Rate</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>710</td>
<td>Intel® UHD 730 Graphics</td>
<td>Integrated/Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI)/Flex IO(DP), 3840x2160@60Hz(Flex IO(USB-C))</td>
<td>2x DP 1.4 HBR2, 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2048x1536@50Hz(Flex IO(VGA))</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>710</td>
<td>Intel® UHD 770 Graphics</td>
<td>Integrated/Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz(HDMI)/Flex IO(DP), 3840x2160@60Hz(Flex IO(USB-C))</td>
<td>2x DP 1.4 HBR2, 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2048x1536@50Hz(Flex IO(VGA))</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3050</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@120Hz(DP)</td>
<td>1x HDMI® 2.1 FRL, 3x DP 1.4a</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6400</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)</td>
<td>1x HDMI® 2.1 FRL, 1x DP 1.4a</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6500XT</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)</td>
<td>1x HDMI® 2.1, 1x DP 1.4</td>
</tr>
<tr>
<td>Intel® Iris® Xe MAX 100</td>
<td>Discrete</td>
<td>2GB LPDDR4X</td>
<td>3840x2160@60Hz(DP)</td>
<td>2x DP 1.4</td>
</tr>
</tbody>
</table>

**Notes:**

1. The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).
2. Requires two DisplayPort™ 1.4a links and DSC compression.

**Monitor Support**

Monitors support up to 4 independent displays via onboard ports (2x DP, 1x HDMI®, and 1x optional Flex IO), more displays support via discrete graphics.

**Notes:**

1. Onboard video ports are only available for the models with integrated graphics.

**Chipset**

**Chipset**

Intel® Q670 chipset

**Memory**

Max Memory

Up to 128GB DDR5

**Memory Slots**

Four DDR5 UDIMM slots, dual-channel capable

**Memory Type**

- DDR5-3600
- DDR5-4000
- DDR5-4400

**Notes:**
The max memory is based on the test results with current Lenovo® memory offerings.

Installed memory is actually DDR5-4800 but may run as DDR5-3600, DDR5-4000, or DDR5-4400 depending on the memory support capability of processor.

Storage

Storage Support

Up to four drives, 1x 2.5"/3.5" HDD + 1x 2.5" HDD + 2x M.2 SSD
- 2.5" HDD up to 1TB
- 3.5" HDD up to 2TB
- M.2 SSD up to 2TB each

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Value</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID

RAID 0/1 support (RAID preset only available via special bid models)

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] The max capacity of SSD/HDD is based on the test results with current Lenovo® SSD/HDD offerings.

Removable Storage

Optical

- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

Card Reader

- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC897Q-CG codec

Speakers

Single speaker, 2W x1

Power Supply

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>380W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Input Device

Keyboard
** Keyboard **
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

** Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Mouse (PS/2 connector), black (only available via special bid)
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

** Mechanical **

** Form Factor **
Tower (13.6L)

** Dimensions (WxDxH)**
145 x 296 x 346 mm (5.7 x 11.7 x 13.6 inches)

** Packaging Dimensions (WxDxH)**
245 x 395 x 530 mm (9.65 x 15.55 x 20.87 inches)

** Weight**
Around 5.9 kg (13.0 lbs)

** Packaging Weight**
8.3 kg (18.29 lbs)

** Case Color**
Black

** Bays**
- 1x 2.5” disk bay
- 1x 3.5” disk bay
- 1x slim ODD bay

** Expansion Slots**
- One PCIe® 4.0 x16 (x4 signal), full-height, (length ≤ 185mm, height ≤ 100mm) or (length ≤ 118mm, height ≤ 110mm)
- One PCIe® 4.0 x16, full-height, length ≤ 209mm, height ≤ 117.5mm
- One PCIe® 3.0 x1, full-height, (length ≤ 185mm, height ≤ 100mm) or (length ≤ 118mm, height ≤ 110mm)
- Three M.2 slots (one for WLAN, two for SSD)

** EOU**
Toolless cover, disk, optical, extension card assembly / removal

** Stand**
No stand

** Others**
- (Optional) Dust filter
- Supports Smart Power On

---

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2.5” HDD tray is optional, or comes with 2.5 HDD. 3.5” bay supports 2.5” / 3.5” HDD, 3.5” to 2.5 converter comes with 2nd 2.5” HDD.

---

** CONNECTIVITY **

** Network **
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet***

- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe® x1
- Gigabit Ethernet, Intel® Ethernet Server Adapter I350-T4, 4x RJ-45, PCIe® x4
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
- No optional Ethernet

WLAN + Bluetooth®**

- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
- No WLAN and Bluetooth®

Notes:

[1] Intel® Ethernet Server Adapter I350-T4 is not available in EMEA.
[4] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports

Front Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

Optional Front Ports
- 1x card reader

Rear Ports
- 4x USB 3.2 Gen 1
- 1x HDMI® 2.1 TMDS
- 2x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

Optional Rear Ports***
- 1x USB-C® 3.2 Gen 1 with DisplayPort™ function and 5V@3A charging (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.2 (Flex IO)
- 1x VGA (Flex IO)
- 1x USB-C® 3.2 Gen 2x2 (support data transfer, via USB-C® expansion card, PCIe® x4)
- 2x USB-C® 3.2 Gen 2 (support data transfer, via 2-port USB-C® expansion card, PCIe® x4)
- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
- 2x USB 2.0 (via 2-port adapter)
- 1x parallel
- 1x serial
- 1x 2nd serial
- 4x serial (via 4-port serial expansion card, PCIe® x1)
- 2x PS/2

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4®: 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4®: 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
- (Optional) E-lock
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
- Touch style fingerprint reader on mouse (EOL on Jan, 2023)
- No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Self-healing BIOS (Level 2)
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management**
- Intel® vPro® Enterprise[1]
- Intel® vPro® Essentials[2]
- Non-vPro®

Notes:
[1], [2] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
- 1-year courier or carry-in service
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES
**Bundled Accessories**

- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® cable (1.5m)
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C®)
- None

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

**Relative Humidity**
- Operating: 20% to 80%
- Storage: 10% to 90%

**Altitude**
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

**CERTIFICATIONS**

**Green Certifications**[1]

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[2]
- (Optional) EPEAT™ Gold Registered[3]
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

**Other Certifications**

- (Optional) TÜV Rheinland® Ultra Low Noise

**Mil-Spec Test**

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
[2], [3] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

Feature with ** means that only one offering listed under the feature is configured on selected models.

Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th>1. Power button</th>
<th>10. Flex IO *</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Optical drive *</td>
<td>11. HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>3. Card reader *</td>
<td>12. 2x DisplayPort 1.4</td>
</tr>
<tr>
<td>4. Microphone (3.5mm)</td>
<td>13. 2x PS/2 ports (keyboard / mouse) *</td>
</tr>
<tr>
<td>5. Headphone / microphone combo jack (3.5mm)</td>
<td>14. 4x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>6. USB-C 3.2 Gen 2</td>
<td>15. Ethernet (RJ-45)</td>
</tr>
<tr>
<td>7. 2x USB 3.2 Gen 1</td>
<td>16. Serial *</td>
</tr>
<tr>
<td>8. 2x USB 3.2 Gen 2</td>
<td>17. Optional ports on expansion cards *</td>
</tr>
<tr>
<td>9. Line-out (3.5mm)</td>
<td>18. Power connector</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
**PERFORMANCE**

**Processor**

**Processor Family**
Intel® Pentium® or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td>-</td>
<td>6MB</td>
</tr>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
</tr>
<tr>
<td>Core i3-12300</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz[2]</td>
<td>12MB</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[3]</td>
<td>18MB</td>
</tr>
<tr>
<td>Core i5-12400F</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[4]</td>
<td>18MB</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz[5]</td>
<td>18MB</td>
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<tr>
<td>Core i5-12600</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.8GHz[6]</td>
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<tr>
<td>Core i5-12600K</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 3.7GHz / E-core 2.8GHz</td>
<td>P-core 4.9GHz / E-core 3.6GHz[7]</td>
<td>20MB</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[8]</td>
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<td>30MB</td>
</tr>
</tbody>
</table>

**Notes:**

[1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12], [13] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[1]
- No preload operating system

**Notes:**

[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID,
### Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI*] / Flex IO(HDMI*), 3840x2160@60Hz[Flex IO(USB-C*)], 2048x1536@50Hz[Flex IO(VGA)]</td>
<td>2x DP 1.4 HBR2, 1x HDMI* 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI* 2.1 TMDS / USB-C*)</td>
<td>DirectX® 12</td>
<td></td>
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<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI*] / Flex IO(HDMI*), 3840x2160@60Hz[Flex IO(USB-C*)], 2048x1536@50Hz[Flex IO(VGA)]</td>
<td>2x DP 1.4 HBR2, 1x HDMI* 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI* 2.1 TMDS / USB-C*)</td>
<td>DirectX® 12</td>
<td></td>
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<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI*] / Flex IO(HDMI*), 3840x2160@60Hz[Flex IO(USB-C*)], 2048x1536@50Hz[Flex IO(VGA)]</td>
<td>2x DP 1.4 HBR2, 1x HDMI* 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI* 2.1 TMDS / USB-C*)</td>
<td>DirectX® 12</td>
<td></td>
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<tr>
<td>NVIDIA® GeForce GTX 1660 SUPER</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>4096x2160@60Hz(HDMI*), 5120x3200@60Hz (DP), 2560x1600@60Hz(DVI-D)</td>
<td>1x HDMI* 2.0, 1x DP 1.4, 1x DVI-D</td>
<td>DirectX® 12</td>
<td></td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3050</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>7680x4320@60Hz(HDMI*), 7680x4320@120Hz(DP)</td>
<td>1x HDMI* 2.1 FRL, 3x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
<td></td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3060</td>
<td>Discrete</td>
<td>12G GDDR6</td>
<td>7680x4320@60Hz(HDMI*), 7680x4320@120Hz(DP)</td>
<td>1x HDMI* 2.1, 3x DP 1.4</td>
<td>DirectX® 12</td>
<td></td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3070 Ti</td>
<td>Discrete</td>
<td>8G GDDR6X</td>
<td>7680x4320@60Hz(HDMI*), 5120x2880@60Hz(DP)</td>
<td>3x DP 1.4, 1x HDMI* 2.1</td>
<td>DirectX® 12, EOL</td>
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<tr>
<td>NVIDIA® GeForce RTX™ 3080 Ti</td>
<td>Discrete</td>
<td>8G GDDR6X</td>
<td>7680x4320@60Hz(HDMI*), 5120x2880@60Hz(DP)</td>
<td>1x HDMI* 2.1 FRL, 1x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
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<tr>
<td>AMD Radeon™ RX 6400</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI*), 7680x4320@60Hz(DP)</td>
<td>1x HDMI* 2.1 FRL, 1x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
<td></td>
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<tr>
<td>AMD Radeon™ RX 6500XT</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI*), 7680x4320@60Hz(DP)</td>
<td>1x HDMI* 2.1, 1x DP 1.4</td>
<td>DirectX® 12, OpenGL 4.6</td>
<td></td>
</tr>
<tr>
<td>Intel® Iris® Xe MAX 100</td>
<td>Discrete</td>
<td>2GB LPDDR4X</td>
<td>3840x2160@60Hz(DP)</td>
<td>2x DP 1.4</td>
<td>DirectX® 12, OpenGL 4.6</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

[2] NVIDIA® GeForce RTX™ 3070 Ti is EOL.

[3], [4] Requires two DisplayPort™ 1.4a links and DSC compression.

### Monitor Support

**Monitor Support**

Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI*, and 1x optional Flex IO), more displays support
via discrete graphics

Notes:
[1] Onboard video ports are only available for the models with integrated graphics.

**Chipset**

Chipset
Intel® Q670 chipset

**Memory**

Max Memory[1]  Up to 128GB DDR5

Memory Slots
Four DDR5 UDIMM slots, dual-channel capable

Memory Type[2]
- DDR5-3600
- DDR5-4000
- DDR5-4400

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR5-4800 but may run as DDR5-3600, DDR5-4000, or DDR5-4400 depending on the memory support capability of processor.

**Storage**

Storage Support[1][2]
Up to five drives, 2x 2.5"/3.5" HDD + 1x 2.5" HDD + 2x M.2 SSD
- 2.5" HDD up to 1TB each
- 3.5" HDD up to 2TB
- M.2 SSD up to 2TB each

Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe* NVMe*, PCIe* 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe* NVMe*, PCIe* 3.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe* NVMe*, PCIe* 4.0 x4 Performance</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe* NVMe*, PCIe* 4.0 x4 Value</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
RAID 0/1 support (RAID preset only available via special bid models)

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] The max capacity of SSD/HDD is based on the test results with current Lenovo® SSD/HDD offerings.

**Removable Storage**

Optical**
- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

Card Reader
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader
Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC897Q-CG codec
Speakers
Single speaker, 2W x1

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>300W</td>
<td>Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>500W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>750W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Input Device

Keyboard**
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Keyboard (PS/2 connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Mouse (PS/2 connector), black (only available via special bid)
- Lenovo® Fingerprint Mouse (USB connector), Windows® Hello support, black (EOL on Jan, 2023)
- No mouse

Mechanical

Form Factor
Tower (17L)

Dimensions (WxDxH)(3)
170 x 298 x 376 mm (6.7 x 11.7 x 14.8 inches)

Packaging Dimensions (WxDxH)
275 x 395 x 540 mm (10.8 x 15.6 x 21.4 inches)

Weight(2)
Around 6.5 kg (14.3 lbs)

Packaging Weight
9.8 kg (21.61 lbs)

Case Color
Black

Bays
- 1x 2.5" disk bay (bay comes with disk)
- 1x 3.5" disk bay
- 1x 3.5" disk bay (optional, or bay comes with disk)
- 1x slim ODD bay

Expansion Slots
- One PCIe® 4.0 x16 (x4 signal), full-height, length ≤ 205mm, height ≤ 114.55mm
- One PCIe® 4.0 x16, full-height, length ≤ 268.5mm, height ≤ 114.55mm
- Two PCIe® 3.0 x1, full-height, length ≤ 205mm, height ≤ 114.55mm
- Three M.2 slots (one for WLAN, two for SSD)

EOU
Toolless cover, disk, optical, extension card assembly / removal

Stand
No stand

Others
• (Optional) Dust filter
• Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet***
• Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe® x1
• Gigabit Ethernet, Bitland RTL8168H, 1x RJ-45, PCIe® x1
• Gigabit Ethernet, Intel® Ethernet Server Adapter I350-T4, 4x RJ-45, PCIe® x4[1]
• 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
• No optional Ethernet

WLAN + Bluetooth®**
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[2]
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[2]
• AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[2]
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card[3]
• No WLAN and Bluetooth®

Notes:
[1] Intel® Ethernet Server Adapter I350-T4 is not available in EMEA.
[4] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports[1]

Front Ports
• 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
• 2x USB 3.2 Gen 1
• 2x USB 3.2 Gen 2
• 1x headphone / microphone combo jack (3.5mm)
• 1x microphone (3.5mm)

Optional Front Ports
1x card reader

Rear Ports[2]
• 4x USB 3.2 Gen 1
• 1x HDMI® 2.1 TMDS
• 2x DisplayPort™ 1.4
• 1x Ethernet (RJ-45)
• 1x line-out (3.5mm)

Optional Rear Ports***
• 1x USB-C® 3.2 Gen 1 with DisplayPort™ function and 5V@3A charging (Flex IO)
• 1x HDMI® 2.1 TMDS (Flex IO)
• 1x DP 1.2 (Flex IO)
• 1x VGA (Flex IO)
• 1x USB-C® 3.2 Gen 2x2 (support data transfer, via USB-C® expansion card, PCIe® x4)
• 2x USB-C® 3.2 Gen 2 (support data transfer, via 2-port USB-C® expansion card, PCIe® x4)
• 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
• 2x USB 2.0 (via 2-port adapter)
• 1x parallel
• 1x serial
• 1x 2nd serial
• 4x serial (via 4-port serial expansion card, PCIe® x1)
• 2x PS/2

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified
Physical Locks
• (Optional) E-lock
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop
Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch
Fingerprint Reader
• Touch style fingerprint reader on mouse (EOL on Jan, 2023)
• No fingerprint reader
BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Boot without keyboard and mouse
• Individual USB port disablement
• Self-healing BIOS (Level 2)
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management
• Intel® vPro® Enterprise®
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE
**Warranty**

**Base Warranty**
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

**Notes:**
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to [https://smartfind.lenovo.com/](https://smartfind.lenovo.com/). To learn more details of warranty policy, please access [https://pcsupport.lenovo.com/warranty](https://pcsupport.lenovo.com/warranty).

**ACCESSORIES**

**Bundled Accessories**

- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® cable (1.5m)
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C®)
- None

**OPERATING REQUIREMENTS**

**Operating Environment**

**Temperature**
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

**Relative Humidity**
- Operating: 20% to 80%
- Storage: 10% to 90%

**Altitude**
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

**CERTIFICATIONS**

**Green Certifications**

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

**Notes:**
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

[2], [3] EPEAT™ is registered where applicable, please visit [epa.net](http://epa.net) for registration status by country.
• (Optional) TÜV Rheinland® Low Noise
• (Optional) TÜV Rheinland® Ultra Low Noise

**Mil-Spec Test**

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
### OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power button</td>
</tr>
<tr>
<td>2.</td>
<td>Optical drive *</td>
</tr>
<tr>
<td>3.</td>
<td>Card reader *</td>
</tr>
<tr>
<td>4.</td>
<td>Microphone (3.5mm)</td>
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<tr>
<td>5.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
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<tr>
<td>6.</td>
<td>USB-C 3.2 Gen 2</td>
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<tr>
<td>7.</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>8.</td>
<td>2x USB 3.2 Gen 2</td>
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<tr>
<td>9.</td>
<td>Line-out (3.5mm)</td>
</tr>
<tr>
<td>10.</td>
<td>Flex IO *</td>
</tr>
<tr>
<td>11.</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>12.</td>
<td>2x DisplayPort 1.4a</td>
</tr>
<tr>
<td>13.</td>
<td>2x PS/2 ports (keyboard / mouse) *</td>
</tr>
<tr>
<td>14.</td>
<td>4x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>15.</td>
<td>Ethernet (RJ-45)</td>
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<tr>
<td>16.</td>
<td>Serial *</td>
</tr>
<tr>
<td>17.</td>
<td>Optional ports on expansion cards *</td>
</tr>
<tr>
<td>18.</td>
<td>Power connector</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
13th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400F</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
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<tr>
<td>Core i5-13600</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.7GHz / E-core 2.0GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700F</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i9-13900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz</td>
<td>36MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-13900F</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz</td>
<td>36MB</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 IoT Enterprise LTSC 2021
- Ubuntu Linux[1]
- No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics****[1]

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI* / Flex IO(HD MI) / Flex IO(DP)], 3840x2160@60Hz[Flex IO(USB-C*)], 2048x1536@50Hz[Flex IO(VGA)]</td>
<td>2x DP 1.4a (HBR2, DSC), 1x HDMI* 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI* 2.1 TMDS / USB-C*)</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>
### Intel® UHD graphics 770
- **Integrated:** Yes
- **Shared:** Yes
- **Resolutions:**
  - 4096x2304@60Hz (DP), 4096x2160@60Hz (HDMI®, Flex IO (HD MI), Flex IO (DP)), 3840x2160@60Hz (Flex IO (USB-C®)), 2048x1536@50Hz (Flex IO (VGA))
- **Additional Ports:**
  - 2x DP 1.4a (HBR2, DSC)
  - 1x HDMI® 2.1 TMDS
  - 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C®)
- **DirectX®:** 12

### NVIDIA® GeForce RTX™ 3050
- **Discrete:** Yes
- **GDDR6:** 8GB
- **Resolutions:**
  - 7680x4320@60Hz (HDMI®), 7680x4320@120Hz (DP)
- **Additional Ports:**
  - 1x HDMI® 2.1 FRL
  - 3x DP 1.4a
- **DirectX®:** 12, OpenGL 4.6

### NVIDIA® GeForce RTX™ 4060
- **Discrete:** Yes
- **GDDR6:** 8GB
- **Resolutions:**
  - 7680x4320@60Hz (HDMI®), 7680x4320@60Hz (DP)
- **Additional Ports:**
  - 1x HDMI® 2.1a FRL
  - 3x DP 1.4a
- **DirectX®:** 12, OpenGL 4.6

### AMD Radeon™ RX 6400
- **Discrete:** Yes
- **GDDR6:** 4GB
- **Resolutions:**
  - 7680x4320@60Hz (HDMI®), 7680x4320@60Hz (DP)
- **Additional Ports:**
  - 1x HDMI® 2.1 FRL
  - 1x DP 1.4a
- **DirectX®:** 12, OpenGL 4.6

### Notes:
1. The information of integrated graphics is not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).
2. Requires two DisplayPort™ 1.4a links and DSC compression.

### Monitor Support
**Monitor Support**
Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI®, and 1x optional Flex IO), more displays support via discrete graphics

### Chipset
**Chipset**
Intel® Q670 chipset

### Memory
**Max Memory**
Up to 128GB DDR5

**Memory Slots**
Four DDR5 UDIMM slots, dual-channel capable

**Memory Type**
- DDR5-3600
- DDR5-4000
- DDR5-4400

### Notes:
1. The max memory is based on the test results with current Lenovo® memory offerings.
2. Installed memory is actually DDR5-5600 but may run as DDR5-3600, DDR5-4000, or DDR5-4400 depending on the memory support capability of processor.

### Storage
**Storage Support**
Up to five drives, 2x 2.5”/3.5” HDD + 1x 2.5” HDD + 2x M.2 SSD
- 2.5” HDD up to 1TB each
- 3.5” HDD up to 2TB
- M.2 SSD up to 2TB each

**Storage Type**
### Disk Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Value</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

### RAID

RAID 0/1 support (RAID preset only available via special bid models)

### Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

### Removable Storage

#### Optical

- DVD-ROM, SATA connector, slim (9.0mm)
- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

#### Card Reader

- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

### Multi-Media

#### Audio Chip

High Definition (HD) Audio, Realtek® ALC897Q-CG codec

#### Speakers

Single speaker, 2W x1

### Power Supply

#### Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>260W</td>
<td>Fixed</td>
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<tr>
<td>500W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

### DESIGN

#### Input Device

#### Keyboard**

- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

#### Mouse**

- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- No mouse

### Mechanical

#### Form Factor

Tower (17L)

#### Dimensions (WxDxH)**

170 x 298 x 376 mm (6.7 x 11.7 x 14.8 inches)

#### Packaging Dimensions (WxDxH)
275 x 395 x 540 mm (10.8 x 15.6 x 21.4 inches)

Weight\(^2\)
Around 6.5 kg (14.3 lbs)

Packaging Weight
9.8 kg (21.61 lbs)

Case Color
Black

Bays
- 1x 2.5” disk bay (bay comes with disk)
- 1x 3.5” disk bay
- 1x 3.5” disk bay (optional, or bay comes with disk)
- 1x slim ODD bay

Expansion Slots
- One PCIe® 4.0 x16 (x4 signal), full-height, length ≤ 205mm, height ≤ 114.55mm
- One PCIe® 4.0 x16, full-height, length ≤ 268.5mm, height ≤ 114.55mm
- One PCIe® 3.0 x1, full-height, length ≤ 205mm, height ≤ 114.55mm
- Three M.2 slots (one for WLAN, two for SSD)

EOU
Toolless cover, disk, optical, extension card assembly / removal

Stand
No stand

Others
- (Optional) Dust filter
- Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
- No optional Ethernet

WLAN + Bluetooth®
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card\(^1\)
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card\(^2\)
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, Intel® vPro® technology support, M.2 Card\(^3\)
- No WLAN and Bluetooth®

Notes:
[1], [2], [3] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports\(^1\)
Front Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)
Optional Front Ports
1x card reader

Rear Ports
• 4x USB 3.2 Gen 1
• 1x HDMI® 2.1 TMDS
• 2x DisplayPort™ 1.4a (HBR2, DSC)
• 1x Ethernet (RJ-45)
• 1x line-out (3.5mm)

Optional Rear Ports
• 1x USB-C® 3.2 Gen 1 with DisplayPort™ function and 5V@3A charging (Flex IO)
• 1x HDMI® 2.1 TMDS (Flex IO)
• 1x DP 1.2 (Flex IO)
• 1x VGA (Flex IO)
• 1x USB-C® 3.2 Gen 2x2 (support data transfer, via USB-C® expansion card, PCIe® x4)
• 2x USB-C® 3.2 Gen 2 (support data transfer, via 2-port USB-C® expansion card, PCIe® x4)
• 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
• 2x USB 2.0 (via 2-port adapter)
• 1x parallel
• 1x serial
• 1x 2nd serial

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
• (Optional) E-lock
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Boot without keyboard and mouse
• Individual USB port disablement
• Self-healing BIOS (Level 2)
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY
**System Management**

Intel® vPro® Enterprise
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH's defined capabilities.

**SERVICE**

**Warranty**

Base Warranty
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:

[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

**ACCESSORIES**

**Bundled Accessories**

- DP to DVI dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C®)
- None

**OPERATING REQUIREMENTS**

**Operating Environment**

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

**CERTIFICATIONS**

**Green Certifications**

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2], [3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications

- (Optional) TÜV Rheinland® Low Noise
- (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test

MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Power button
2. Optical drive *
3. Card reader *
4. Microphone (3.5mm)
5. Headphone / microphone combo jack (3.5mm)
6. USB-C (USB 10Gbps), data transfer only
7. 2x USB-A (USB 5Gbps)
8. 2x USB-A (USB 10Gbps)
9. Line-out (3.5mm)
10. Flex IO *
11. HDMI 2.1 TMDS
12. 2x DisplayPort 1.4a
13. 2x PS/2 ports (keyboard / mouse) *
14. 4x USB-A (USB 5Gbps)
15. Ethernet (RJ-45)
16. Serial *
17. Optional ports on expansion cards *
18. Power connector

Notes:
- Items with * are only available on selected models
- More ports are available through the optional expansion cards (not shown on the sample product above)
PERFORMANCE

Processor

Processor Family
13th Generation Intel® Core™ i5 / i7 or 14th Generation Intel® Core™ i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-14400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
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<tr>
<td>Core i5-14500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-14600</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.7GHz / E-core 2.0GHz</td>
<td>P-core 5.2GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
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<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
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<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-14900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.8GHz / P-core 5.4GHz / E-core 4.3GHz</td>
<td>36MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 IoT Enterprise LTSC 2024
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- No preload operating system

Graphics

Graphics****(1)

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(DP), 4096x2160@60Hz[HDMI® / Flex IO(HD MI) / Flex IO(DP)], 3840x2160@60Hz[Flex IO(USB-C*)], 2048x1536@50Hz[Flex IO(VGA)]</td>
<td>2x DP 1.4a (HBR2, DSC), 1x HDMI® 2.1 TMDS, 1x Flex IO (VGA / DP 1.2 / HDMI® 2.1 TMDS / USB-C*)</td>
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</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3050</td>
<td>Discrete</td>
<td>6GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@120Hz(DP), 2560x1660@60Hz(DVI)</td>
<td>1x HDMI® 2.1 TMDS, 1x DisplayPort™ 1.4a, 1x DVI-D</td>
<td>DirectX® 12, OpenGL 4.6</td>
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</table>
| AMD Radeon™ | Discrete | 8G GDDR6 | 7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP) | 3x DP 1.4a, 1x HDMI® 2.1 FRL | DirectX® 12, OpenGL 4.6,
ThinkCentre M90t Gen 5

RX 6600 LE

Intel® Arc™ A310 LP Graphics
Discrete
4GB GDDR6
5120x2880@60Hz(DP)
2x DisplayPort™ 1.4a
DirectX® 12, OpenGL 4.6
OpenCL 2.2

Notes:
[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support

Monitor Support

Supports up to 4 independent displays via onboard ports (2x DP, 1x HDMI®, and 1x optional Flex IO), more displays support via discrete graphics.

Chipset

Chipset

Intel® Q670 chipset

Memory

Max Memory

Up to 128GB DDR5

Memory Slots

Four DDR5 UDIMM slots, dual-channel capable

Memory Type

• DDR5-3600
• DDR5-4000
• DDR5-4400

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] Installed memory is actually DDR5-5600 but runs at DDR5-3600, DDR5-4000, DDR5-4400 due to the memory support capability of processor.

Storage

Storage Support

Up to five drives, 2x 3.5” HDD + 1x 2.5” HDD + 2x M.2 SSD
• 3.5” HDD up to 2TB
• 2.5” HDD bay is only for customer self upgrade
• M.2 SSD up to 2TB each

Storage Type

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<td>PCIe NVMe*, PCIe 4.0 x4</td>
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</table>

RAID

RAID 0/1 support (RAID preset only available via special bid models)

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] 2.5” HDD bay and 2nd 3.5” bay are optional parts, and 2.5” HDD bay is only for customer self upgrade purpose and the hard drive is sold separately.

Removable Storage

Optical

• DVD-ROM, SATA connector, slim (9.0mm)
ThinkCentre M90t Gen 5

- DVD burner (DVD±RW), SATA connector, slim (9.0mm)
- None

Card Reader
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC897Q-CG codec

Speakers
Single speaker, 2W x1

Power Supply

<table>
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<td>500W</td>
<td>Fixed</td>
<td>92%</td>
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DESIGN

Input Device

Keyboard**
- EOS Wireless Keyboard, black
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- EOS Wireless Mouse, Black
- No mouse

Mechanical

Form Factor
Tower (17L)

Dimensions (WxDxH)[3]
170 x 298 x 376 mm (6.7 x 11.7 x 14.8 inches)

Packaging Dimensions (WxDxH)
275 x 395 x 540 mm (10.8 x 15.6 x 21.4 inches)

Weight[2]
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Packaging Weight
9.8 kg (21.61 lbs)

Case Color
Black

Bays
- 1x 2.5" disk bay (optional)[3]
- 1x 3.5" disk bay
- 1x 3.5" disk bay (optional, or bay comes with disk)[4]
- 1x slim ODD bay

Expansion Slots
- One PCIe® 4.0 x16 (x4 signal), full-height, length ≤ 205mm, height ≤ 114.55mm
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• One PCIe® 3.0 x1, full-height, length ≤ 205mm, height ≤ 114.55mm
• Three M.2 slots (one for WLAN, two for SSD)

EOU
Toolless cover, memory, disk, optical, extension card assembly / removal

Stand
No stand

Others
• (Optional) Dust filter
• Supports Smart Power On

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] 2.5" HDD bay is optional part
[4] 2nd 3.5" bay is optional part

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
• 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
• No optional Ethernet

WLAN + Bluetooth®**
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support, M.2 Card
• No WLAN and Bluetooth®

Ports[1]
Front Ports
• 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with 15W charging
• 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
• 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
• 1x headphone / microphone combo jack (3.5mm)
• 1x microphone (3.5mm)

Optional Front Ports
1x card reader

Rear Ports[2]
• 4x USB-A (USB 5Gbps / USB 3.2 Gen 1)
• 1x HDMI® 2.1 TMDS
• 2x DisplayPort™ 1.4a (HBR2, DSC)
• 1x Ethernet (RJ-45)
• 1x line-out (3.5mm)

Optional Rear Ports***
• 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with DisplayPort™ function and 5V@3A charging (Flex IO)
• 1x HDMI® 2.1 TMDS (Flex IO)
• 1x DP 1.2 (Flex IO)
• 1x VGA (Flex IO)
• 2x USB-A (Hi-Speed USB / USB 2.0), via 2-port adapter
• 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via 2-port USB expansion card, PCIe® x1
• 1x parallel
• 1x serial
• 1x 2nd serial
Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
- (Optional) E-lock
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Certificate based BIOS authentication
- Individual USB port disablement
- Self-healing BIOS (Level 2)
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- More BIOS security features, please visit BIOS Simulator

MANAGEABILITY

System Management

System Management[1]
- Intel® vPro® Enterprise
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty[1]

Base Warranty **
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty
Notes:

[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories***
- DP to DVI dongle
- DP to HDMI® dongle
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C®)
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[1]

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered[2]
- ErP Lot 3
- GREENGUARD®
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- (Optional) TÜV Rheinland® Low Noise
- (Optional) TÜV Rheinland® Ultra Low Noise

Mil-Spec Test
MIL-STD-810H military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power button</td>
</tr>
<tr>
<td>2.</td>
<td>Card reader *</td>
</tr>
<tr>
<td>3.</td>
<td>Microphone (3.5mm)</td>
</tr>
<tr>
<td>4.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5.</td>
<td>1x USB-C 3.2 Gen 1</td>
</tr>
<tr>
<td>6.</td>
<td>2x USB 3.2 Gen 1</td>
</tr>
<tr>
<td>7.</td>
<td>2x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>8.</td>
<td>Optical drive *</td>
</tr>
<tr>
<td>9.</td>
<td>Headphone (3.5mm)</td>
</tr>
<tr>
<td>10.</td>
<td>DisplayPort 1.4</td>
</tr>
<tr>
<td>11.</td>
<td>HDMI 1.4b</td>
</tr>
<tr>
<td>12.</td>
<td>Serial</td>
</tr>
<tr>
<td>13.</td>
<td>VGA</td>
</tr>
<tr>
<td>14.</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>15.</td>
<td>3x USB 2.0</td>
</tr>
<tr>
<td>16.</td>
<td>1x USB 2.0 (with smart power-on feature)</td>
</tr>
<tr>
<td>17.</td>
<td>Optional ports on expansion cards *</td>
</tr>
<tr>
<td>18.</td>
<td>Power connector</td>
</tr>
<tr>
<td>19.</td>
<td>2x PS/2 ports (keyboard / mouse) *</td>
</tr>
<tr>
<td>20.</td>
<td>Serial *</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
- Onboard video ports are only available for the models with integrated graphics
PERFORMANCE

Processor

Processor Family
Intel® Celeron®, Intel® Pentium®, or 12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® G6900</td>
<td>2</td>
<td>2</td>
<td>3.4GHz</td>
<td></td>
<td>4MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td></td>
<td>6MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[2]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400F</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[3]</td>
<td>18MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz[4]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[5]</td>
<td>25MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[6]</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:
[1], [2], [3], [4], [5], [6] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
• Windows® 11 Pro
• Windows® 11 Home
• Windows® 11 Home Single Language
• Windows® 11 DG Windows® 10 Pro 64
• Ubuntu Linux[1]
• No preload operating system

Notes:
[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

Graphics

Graphics***[1]

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>3840x2160@24Hz(HDMI®), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP)</td>
<td>1x HDMI® 1.4b, 1x VGA, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>3840x2160@24Hz(HDMI®), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP)</td>
<td>1x HDMI® 1.4b, 1x VGA, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
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<td>1x HDMI® 1.4b, 1x VGA, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Graphics Model</td>
<td>Type</td>
<td>Memory</td>
<td>Resolution</td>
<td>Interface</td>
<td>Compatibility</td>
</tr>
<tr>
<td>---------------</td>
<td>------</td>
<td>--------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>NVIDIA GeForce RTX™ 3050</td>
<td>Discrete</td>
<td>8GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@120Hz(DP)</td>
<td>1x HDMI® 2.1 FRL, 3x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6400</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)</td>
<td>1x HDMI® 2.1 FRL, 1x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6500XT</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)</td>
<td>1x HDMI® 2.1, 1x DP 1.4</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>Intel® Iris® Xe MAX 100</td>
<td>Discrete</td>
<td>2GB LPDDR4X</td>
<td>3840x2160@30Hz(HDMI®), 1920x1080@60Hz(VGA)</td>
<td>1x VGA, 1x HDMI® 1.4</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Notes:
[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).
[2] The onboard video ports VGA, HDMI® and DisplayPort™ are disabled on the models with discrete graphics. 7680x4320@120Hz(DP) requires two DisplayPort™ 1.4a links and DSC compression.
[3], [4], [5] The onboard video ports VGA, HDMI® and DisplayPort™ are disabled on the models with discrete graphics.

**Monitor Support**

**Chipset**

**Intel® B660 chipset**

**Memory**

**Max Memory**

Up to 64GB DDR4-3200

**Memory Slots**

Two DDR4 UDIMM slots, dual-channel capable

**Memory Type**

DDR4-3200

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

**Storage Support**

Up to two drives. 1x 3.5" HDD + 1x M.2 SSD
- 3.5" HDD up to 2TB
- M.2 SSD up to 1TB

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2242 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**RAID**

No support

Notes:
The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

### Removable Storage

**Optical**
- DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

**Card Reader**
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

### Multi-Media

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC222-CG codec

**Speakers**
- No speakers
- Single speaker, 2W x1

### Power Supply

**Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
</tr>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>90%</td>
</tr>
<tr>
<td>310W</td>
<td>Fixed</td>
<td>92%</td>
</tr>
<tr>
<td>380W</td>
<td>Fixed</td>
<td>92%</td>
</tr>
</tbody>
</table>

### DESIGN

#### Input Device

**Keyboard**
- Euterpe Wireless Keyboard, grey
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Euterpe Wireless Mouse, grey
- No mouse

### Mechanical

**Form Factor**
Tower (13.6L)

**Dimensions (WxDxH)**
145 x 294 x 340 mm (5.71 x 11.57 x 13.39 inches)

**Packaging Dimensions (WxDxH)**
245 x 395 x 530 mm (9.65 x 15.55 x 20.87 inches)

**Weight**
Around 5.5 kg (12.1 lbs)

**Packaging Weight**
Around 7.5 kg (16.53 lbs)

**Case Color**
Black (chassis), grey (bezel)

**Bays**
• 1x 3.5" disk bay
• 1x slim ODD bay

Expansion Slots
• One PCIe® 4.0 x16, full-height, half-length
• Two PCIe® 3.0 x1, full-height, half-length
• (Optional) M.2 Bracket. For installing M.2 devices, M.2 bracket kit is needed. The kit is optional, or comes with pre-configured M.2 SSD or M.2 Wifi models
• Two M.2 slots (one for WLAN, one for SSD)

EOU
• (Optional) toolless chassis open (toolless chassis screw required) and toolless M.2 SSD, HDD, memory assembly / removal
• No support

Cooling System (Fan & Cooler)***
• (Optional) 1x rear fan
• (Optional) 1x front system fan
• (Optional) 1x Photocatalyst System Fan

Others
(Optional) Smart Cable (USB-A to USB-C®)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
No optional Ethernet

WLAN + Bluetooth®**
• Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
• Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, Intel® vPro® technology support, M.2 card
• Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[1]
• Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card[2]
• No WLAN and Bluetooth®

Notes:
[1], [2] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports[1]

Front Ports
• 1x USB-C® 3.2 Gen 1 (support data transfer and 5V@3A charging)
• 2x USB 3.2 Gen 1
• 2x USB 3.2 Gen 2
• 1x headphone / microphone combo jack (3.5mm)
• 1x microphone (3.5mm)

Optional Front Ports
1x card reader

Rear Ports[2,3]
• 4x USB 2.0
• 1x HDMI® 1.4b
• 1x DisplayPort™ 1.4
• 1x VGA
**SECURITY & PRIVACY**

**Security**

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
- (Optional) Smart Cable Clip
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Cover presence switch
- Individual USB port disablement
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

**MANAGEABILITY**

**System Management**

System Management
Non-vPro®

**SERVICE**

**Warranty**(1)

Base Warranty**(2)
- 1-year courier or carry-in service
- 1-year limited onsite service

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

[3] The onboard video ports VGA, HDMI® and DisplayPort™ are disabled on the models with discrete graphics.
Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories
- DP to DVI dongle
- HDMI® to DVI dongle

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications[1]

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered[2]
- (Optional) EPEAT™ Gold Registered[3]
- REACH
- RoHS compliant
- TCO Certified
- WEEE

Notes:
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[2], [3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
TÜV Rheinland® Ultra Low Noise

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• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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OVERVIEW

1. Power button
2. Card reader *
3. Microphone (3.5mm)
4. Headphone / microphone combo jack (3.5mm)
5. 1x USB-C 3.2 Gen 1
6. 2x USB 3.2 Gen 1
7. 2x USB 3.2 Gen 2
8. Optical drive *
9. Headphone (3.5mm)
10. DisplayPort 1.4
11. HDMI 1.4b
12. Serial
13. VGA
14. Ethernet (RJ-45)
15. 3x USB 2.0
16. 1x USB 2.0 (with smart power-on feature)
17. Optional ports on expansion cards *
18. Power connector
19. 2x PS/2 ports (keyboard / mouse) *
20. Serial *

Notes:
- Items with * are only available on selected models
- Onboard video ports are only available for the models with integrated graphics
PERFORMANCE

Processor

Processor Family
Intel® Celeron®, Intel® Pentium®, or 12th / 13th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron® G6900</td>
<td>2</td>
<td>2</td>
<td>3.4GHz</td>
<td>-</td>
<td>4MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Pentium® Gold G7400</td>
<td>2</td>
<td>4</td>
<td>3.7GHz</td>
<td>-</td>
<td>6MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
<tr>
<td>Core i3-12100</td>
<td>4</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz[1]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[2]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400F</td>
<td>6</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz[3]</td>
<td>18MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz[4]</td>
<td>18MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz[5]</td>
<td>25MB</td>
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<tr>
<td>Core i9-12900</td>
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<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz[6]</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i3-13100</td>
<td>4</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz[7]</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400</td>
<td>10</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz[8]</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400F</td>
<td>10</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz[9]</td>
<td>20MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i5-13500</td>
<td>14</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz[10]</td>
<td>24MB</td>
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<tr>
<td>Core i7-13700</td>
<td>16</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
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<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
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<tr>
<td>Core i9-13900</td>
<td>24</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz[12]</td>
<td>36MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

Notes:

[1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux[1]
- No preload operating system

Notes:

[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.
### Graphics

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Memory Type</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>1920x1080@60Hz (HDMI®), 2048x1536@60Hz (VGA), 4096x2304@60Hz (DP)</td>
<td>1x HDMI® 1.4b, 1x VGA, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>1920x1080@60Hz (HDMI®), 2048x1536@60Hz (VGA), 4096x2304@60Hz (DP)</td>
<td>1x HDMI® 1.4b, 1x VGA, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
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<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>1920x1080@60Hz (HDMI®), 2048x1536@60Hz (VGA), 4096x2304@60Hz (DP)</td>
<td>1x HDMI® 1.4b, 1x VGA, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6400[2]</td>
<td>Discrete</td>
<td>4GB GDDR6, 7680x4320@60Hz (HDMI®), 7680x4320@60Hz (DP)</td>
<td>1x HDMI® 2.1 FRL, 1x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

[2] The onboard video ports VGA, HDMI® and DisplayPort™ are disabled on the models with discrete graphics.

### Monitor Support

Monitor Support

Supports up to 3 independent displays via (HDMI®, DP and VGA)

### Chipset

Chipset

Intel® B760 chipset

### Memory

Max Memory[3]

Up to 64GB DDR4-3200

Memory Slots

Two DDR4 UDIMM slots, dual-channel capable

Memory Type

DDR4-3200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

### Storage

Storage Support[3]

Up to two drives, 1x 3.5" HDD + 1x M.2 SSD

- 3.5" HDD up to 2TB
- M.2 SSD up to 1TB

Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID

No support

Notes:
The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage

Optical**
- DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

Card Reader
- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC222-CG codec

Speakers
- No speakers
- Single speaker, 2W x1

Power Supply

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>180W Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>260W Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>310W Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>380W Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Input Device

Keyboard**
- Euterpe Wireless Keyboard, grey
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Euterpe Wireless Mouse, grey
- No mouse

Mechanical

Form Factor
Tower (13.6L)

Dimensions (WxDxH)[3]
145 x 294 x 340 mm (5.71 x 11.57 x 13.39 inches)

Packaging Dimensions (WxDxH)
245 x 395 x 530 mm (9.65 x 15.55 x 20.87 inches)

Weight[2]
Around 5.5 kg (12.1 lbs)

Packaging Weight
Around 7.5 kg (16.53 lbs)

Case Color
Black

Bays
• 1x 3.5” disk bay
• 1x slim ODD bay

**Expansion Slots**
- One PCIe® 4.0 x16, full-height, half-length
- Two PCIe® 3.0 x1, full-height, half-length
- (Optional) M.2 Bracket. For installing M.2 devices, M.2 bracket kit is needed. The kit is optional, or comes with pre-configured M.2 SSD or M.2 Wifi models
- Two M.2 slots (one for WLAN, one for SSD)

**Cooling System (Fan & Cooler)***
- (Optional) 1x rear system fan
- (Optional) 1x front system fan
- (Optional) 1x Photocatalyst System fan

**Others**
(Optional) Smart Cable (USB-A to USB-C®)

---

**Notes:**

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

---

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Intel® Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**
No optional Ethernet

**WLAN + Bluetooth®***
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card[1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card[2]
- No WLAN and Bluetooth®

---

**Notes:**


**Ports**[1]

**Front Ports**
- 1x USB-C® 3.2 Gen 1 (support data transfer and 5V@3A charging)
- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

**Optional Front Ports**
1x card reader

**Rear Ports**[2][3]
- 4x USB 2.0 (one supports Smart Power On)
- 1x HDMI® 1.4b
- 1x DisplayPort™ 1.4
- 1x VGA
- 1x Ethernet (RJ-45)
- 1x headphone (3.5mm)
- 1x serial (9-pin)

**Optional Rear Ports***
- 1x parallel
1x 2nd serial
2x PS/2
None

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.
[3] The onboard video ports VGA, HDMI® and DisplayPort™ are disabled on the models with discrete graphics.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch

Fingerprint Reader
No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Certificate based BIOS authentication
• Cover presence switch
• Individual USB port disablement
• Self-healing BIOS
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management
Non-vPro®

SERVICE

Warranty

Base Warranty
• 1-year courier or carry-in service
• 1-year limited onsite service

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific
model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories

Bundled Accessories ***
• DP to DVI dongle
• HDMI® to DVI dongle

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Silver Registered
• (Optional) EPEAT™ Gold Registered
• REACH
• RoHS compliant
• TCO Certified
• WEEE

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2], [3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
(Optional) TÜV Rheinland® Ultra Low Noise

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Power button
2. Optical drive *
3. Card reader *
4. Microphone (3.5mm)
5. Headphone / microphone combo jack (3.5mm)
6. USB-C (USB 5Gbps), data transfer only
7. 4x USB-A (USB 5Gbps)
8. Audio-out (3.5mm)
9. DisplayPort 1.4 (HBR2)
10. HDMI 2.1 TMDS
11. 2x PS/2 ports (keyboard / mouse) *
12. VGA
13. 4x USB-A (Hi-Speed USB)
14. Ethernet (RJ-45)
15. Serial *
16. Optional ports on expansion cards *

Notes:
- Items with * are only available on selected models
## PERFORMANCE

### Processor

**Processor Family**

13th / 14th Generation Intel® Core™ i3 / i5 / i7 Processor, or Intel® 300 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i3-14100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.7GHz</td>
<td>12MB</td>
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<td>Core i5-14400</td>
<td>10 (6 P-core + 4 E-core)</td>
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<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-14400F</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.7GHz / E-core 3.5GHz</td>
<td>20MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-14500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Intel® 300</td>
<td>2</td>
<td>4</td>
<td>3.9 GHz</td>
<td>-</td>
<td>6MB</td>
<td>Intel® UHD Graphics 710</td>
</tr>
</tbody>
</table>

### Operating System

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux
- No preload operating system

### Graphics

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 710</td>
<td>Integrated</td>
<td>Shared</td>
<td>2048x1536@60Hz (HDMI“)*, 2048x1536@50Hz (VGA), 2048x1536@60Hz (DP)</td>
<td>1x HDMI“ 2.1 TMDS, 1x VGA, 1x DP 1.4 HBR2</td>
<td>DirectX® 12, OpenGL 4.5</td>
</tr>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>2048x1536@60Hz (HDMI“)*, 2048x1536@50Hz (VGA), 2048x1536@60Hz (DP)</td>
<td>1x HDMI“ 2.1 TMDS, 1x VGA, 1x DP 1.4 HBR2</td>
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<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>2048x1536@60Hz (HDMI“)*, 2048x1536@50Hz (VGA), 2048x1536@60Hz (DP)</td>
<td>1x HDMI“ 2.1 TMDS, 1x VGA, 1x DP 1.4 HBR2</td>
<td>DirectX® 12, OpenGL 4.5</td>
</tr>
<tr>
<td>Intel® Arc™ A310 LP Graphics</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>5120x2880@60Hz (DP)</td>
<td>2x DisplayPort™ 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
</tbody>
</table>

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated...
Monitor Support
Monitor Support
Supports up to 3 independent displays via (HDMI®, DP and VGA), more displays support via discrete graphics

Chipset
Chipset
Intel® B760 chipset

Memory
Max Memory[1]
Up to 32GB DDR5-5600
Memory Slots
Two DDR5 UDIMM slots, dual-channel capable
Memory Type
• DDR5-4800
• DDR5-5200
• DDR5-5600
Memory Protection
Non-ECC

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage
Storage Support[2]
Up to three drives, 1x 3.5"HDD + 1x 2.5"HDD + 1x M.2 SSD
• 3.5" HDD up to 2TB
• M.2 SSD up to 1TB
• 2.5" HDD bay is only for customer self upgrade[3]
Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

RAID
No support

Notes:
[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.
[2] 2.5" HDD bay is optional part, only for customer self upgrade purpose and the hard drive is sold separately. Two onboard SATA ports support up to two drives of 2.5" HDD, 3.5" HDD and ODD.

Removable Storage
Optical**
• DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
• DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
• None
Card Reader
• 3-in-1 card reader (SD, SDHC, SDXC)
• No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC623-CG codec
Speakers
- No speakers
- Single speaker, 2W x1

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>310W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>180W</td>
<td>Fixed</td>
<td>85%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>260W</td>
<td>Fixed</td>
<td>90%</td>
<td>100-240V, 50-60Hz</td>
</tr>
<tr>
<td>380W</td>
<td>Fixed</td>
<td>92%</td>
<td>100-240V, 50-60Hz</td>
</tr>
</tbody>
</table>

DESIGN

Input Device

Keyboard
- EOS Wireless Keyboard, black
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Traditional Keyboard (USB connector), black
- No keyboard

Mouse
- Lenovo® Calliope Mouse (USB connector), black
- EOS Wireless Mouse, Black
- No mouse

Mechanical

Form Factor
Tower (13.6L)

Dimensions (WxDxH)
145 x 294 x 340 mm (5.71x 11.57 x 13.39 inches)

Packaging Dimensions (WxDxH)
240 x 395 x 530 mm (9.45 x 15.55 x 20.87 inches)

Weight
Around 5.6 kg (12.35 lbs)

Packaging Weight
Around 7 kg (15.43 lbs)

Case Color
Luna grey (front bezel), raven black (chassis)

Bays
- 1x 2.5" disk bay (optional)
- 1x 3.5" disk bay
- 1x slim ODD bay

Expansion Slots
- One PCIe® 3.0 x1, full-height, (length ≤ 185mm, height ≤ 100mm) or (length ≤ 118mm, height ≤ 110mm)
- Two M.2 slots (one for WLAN, one for SSD)
- One PCIe® 3.0 x16, full-height, length ≤ 233.6mm, height ≤ 117.5mm

EOU
(Optional) toolless chassis open (toolless chassis screw required)

Cooling System (Fan & Cooler)
(Optional) 1x rear system fan

Notes:
The system dimensions may vary depending on configurations.

The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

2.5” HDD bay is optional part, only for customer self upgrade purpose and the hard drive is sold separately. Two onboard SATA ports support up to two drives of 2.5” HDD, 3.5” HDD and ODD.

## CONNECTIVITY

### Network

**Onboard Ethernet**

Gigabit Ethernet, Realtek® RTL8111K, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**

No optional Ethernet

**WLAN + Bluetooth®**

- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card
- No WLAN and Bluetooth®

### Ports

**Front Ports**

- 4x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)
- 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with data transfer and 15W charging

**Rear Ports**

- 4x USB-A (Hi-Speed USB / USB 2.0)
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4 (HBR2)
- 1x VGA
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

**Optional Rear Ports**

- 1x parallel
- 2x serial
- 2x PS/2

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

### SECURITY & PRIVACY

**Security**

**Security Chip**

Discrete TPM 2.0, TCG certified

**Physical Locks**

- (Optional) Smart Cable Clip
- Kensington® Security Slot™
Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

BIOS Security
- Administrator password
- Power-on password
- Hard disk password
- Individual USB port disablement
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management\(^1\)
None

Notes:
\(^1\) Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty\(^1\)

Base Warranty
- 1-year courier or carry-in service
- 1-year limited onsite service

Notes:
\(^1\) The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ACCESSORIES

Bundled Accessories
Bundled Accessories
- (Optional) DP to DVI dongle
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS
Green Certifications

(Optional) ENERGY STAR® 8.0
(Optional) EPEAT™ Silver Registered
(Optional) EPEAT™ Gold Registered
RoHS / WEEE / REACH
TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

(Optional) TÜV Rheinland® Ultra Low Noise

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Power button
2. Card reader *
3. Microphone (3.5mm)
4. Headphone / microphone combo jack (3.5mm)
5. 1x USB-C 3.2 Gen 2
6. 2x USB 3.2 Gen 1
7. 2x USB 3.2 Gen 2
8. Optical drive *
9. Line-in (3.5mm)
10. Microphone (3.5mm)
11. Line-out (3.5mm)
12. Flex IO *
13. HDMI 2.1 TMDS
14. DisplayPort 1.4
15. 2x USB 3.1 Gen 1
16. 2x USB 2.0 (one with smart power-on feature)
17. Expansion card *
18. 2x PS/2 ports (keyboard / mouse) *
19. Ethernet (RJ-45)
20. Serial *

Notes:
• Items with * are only available on selected models
• Onboard video ports are only available for the models with integrated graphics
**PERFORMANCE**

**Processor**

**Processor Family**

12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz(^1)</td>
<td>12MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz(^2)</td>
<td>18MB</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400F</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz(^3)</td>
<td>18MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz(^4)</td>
<td>18MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz(^5)</td>
<td>25MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700KF</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 3.6GHz / E-core 2.7GHz</td>
<td>Max Turbo up to 5.0GHz / P-core 4.9GHz / E-core 3.8GHz(^6)</td>
<td>25MB</td>
<td>-</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz(^7)</td>
<td>30MB</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900KF</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 3.2GHz / E-core 2.4GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 3.9GHz(^8)</td>
<td>30MB</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:

\(^1\), \(^2\), \(^3\), \(^4\), \(^5\), \(^6\), \(^7\), \(^8\) Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 DG Windows® 10 Pro 64
- No preload operating system

**Graphics**

**Graphics**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Max Resolution</th>
<th>Connector</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® UHD graphics 730</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2160@60Hz(HDMI*), 4096x2304@60Hz(DP)</td>
<td>1x HDMI* 2.1 TMDS, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>Intel® UHD graphics 770</td>
<td>Integrated</td>
<td>Shared</td>
<td>4096x2304@60Hz(HDMI*), 4096x2304@60Hz(DP)</td>
<td>1x HDMI* 2.1 TMDS, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3050(^2)</td>
<td>Discrete</td>
<td>GDDR6</td>
<td>7680x4320@60Hz(HDMI*), 7680x4320@120Hz(DP)</td>
<td>1x HDMI* 2.1 FRL, 3x DP 1.4a</td>
<td>DirectX® 12, OpenGL 4.6</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3060 Ti(^3)</td>
<td>Discrete</td>
<td>GDDR6</td>
<td>7680x4320@60Hz(HDMI*), 7680x4320@120Hz(DP)</td>
<td>1x HDMI* 2.1, 3x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
<tr>
<td>AMD Radeon™ RX 6500XT(^4)</td>
<td>Discrete</td>
<td>GDDR6</td>
<td>7680x4320@60Hz(HDMI*), 7680x4320@60Hz(DP)</td>
<td>1x HDMI* 2.1, 1x DP 1.4</td>
<td>DirectX® 12</td>
</tr>
</tbody>
</table>

Notes:

\(^1\) The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).
The onboard video ports HDMI® and DisplayPort™ are disabled on the models with discrete graphics. 7680x4320@120Hz(DP) requires two DisplayPort™ 1.4a links and DSC compression.

The onboard video ports HDMI® and DisplayPort™ are disabled on the models with discrete graphics.

**Monitor Support**

**Monitor Support**

Supports up to 3 independent displays via onboard ports (HDMI®, DisplayPort™, and 1x optional Flex IO), more displays support via discrete graphics

**Chipset**

**Chipset**

Intel® Q670 chipset

**Memory**

**Max Memory**

Up to 128GB DDR5

**Memory Slots**

Four DDR5 UDIMM slots, dual-channel capable

**Memory Type**

- DDR5-3600
- DDR5-4000
- DDR5-4400

**Memory Protection**

Non-ECC

**Notes:**

[1] The max memory is based on the test results with current Lenovo® memory offerings.

[2] Installed memory is actually DDR5-4800 but may run as DDR5-3600, DDR5-4000, or DDR5-4400 depending on the memory support capability of processor.

**Storage**

**Storage Support**

Up to four drives, 2x 3.5” HDD + 2x M.2 SSD

- 3.5” HDD up to 2TB each
- M.2 SSD up to 1TB each

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 3.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**RAID**

RAID 0/1 support

**Notes:**

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Optical**

- DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

**Card Reader**

- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader
ThinkCentre neo 70t

**Multi-Media**

Audio Chip
High Definition (HD) Audio, Realtek® ALC623-CG codec

Speakers
- No speakers
- Single speaker, 2W x1

**Power Supply**

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>750W Power Supply</td>
<td>Fixed Efficiency 92% 100-240V, autosensing</td>
</tr>
</tbody>
</table>

**DESIGN**

**Input Device**

Keyboard**
- Euterpe Wireless Keyboard, grey
- Lenovo® Calliope Keyboard (USB connector), black
- No keyboard

Mouse**
- Lenovo® Calliope Mouse (USB connector), black
- Euterpe Wireless Mouse, grey
- No mouse

**Mechanical**

Form Factor
Tower (17L)

Dimensions (WxDxH)
376 x 170 x 297.85 mm (14.8x 6.7 x 11.73 inches)

Packaging Dimensions (WxDxH)
395 x 275 x 540 mm (21.4 x 10.8 x 15.6 inches)

Weight
Around 7.5 kg (16.53 lbs)

Packaging Weight
Around 10.5 kg (23.15 lbs)

Case Color
Raven black

Bays
- 1x 3.5" disk bay (optional)
- 1x 3.5" disk bay
- 1x slim ODD bay

Expansion Slots
- One PCIe® 4.0 x16 (x4 signal)
- One PCIe® 4.0 x16, full-height, length<249mm
- One PCIe® 3.0 x1
- Three M.2 slots (one for WLAN, two for SSD)

Cooling System (Fan & Cooler)**
- (Optional) 1x front system fan, 1x rear system fan
- (Optional) 1x rear system fan
- (Optional) 1x front system fan

Notes:
[1] The system dimensions may vary depending on configurations.
The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**

Gigabit Ethernet, Intel® Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**

- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, supports Wake-on-LAN
- No optional Ethernet

**WLAN + Bluetooth®**

- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, M.2 card
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0, Intel® vPro® technology support, M.2 card
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- No WLAN and Bluetooth®

Notes:

1. [1], [2], [3], [4] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

**Ports**

**Front Ports**

- 1x USB-C® 3.2 Gen 2
- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

**Optional Front Ports**

1x card reader

**Rear Ports**

- 2x USB 2.0 (one with smart power-on feature)
- 2x USB 3.2 Gen 1
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)
- 1x line-in (3.5mm)
- 1x line-out (3.5mm)
- 1x microphone (3.5mm)

**Optional Rear Ports**

- 1x USB-C® 3.2 Gen 1 (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.4 (Flex IO)
- 1x VGA (Flex IO)
- 1x USB-C® 3.2 Gen 2x2 (support data transfer, via USB-C® expansion card, PCIe® x4)
- 2x USB-C® 3.2 Gen 2 (support data transfer, via 2-port USB-C® expansion card, PCIe® x4)
- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
- 1x 1GbE RJ-45, via BN8E88
- 1x 1GbE RJ-45, via RGL8168H
- 1x 2.5GbE RJ-45, via RTL8125BGS
- 1x parallel
- 1x serial
- 4x serial (via 4-port serial expansion card, PCIe® x1)
- 2x PS/2
- None
Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

[3] Onboard video ports are only available for the models with integrated graphics.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
(Optional) Smart Cable Clip

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch

Fingerprint Reader
• Touch style fingerprint reader integrated in power button
• No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Cover presence switch
• Secure Wipe
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management
• Intel® vPro® Essentials[1]
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
• 1-year courier or carry-in service
• 1-year limited onsite service

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.
ACCESSORIES

Bundled Accessories

- DP to DVI dongle
- DP to Dual DP dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI® to HDMI® dongle
- HDMI® to VGA dongle
- Smart Cable (USB-A to USB-C®)
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity

- Operating: 20% to 80%
- Storage: 20% to 90%

Altitude

- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 10,668 m (35,000 ft)

CERTIFICATIONS

Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Silver Registered
- ErP Lot 3
- RoHS / WEEE / REACH

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- (Optional) TÜV Rheinland® Low Noise
- (Optional) TÜV Rheinland® Ultra Low Noise

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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Lenovo PSREF
Product Specifications Reference
ThinkStation Workstations

Version 627
March 20, 2024
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover</td>
<td>1</td>
</tr>
<tr>
<td>Contents</td>
<td>2</td>
</tr>
<tr>
<td>Summary Of Change</td>
<td>3</td>
</tr>
<tr>
<td><strong>P Series</strong></td>
<td></td>
</tr>
<tr>
<td>ThinkStation P2 Tower</td>
<td>4</td>
</tr>
<tr>
<td>ThinkStation P3 Tiny</td>
<td>12</td>
</tr>
<tr>
<td>ThinkStation P3 Tower</td>
<td>21</td>
</tr>
<tr>
<td>ThinkStation P3 Ultra SFF</td>
<td>30</td>
</tr>
<tr>
<td>ThinkStation P358 Tower</td>
<td>39</td>
</tr>
<tr>
<td>ThinkStation P360 Tiny</td>
<td>47</td>
</tr>
<tr>
<td>ThinkStation P360 Tower</td>
<td>55</td>
</tr>
<tr>
<td>ThinkStation P5</td>
<td>64</td>
</tr>
<tr>
<td>ThinkStation P620</td>
<td>72</td>
</tr>
<tr>
<td>ThinkStation P7</td>
<td>80</td>
</tr>
<tr>
<td>ThinkStation P8</td>
<td>88</td>
</tr>
<tr>
<td>ThinkStation PX</td>
<td>96</td>
</tr>
<tr>
<td><strong>Legal Information</strong></td>
<td>104</td>
</tr>
</tbody>
</table>
Summary of Changes

This section describes the technical changes made in this edition. This edition might also include minor corrections and editorial changes which are not identified.

February 28, 2024 - Version 626

Additions in this update

► New product(s)
  ThinkStation P2 Tower

► Spec updated
  ThinkStation P3 Tower

Withdrawals in this update

► Withdrawn product(s)
  None
## OVERVIEW

<table>
<thead>
<tr>
<th>Number</th>
<th>Feature</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Optical drive *</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Front access storage bay or 2nd HDD bay *</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Power button</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SD card reader *</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Microphone (3.5mm)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>USB-C (USB 10Gbps), data transfer only</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2x USB-A (USB 5Gbps)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>2x USB-A (USB 10Gbps)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Audio line-out (3.5mm)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Flex IO *</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>HDMI</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2x DisplayPort</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>3x USB-A (USB 5Gbps)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>USB-A (USB 5Gbps), with Smart Power On</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Padlock loop</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>PS/2 port (mouse) *</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>PS/2 port (keyboard) *</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Ethernet (GbE RJ-45)</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>E-lock slot *</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Serial (9-pin) *</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Smart cable clip slots</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Optional ports on expansion cards *</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Kensington Security Slot</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Power-in</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
## Processor

### Processor Family

Up to one 125W Intel® Core™ i5 / i7 / i9 (12th Gen), Intel® Core™ i3 / i5 / i7 / i9 (13th Gen), or Intel® Core™ i5 / i7 / i9 (14th Gen) processor; supports up to 24 cores; up to 6GHz.

### Processor**[1]**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900K</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 3.2GHz / E-core 2.4GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 3.9GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
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<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
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<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700K</td>
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<td>P-core 3.4GHz / E-core 2.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>30MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-13900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
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<td>32</td>
<td>P-core 3.0GHz / E-core 2.2GHz</td>
<td>Max Turbo up to 5.8GHz / P-core 5.4GHz / E-core 4.3GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
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</tr>
<tr>
<td>Core i5-14500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.6GHz / E-core 1.9GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700K</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 3.4GHz / E-core 2.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.5GHz / E-core 4.3GHz</td>
<td>33MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-14900</td>
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<td>32</td>
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<td>Max Turbo up to 5.8GHz / P-core 5.4GHz / E-core 4.3GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-14900K</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 3.2GHz / E-core 2.4GHz</td>
<td>Max Turbo up to 6.0GHz / P-core 5.6GHz / E-core 4.4GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

### Processor Sockets

1x FCLGA1700

---

**Notes:**

[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see [http://www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

## Operating System

### Operating System
ThinkStation P2 Tower

• Windows® 11 Pro
• Windows® 11 Home
• Windows® 11 Home Single Language
• Ubuntu Linux LTS
• Red Hat Enterprise Linux 9.4 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)[1]
• No preload operating system

Notes:
[1] Red Hat Enterprise Linux 9.3 certification will be available after May 2024.

Graphics

Integrated Graphics**
• Intel® UHD Graphics 730
• Intel® UHD Graphics 770

Discrete Graphics Support[2]
Supports up to two NVIDIA® RTX A2000 12GB

Discrete Graphics Offering

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>Form Factor</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000</td>
<td>4GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000 8GB</td>
<td>8GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000 12GB</td>
<td>12GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:
[1] Discrete graphics support may vary by configurations such as processor selection or power supply wattage.

Monitor Support

Monitor Support
Onboard graphics supports up to 4 independent displays via onboard two DP, one HDMI® and one optional USB-C®; the number of maximum monitors also depends on the discrete graphic card in use

Chipset

Chipset
Intel® W680 chipset

Memory

Max Memory[3]
Up to 128GB (4x 32GB DDR5 UDIMM)

Memory Type[2]
• DDR5-4400 UDIMM ECC
• DDR5-4400 UDIMM non-ECC

Memory Slots
Four DDR5 UDIMM slots, dual-channel capable

Memory Protection
ECC on models with ECC DIMMs and ECC capable processor

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] DR5-4400 is maximum operating speed, memory operating speed varies depending on memory configuration:
1x 8GB / 2x 8GB / 1x 16GB / 2x 16GB / 2x 32GB configurations run as DDR5-4400;
4x 8GB / 4x 16GB configurations run as DDR5-4000;
4x 32GB configuration runs at DDR5-3600.

Storage
Storage Support

Up to 2x 3.5” SATA HDD; also supports up to 3x M.2 SSD (two by onboard, one by M.2 to PCIe® adapter)

- 3.5” HDD up to 4TB each
- Onboard M.2 SSD up to 4TB each
- M.2 SSD by M.2 to PCIe® adapter up to 2TB

<table>
<thead>
<tr>
<th>Storage Type</th>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB / 2TB / 4TB</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD for Onboard M.2 slots</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal 2.0</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD for Onboard M.2 slots</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
<td></td>
</tr>
<tr>
<td>M.2 2280 SSD for single M.2 to PCIe® adapter</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4[^3]</td>
<td>-</td>
<td>256GB / 512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
<td></td>
</tr>
</tbody>
</table>

Storage Controllers

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated SATA controller</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>0/1</td>
<td>None</td>
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<tr>
<td>Integrated NVMe® controller</td>
<td>Standard</td>
<td>PCIe® NVMe®</td>
<td>0/1</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:

[^1]: The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[^2]: For detailed storage bays information and how to upgrade optional drives for ThinkStation® products, please visit [ThinkStation® Storage Upgrade Guide](https://www.lenovo.com/).
[^3]: M.2 2280 SSD is PCIe® 4.0 x4, and the M.2 slot on single M.2 to PCIe® adapter are PCIe® 3.0 x4. See M.2 Slots section for more information.

Removable Storage

Optical Support
Optional one 9.0mm optical drive, DVD-ROM, DVD±RW, and Blu-ray

Card Reader

- SD card reader
- No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC897Q-CG codec

Speakers

Single speaker, 2W x1

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>500W</td>
<td>Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
<tr>
<td>750W</td>
<td>Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
</tbody>
</table>

DESIGN

Mechanical

Form Factor
Tower (17L)

Dimensions (WxDxH)[^4]
170 x 315.35 x 376 mm (6.7 x 12.4 x 14.8 inches, with feet)
Weight\(^{[2]}\)
9.67 kg (21.32 lbs, maximum configuration)

Bays
Three internal disk bays, up to two 3.5” bays plus one 2.5” bay:
• Bay 1 supports one 3.5” HDD, standard; or one 2.5” HDD / SSD, optional
• Bay 2 supports one 3.5” HDD or 2.5” HDD / SSD, optional
• Bay 3 supports one 2.5” HDD / SSD, optional
• Front Access HDD Bay supports one 3.5” HDD or 2.5” HDD / SSD, optional, occupies Bay 2 location\(^{[3]}\)

M.2 Slots
• Up to 3x M.2 SSD:
  • 2 via onboard slots, PCIe® 4.0 x4
  • 1 via Single M.2 to PCIe® adapter, PCIe® 3.0 x4
  • One M.2 slot (for WLAN)

Expansion Slots
Supports four PCIe® slots with two PCIe® 4.0 x16 and two PCIe® 3.0 x1.
• Slot 1: PCIe® 4.0 x16, full height, full length, 75W, double-width
• Slot 2: PCIe® 3.0 x1, full height, half length, 25W
• Slot 3: PCIe® 4.0 x16 (x4 lanes), full height, half length, 25W
• Slot 4: PCIe® 3.0 x1, full height, half length, 25W

Notes:
\(^{[1]}\) The system dimensions may vary depending on configurations.
\(^{[2]}\) The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
\(^{[3]}\) 3.5” bay and Front Access HDD Bay need optional 3.5” to 2.5” HDD bracket kit. 2.5” drive is for customer-own configuration. None of configurable 2.5” drive options are provided.

CONNECTIVITY

Network
Onboard Ethernet
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet
Up to two additional PCIe® x1 Ethernet adapters; or one PCIe® x4 plus one PCIe® x1 Ethernet adapter, up to five additional GbE ports
• Gigabit Ethernet, Intel® I210-T1, 1x RJ-45, PCIe® x1
• Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
• Gigabit Ethernet, Intel® I350-T4, 4x RJ-45, PCIe® x4
• Gigabit Ethernet, Realtek® RTL8168H, 1x RJ-45, PCIe® x1

WLAN + Bluetooth®
• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support
• No WLAN and Bluetooth®

Ports\(^{[1]}\)
Front Ports
• 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
• 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
• 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
• 1x headphone / microphone combo jack (3.5mm)
• 1x microphone (3.5mm)

Rear Ports\(^{[2]}\)
• 4x USB-A (USB 5Gbps / USB 3.2 Gen 1), one supports Smart Power On
• 1x HDMI® 2.1 TMDs
• 2x DisplayPort™ 1.4
• 1x Ethernet (RJ-45)
• 1x line-out (3.5mm)

Optional Rear Ports
ThinkStation P2 Tower

- 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with DisplayPort™ 2.1 (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.2 (Flex IO)
- 1x VGA (Flex IO)
- 1x parallel (via cable and PCIe® bracket)
- 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), support data transfer, via USB-C® PCIe® x4 card
- 2x USB-A (Hi-Speed USB / USB 2.0), via cable and PCIe® bracket
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via additional PCIe® adapter
- 1x serial (via cable)
- 4x serial (via 4-port serial expansion card, PCIe® x1)
- 2x PS/2 (via cable)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower than the theoretical speed.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
- (Optional) E-lock
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

BIOS Security
- Administrator password
- Power-on password
- Self-healing BIOS

MANAGEABILITY

System Management

System Management[1]
- Intel® vPro® Enterprise with Intel® AMT 16
- Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
- 1-year limited onsite service
- 2-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific
model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 10°C (50°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

CERTIFICATIONS

Green Certifications

Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Gold Registered
• ErP Lot 3
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

ISV Certifications

ISV Certifications

Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<table>
<thead>
<tr>
<th>No.</th>
<th>Port/Connector Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>2</td>
<td>USB-A (USB 10Gbps)</td>
</tr>
<tr>
<td>3</td>
<td>USB-A (USB 10Gbps), Always On</td>
</tr>
<tr>
<td>4</td>
<td>USB-C (USB 10Gbps), data transfer only</td>
</tr>
<tr>
<td>5</td>
<td>Power connector</td>
</tr>
<tr>
<td>6</td>
<td>DisplayPort 1.4</td>
</tr>
<tr>
<td>7</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>8</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>9</td>
<td>USB-A (USB 5Gbps), with Smart Power On</td>
</tr>
<tr>
<td>10</td>
<td>USB-A (USB 10Gbps)</td>
</tr>
<tr>
<td>11</td>
<td>USB-A (USB 10Gbps)</td>
</tr>
<tr>
<td>12</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>13</td>
<td>2 Punch out ports or expansion card *</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models

---

ThinkStation P3 Tiny - July 02 2024

1of 9
**PERFORMANCE**

**Processor**

**Processor Family**

Up to one Intel® Core™ i3 / i5 / i7 / i9 (13th Gen or 14th Gen) processor; supports up to 24 cores; up to 5.8GHz.

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-13100T</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.2GHz</td>
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<tr>
<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
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<tr>
<td>Core i5-13400T</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 1.3GHz / E-core 1.0GHz</td>
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<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
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<tr>
<td>Core i7-13700T</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 1.4GHz / E-core 1.0GHz</td>
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<tr>
<td>Core i9-13900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
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<tr>
<td>Core i9-13900T</td>
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<td>P-core 1.1GHz / E-core 0.8GHz</td>
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<td>24MB</td>
<td>DDR5-5600</td>
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</tr>
<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>
## Processor Sockets

1x FCLGA1700

**Notes:**

[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see [http://www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

## Operating System

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.4 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](https://www.redhat.com/certified-hardware))
- No preload operating system

## Graphics

**Integrated Graphics**

- Intel® UHD Graphics 730
- Intel® UHD Graphics 770

**Discrete Graphics Support**

Supports up to one NVIDIA® T1000 8GB

### Discrete Graphics Offering

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000</td>
<td>4GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000 8GB</td>
<td>8GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
</tbody>
</table>

**Notes:**

[1] Discrete graphics support may vary by configurations such as processor selection or power supply wattage.

## Monitor Support

**Monitor Support**

Onboard graphics supports up to 4 independent displays via (onboard DP, onboard HDMI®, punch out port 1 [VGA / HDMI® / DP / USB-C®], and punch out port 2 [VGA / HDMI® / DP]); the number of maximum monitors also depends on the discrete graphic card in use

## Chipset

**Chipset**

Intel® Q670 chipset

## Memory

**Max Memory**

Up to 64GB (2x 32GB DDR5 SO-DIMM)

**Memory Type**
ThinkStation P3 Tiny

- DDR5-4800 SO-DIMM non-ECC
- DDR5-5600 SO-DIMM non-ECC

**Memory Slots**
Two DDR5 SO-DIMM slots, dual-channel capable

**Notes:**

[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] System may come with DDR5-5600 memory and will run as lower speed due to platform limitations:
1x 32GB / 2x 32GB configurations run as DDR5-5200

**Storage**

**Storage Support**
Up to two drives, 2x M.2 SSD, up to 2TB each

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>256GB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**Storage Controllers**

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated NVMe® controller</td>
<td>Standard PCIe® NVMe®</td>
<td>0/1</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Removable Storage**

**Optical Support**
No optical support

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC256VB codec

**Speakers**
- Single speaker
- Single speaker, premium

**Power Supply**

**Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>170W</td>
<td>Adapter</td>
<td>90%</td>
<td>100V - 240V</td>
</tr>
<tr>
<td>230W</td>
<td>Adapter</td>
<td>90%</td>
<td>100V - 240V</td>
</tr>
<tr>
<td>300W</td>
<td>Adapter</td>
<td>90%</td>
<td>100V - 240V</td>
</tr>
</tbody>
</table>

**DESIGN**

**Mechanical**

**Form Factor**
Tiny (1L)

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>179 x 182.9 x 37mm with rubber feet (7.0 x 7.2 x 1.5 inches with rubber feet)</td>
</tr>
<tr>
<td>Tiny &amp; ODD</td>
<td>204.2 x 186.6 x 64 mm with rubber feet (8.04 x 7.35 x 2.52 inches with rubber feet)</td>
</tr>
</tbody>
</table>
**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>1.4 kg (3 lbs, maximum configuration)</td>
</tr>
</tbody>
</table>

**Bays**

No bays

**M.2 Slots**

- Two M.2 PCIe® Gen 4x4 slots (for SSD)
- One M.2 slot (for WLAN)

**Expansion Slots**

One PCIe® 4.0 x8, low-profile

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] Supports discrete graphic card by x16 riser card (x8 signal), and supports Ethernet card / Thunderbolt 4 / serial card by x4 riser card. Riser card comes with the expension cards.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**

Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**

One additional ethernet adapter support, up to one additional 2.5GbE port
- Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
- Gigabit Ethernet, Intel® I350-T4, 4x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1
- Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, BTB

**WLAN + Bluetooth®**

- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), Intel® vPro® technology support
- No WLAN and Bluetooth®

Notes:

[1] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

**Ports**

**Front Ports**

- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)

**Rear Ports**

- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), one supports Smart Power On
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

**Optional Rear Ports**

- Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® 5Gbps with DisplayPort™ and PD 3.0 functions)
• Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / RJ-45)
• 1x Thunderbolt™ 4 (via additional PCIe® adapter)
• 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), occupies port 1 and 2
• 4x USB-A (USB 5Gbps / USB 3.2 Gen 1), share 5Gbps bandwidth, occupy port 1 and 2
• 2x GbE RJ-45, via additional PCIe® adapter
• 4x GbE RJ-45, via additional PCIe® adapter
• 4x serial, via additional PCIe® adapter

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower than the theoretical speed.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
• (Optional) Cable lock
• Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Boot without keyboard and mouse
• Certificate based BIOS management
• Cover presence switch
• Individual USB port disablement
• Self-healing BIOS
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management[1]
• Intel® vPro® Enterprise with Intel® AMT 16
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty[1]

Base Warranty**
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OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 5°C (41°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

CERTIFICATIONS

Green Certifications

Green Certifications
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[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

ISV Certifications

ISV Certifications
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• Feature with ** means that only one offering listed under the feature is configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power button</td>
</tr>
<tr>
<td>2.</td>
<td>SD card reader *</td>
</tr>
<tr>
<td>3.</td>
<td>Microphone (3.5mm)</td>
</tr>
<tr>
<td>4.</td>
<td>Headphone / microphone combo jack (3.5mm)</td>
</tr>
<tr>
<td>5.</td>
<td>USB-C (USB 10Gbps), data transfer only</td>
</tr>
<tr>
<td>6.</td>
<td>2x USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>7.</td>
<td>2x USB-A (USB 10Gbps)</td>
</tr>
<tr>
<td>8.</td>
<td>Audio line-out (3.5mm)</td>
</tr>
<tr>
<td>9.</td>
<td>Flex IO *</td>
</tr>
<tr>
<td>10.</td>
<td>HDMI</td>
</tr>
<tr>
<td>11.</td>
<td>2x DisplayPort</td>
</tr>
<tr>
<td>12.</td>
<td>4x USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>13.</td>
<td>Optional ports on expansion cards *</td>
</tr>
<tr>
<td>14.</td>
<td>Serial (9-pin) *</td>
</tr>
<tr>
<td>15.</td>
<td>2x PS/2 ports (keyboard / mouse) *</td>
</tr>
<tr>
<td>16.</td>
<td>Ethernet (GbE RJ-45)</td>
</tr>
<tr>
<td>17.</td>
<td>E-lock slot</td>
</tr>
<tr>
<td>18.</td>
<td>Cable lock slot</td>
</tr>
<tr>
<td>19.</td>
<td>Kensington Security Slot</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
- Flex IO supports one optional port from HDMI, VGA, USB-C (with DP function), and DP.
**PERFORMANCE**

**Processor**

**Processor Family**

Up to one 125W Intel® Core™ i3 / i5 / i7 / i9 (13th Gen or 14th Gen) processor; supports up to 24 cores; up to 6GHz.

**Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.6GHz / E-core 3.3GHz</td>
<td>20MB</td>
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</tr>
<tr>
<td>Core i5-13500</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.5GHz / E-core 1.8GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
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<td>P-core 2.7GHz / E-core 2.0GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
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<tr>
<td>Core i5-13600K</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 3.5GHz / E-core 2.6GHz</td>
<td>P-core 5.1GHz / E-core 3.9GHz</td>
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<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
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<td>Core i7-13700K</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 3.4GHz / E-core 2.5GHz</td>
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<td>Intel® UHD Graphics 770</td>
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<td>Core i9-13900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz</td>
<td>36MB</td>
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<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
<td>DDR5-5600</td>
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<td>36MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

**Processor Sockets**

1x FCLGA1700
Notes:

[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

**Operating System**

**Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

**Graphics**

**Integrated Graphics**

- Intel® UHD Graphics 730
- Intel® UHD Graphics 770

**Discrete Graphics Support**(1)

Supports up to one NVIDIA® RTX 5000 Ada Generation or two NVIDIA® RTX A2000

**Discrete Graphics Offering**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>Form Factor</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000 8GB</td>
<td>8GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000 12GB</td>
<td>12GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4000</td>
<td>16GB GDDR6 with ECC</td>
<td>140W</td>
<td>4x DP 1.4a</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4500</td>
<td>20GB GDDR6 with ECC</td>
<td>200W</td>
<td>4x DP 1.4</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A5000</td>
<td>24GB GDDR6 with ECC</td>
<td>230W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A5500</td>
<td>24GB GDDR6 with ECC</td>
<td>230W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX 2000 Ada Generation</td>
<td>16GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX 4000 Ada Generation</td>
<td>20GB GDDR6 with ECC</td>
<td>130W</td>
<td>4x DP 1.4a</td>
<td>Single slot</td>
<td>-</td>
</tr>
<tr>
<td>NVIDIA® RTX 4500 Ada Generation</td>
<td>24GB GDDR6 with ECC</td>
<td>210W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>-</td>
</tr>
<tr>
<td>NVIDIA® RTX 5000 Ada Generation</td>
<td>32GB GDDR6 with ECC</td>
<td>250W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:

[1] Discrete graphics support may vary by configurations such as processor selection or power supply wattage.

**Monitor Support**

**Monitor Support**

Supports multiple displays via onboard video ports and discrete graphics, the number of maximum monitors supported depends on the graphic card in use.

**Chipset**

**Chipset**

Intel® W680 chipset

**Memory**

**Max Memory**(1)

Up to 128GB (4x 32GB DDR5 UDIMM)

**Memory Type**(2)

- DDR5-4400 UDIMM ECC
- DDR5-4400 UDIMM non-ECC
Memory Slots
4 DDR5 DIMM slots, 2 channels capable

Memory Protection
ECC on models with ECC DIMMs and ECC capable processor

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] DR5-4400 is maximum operating speed, memory operating speed varies depending on memory configuration:
1x 8GB / 2x 8GB / 1x 16GB / 2x 16GB / 2x 32GB configurations run as DDR5-4400;
4x 8GB / 4x 16GB configurations run as DDR5-4000;
4x 32GB configuration runs at DDR5-3600.

Storage

Storage Support
Up to five drives (4x HDD + 1x M.2 SSD) or six drives (3x HDD + 3x M.2 SSD)
• 3.5” HDD up to 6TB each
• 2.5” HDD up to 1TB each
• M.2 SSD up to 4TB or 2TB each (see Storage Type)

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB / 1TB FIPS</td>
<td>-</td>
</tr>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB / 2TB / 4TB / 6TB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD for single M.2 to PCIe® adapter</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>256GB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD for Onboard</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD for single M.2 to PCIe® adapter</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Storage Controllers

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated NVMe® controller</td>
<td>Standard</td>
<td>PCIe® NVMe®</td>
<td>0/1</td>
<td>None</td>
</tr>
<tr>
<td>Integrated SATA controller</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>0/1/10/5</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] For detailed storage bays info and how to upgrade optional drives for ThinkStation® products, please visit ThinkStation® Storage Upgrade Guide
[3] M.2 slot on single M.2 to PCIe® adapter works at PCIe® 3.0.

Removable Storage

Optical Support
Optional one 9.0mm optical drive, DVD-ROM, DVD±RW, and Blu-ray

Card Reader
• SD card reader
• No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC897Q-CG codec

Speakers
Single speaker, 2W x1

Power Supply

Power Supply
**

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>500W Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
<tr>
<td>750W Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
<tr>
<td>1100W Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
</tbody>
</table>

**DESIGN**

**Mechanical**

**Form Factor**

Tower (27L)

**Dimensions (WxDxH)**

180 x 370 x 415 mm (7.09 x 14.57 x 16.34 inches)

**Weight**

13.61 kg (30.0 lbs, maximum configuration)

**Bays**

Up to four disk bays:
- Bay 1 supports one 3.5” / 2.5” drive, standard
- Bay 2 supports one 3.5” / 2.5” drive, optional
- Bay 3 supports one 3.5” / 2.5” drive, optional
- Bay 4 supports one 3.5” / 2.5” drive, optional
- Front Access HDD Bay supports one 3.5” / 2.5” drive, optional, occupies Bay 3 location

**M.2 Slots**

- Up to 3x M.2 SSD:
  - 2 via onboard slot, can’t be available when 4th HDD is selected
  - 1 via Single M.2 to PCIe® adapter
  - One M.2 slot (for WLAN)

**Expansion Slots**

Supports four PCIe® slots with two PCIe® 4.0 x16 and two PCIe® 3.0 x1.
- Slot 1: PCIe® 4.0 x16, full height, full length, 75W, double-width
- Slot 2: PCIe® 3.0 x1, full height, half length, 25W
- Slot 3: PCIe® 4.0 x16 (x4 lanes), full height, half length, 25W
- Slot 4: PCIe® 3.0 x1, full height, half length, 25W

**Notes:**

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] Front access HDD bay can be selected when disk bays is equal or less that 2.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**

Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**

Up to two additional PCIe® x1 Ethernet adapters or one PCIe® x4 or x8 Ethernet adapter support; up to two additional 25GbE ports
- Gigabit Ethernet, Intel® I210-T1, 1x RJ-45, PCIe® x1
- Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1
- Gigabit Ethernet, Realtek® RTL8168H, 1x RJ-45, PCIe® x1
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
10 Gigabit Ethernet, Marvell AQtion AQN-107, 1x RJ-45, PCIe® x4
25 Gigabit Ethernet, NVIDIA® Mellanox ConnectX-6, 2x SFP28, PCIe® x8

**WLAN + Bluetooth®**

- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), Intel® vPro® technology support
- No WLAN and Bluetooth®

---

**Notes:**

[1] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

**Ports**

**Front Ports**

- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

**Rear Ports**

- 4x USB-A (USB 5Gbps / USB 3.2 Gen 1), one supports Smart Power On
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

**Optional Rear Ports**

- 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with DisplayPort™ function (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.2 (Flex IO)
- 1x VGA (Flex IO)
- 1x parallel (via cable and PCIe® bracket)
- 1x Thunderbolt™ 4 (via additional PCIe® adapter)
- 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), support data transfer, via USB-C® PCIe® x4 card
- 2x USB-A (Hi-Speed USB / USB 2.0), via cable and PCIe® bracket
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via additional PCIe® adapter
- 1x serial (via cable)
- 4x serial (via 4-port serial expansion card, PCIe® x1)
- 2x PS/2 (via cable)

---

**Notes:**

[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower than the theoretical speed.

[2] For video ports on discrete graphics, please see graphics section.

[3] 2x USB 2.0 and 1x parallel can not be chosen simultaneously.

---

**SECURITY & PRIVACY**

**Security**

**Security Chip**

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**

- (Optional) Cable lock
- (Optional) E-lock
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

**Chassis Intrusion Switch**

- Chassis intrusion switch
- No chassis intrusion switch
BIOS Security
- Administrator password
- Power-on password
- Self-healing BIOS
- UEFI Secure Boot

MANAGEABILITY
System Management
System Management [1]
- Intel® vPro® Enterprise with Intel® AMT 16
- Non-vPro

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE
Warranty [1]
Base Warranty **
- 1-year limited onsite service
- 2-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS
Operating Environment
Temperature
- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

CERTIFICATIONS
Green Certifications [1]
Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered [2]
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-
declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

**ISV Certifications**

ISV Certifications

Please visit ISV certifications for Lenovo® Workstations

- Feature with ** means that only one offering listed under the feature is configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
# OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Headphone (3.5mm)</td>
</tr>
<tr>
<td>2.</td>
<td>USB-A (USB 10Gbps)</td>
</tr>
<tr>
<td>3.</td>
<td>2x Thunderbolt 4</td>
</tr>
<tr>
<td>4.</td>
<td>Ethernet (2.5GbE RJ-45)</td>
</tr>
<tr>
<td>5.</td>
<td>Ethernet (GbE RJ-45)</td>
</tr>
</tbody>
</table>

**Notes:**

- Items with * are only available on selected models
## PERFORMANCE

### Processor

**Processor Family**

Up to one 125W Intel® Core™ i5 / i7 / i9 (12th Gen) or Intel® Core™ i3 / i5 / i7 / i9 (13th and 14th Gen) processor; supports up to 24 cores; up to 6GHz.

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i3-13100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.4GHz</td>
<td>P-core 4.5GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13400T</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 1.3GHz / E-core 1.0GHz</td>
<td>P-core 4.4GHz / E-core 3.0GHz</td>
<td>20MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-13600</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 2.7GHz / E-core 2.0GHz</td>
<td>P-core 5.0GHz / E-core 3.7GHz</td>
<td>24MB</td>
<td>DDR5-4800</td>
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<tr>
<td>Core i5-13600K</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 3.5GHz / E-core 2.6GHz</td>
<td>P-core 5.1GHz / E-core 3.9GHz</td>
<td>24MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-13700</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz</td>
<td>30MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
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<tr>
<td>Core i7-13700K</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 3.4GHz / E-core 2.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
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<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-13900</td>
<td>24 (8 P-core + 16 E-core)</td>
<td>32</td>
<td>P-core 2.0GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz</td>
<td>36MB</td>
<td>DDR5-5600</td>
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<td>Core i9-13900K</td>
<td>24 (8 P-core + 16 E-core)</td>
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<td>P-core 5.2GHz / E-core 3.9GHz</td>
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<td>DDR5-5600</td>
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<td>24MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz</td>
<td>33MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-14700K</td>
<td>20 (8 P-core + 12 E-core)</td>
<td>28</td>
<td>P-core 3.4GHz / E-core 2.5GHz</td>
<td>Max Turbo up to 5.6GHz / P-core 5.5GHz / E-core</td>
<td>33MB</td>
<td>DDR5-5600</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>
**Processor Sockets**
1x FCLGA1700

**Notes:**
[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see [http://www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

**Operating System**

**Operating System**
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.4 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](https://www.redhat.com/certified-hardware))
- No preload operating system

**Graphics**

**Integrated Graphics**
- Intel® UHD Graphics 730
- Intel® UHD Graphics 770

**Discrete Graphics Support**
Supports up to one NVIDIA® RTX 4000 SFF Ada Generation

**Discrete Graphics Offering**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>Form Factor</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000 8GB</td>
<td>8GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000 12GB</td>
<td>12GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A3000 Laptop GPU</td>
<td>12GB GDDR6</td>
<td>80W</td>
<td>4x miniDP 1.4a</td>
<td>MXM Card</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A5000 Laptop GPU</td>
<td>16GB GDDR6</td>
<td>115W</td>
<td>4x miniDP 1.4a</td>
<td>MXM Card</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A5500 Laptop GPU</td>
<td>16GB GDDR6 with ECC</td>
<td>115W</td>
<td>4x miniDP 1.4a</td>
<td>MXM Card</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX 4000 SFF Ada Generation</td>
<td>20GB GDDR6 with ECC</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
</tbody>
</table>

**Notes:**
[1] Discrete graphics support may vary by configurations such as processor selection or power supply wattage.

**Monitor Support**

**Monitor Support**
Supports up to 8 independent displays, 4 via onboard ports (3x DP and 2x Thunderbolt™, simultaneously supports 4 display) and 4 via discrete graphics.
Onboard ports support (with max simultaneous displays):
- DP supports up to 4096x2160@60Hz
- Thunderbolt™ supports up to 5120x2880@60Hz

Discrete graphics ports support (with max simultaneous displays):
- miniDP supports up to 4096x2160@120Hz (RTX A2000)

**Chipset**

**Chipset**
Intel® W680 chipset

**Memory**

**Max Memory**[1]
Up to 128GB (4x 32GB DDR5 SO-DIMM)

**Memory Type**[2]
- DDR5-4800 SO-DIMM ECC
- DDR5-4800 SO-DIMM non-ECC

**Memory Slots**
Four DDR5 SO-DIMM slots, dual-channel capable

**Memory Protection**
ECC on models with ECC DIMMs and ECC capable processor

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2], [3] System comes with DDR5-4800 memory and will run as lower speed due to platform limitations:
4x 32GB configuration runs at DDR5-3600;
other configurations run as DDR5-4000.

**Storage**

**Storage Support**[2]
Up to 1x 2.5" HDD or SSD + 2x M.2 SSD
- 2.5" HDD up to 1TB
- 2.5" SSD up to 7.68TB
- M.2 SSD up to 4TB each

**Storage Type**[3]

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB / 1TB FIPS</td>
<td>-</td>
</tr>
<tr>
<td>2.5&quot; SATA SSD</td>
<td>SATA 6Gb/s</td>
<td>-</td>
<td>3.84TB / 7.68TB</td>
<td>Opal</td>
</tr>
<tr>
<td>M.2 2280 SSD for Onboard M.2 slots</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>256GB</td>
<td>Opal</td>
</tr>
<tr>
<td>M.2 2280 SSD for Onboard M.2 slots</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>256GB / 512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**Storage Controllers**

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated NVMe® controller</td>
<td>Standard</td>
<td>PCIe® NVMe®</td>
<td>0/1</td>
<td>None</td>
</tr>
<tr>
<td>Integrated SATA controller</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>-</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC897-Q codec
**Speakers**
Single speaker

**Power Supply**

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Power</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter</td>
<td>170W</td>
<td>90%</td>
<td>100V - 240V</td>
</tr>
<tr>
<td>Adapter</td>
<td>230W</td>
<td>90%</td>
<td>100V - 240V</td>
</tr>
<tr>
<td>Adapter</td>
<td>300W</td>
<td>90%</td>
<td>100V - 240V</td>
</tr>
</tbody>
</table>

**DESIGN**

**Mechanical**

**Form Factor**
Mini-tower (3.9L)

**Dimensions (WxDxH)**
87 x 223 x 202 mm (3.43 x 8.78 x 7.95 inches)

**Weight**
3.6 kg (7.94 lbs, maximum configuration)

**Bays**
1x 2.5" disk bay (optional, comes with disk)

**M.2 Slots**
- Two M.2 PCIe® Gen 4x4 slots (for SSD)
- One M.2 slot (for WLAN)

**Expansion Slots**
Two PCIe® slots with one PCIe® 4.0 x16 and one PCIe® 3.0 x8.
- Slot 1: PCIe® 4.0 x16 (via MXM to PCIe® riser card), low profile, 75W, double-width
- Slot 2: PCIe® 3.0 x8 (x4 lanes), low profile, 25W

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Two Ethernet, 2.5GbE + GbE, Intel® Ethernet Connection I225-LM and I210-AT, 2x RJ-45, supports Wake-on-LAN

**Optional Ethernet**
One additional Ethernet adapter support, up to four additional GbE ports
- Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), Intel® vPro® technology support
- No WLAN and Bluetooth®

**Notes:**
[1] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
Ports

**Front Ports**
- 2x Thunderbolt™ 4
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)

**Rear Ports**
- 4x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 3x DisplayPort™ 1.2
- 1x Ethernet (2.5GbE RJ-45)
- 1x Ethernet (GbE RJ-45)

**Optional Rear Ports**
- 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), support data transfer, via USB-C® PCIe® x4 card
- 2x USB-C® (USB 10Gbps / USB 3.2 Gen 2), support data transfer, via additional PCIe® adapter
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via additional PCIe® adapter
- 4x serial (via 4-port serial expansion card, PCIe® x1)

**Notes:**

[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower than the theoretical speed.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

**Security**

**Security Chip**
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

**Physical Locks**
Kensington® Security Slot™, 3 x 7 mm

**Chassis Intrusion Switch**
Chassis intrusion switch

**BIOS Security**
- Administrator password
- Power-on password
- Self-healing BIOS
- UEFI Secure Boot

MANAGEABILITY

**System Management**

**System Management**
- (Optional) Aspeed AST2600 graphics / management processor, IPMI 2.0-compliant baseboard management controller (BMC)
- (Optional) Intel® vPro® Enterprise with Intel® AMT 16
- Non-vPro®

**Notes:**

[1] Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

**Warranty**

**Base Warranty**
- 1-year limited onsite service
Notes:

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Operating Environment

Temperature
- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
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Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

CERTIFICATIONS

Green Certifications

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

ISV Certifications

ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

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  updated without notice.
OVERVIEW

1. Card reader *
2. Microphone (3.5mm)
3. Headphone / microphone combo jack (3.5mm)
4. USB-C 3.2 Gen 1
5. 2x USB 3.2 Gen 1
6. 2x USB 3.2 Gen 2
7. Optical drive *
8. Flex bay *
9. Video ports (2x DP, 1x HDMI) *
10. 4x USB 2.0 (with Smart Power On feature)
11. Optional ports on expansion cards *
12. Audio line-out (3.5mm)
13. Padlock loop
14. Serial (9-pin)
15. E-lock slot *
16. Ethernet (RJ-45)
17. Serial (9-pin) *
18. Smart cable clip slots
19. Kensington Security Slot
20. Power connector

Notes:
• Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Up to one 65W AMD Ryzen™ 9 PRO 5000 Series Processor

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<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ 3 PRO 4350G</td>
<td>4</td>
<td>8</td>
<td>3.8GHz</td>
<td>4.0GHz</td>
<td>2MB L2 / 4MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 4650G</td>
<td>6</td>
<td>12</td>
<td>3.7GHz</td>
<td>4.2GHz</td>
<td>3MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 5 PRO 5645</td>
<td>6</td>
<td>12</td>
<td>3.7GHz</td>
<td>4.6GHz</td>
<td>3MB L2 / 32MB L3</td>
<td>DDR4-3200</td>
<td>None</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 4750G</td>
<td>8</td>
<td>16</td>
<td>3.6GHz</td>
<td>4.4GHz</td>
<td>4MB L2 / 8MB L3</td>
<td>DDR4-3200</td>
<td>AMD Radeon™ Graphics</td>
</tr>
<tr>
<td>AMD Ryzen™ 7 PRO 5845</td>
<td>8</td>
<td>16</td>
<td>3.4GHz</td>
<td>4.6GHz</td>
<td>4MB L2 / 32MB L3</td>
<td>DDR4-3200</td>
<td>None</td>
</tr>
<tr>
<td>AMD Ryzen™ 9 PRO 5945</td>
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<td>24</td>
<td>3.0GHz</td>
<td>4.7GHz</td>
<td>6MB L2 / 64MB L3</td>
<td>DDR4-3200</td>
<td>None</td>
</tr>
</tbody>
</table>

Processor Sockets
Socket AM4

Operating System

Operating System**[1]
- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 8.6 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](#))
- No preload operating system

Notes:
[1] Due to hardware limitations, Windows® Autopilot is temporarily not supported

Graphics

Integrated Graphics
- None
- Integrated AMD Radeon™ Graphics

Discrete Graphics Support*[1]
Supports up to one NVIDIA® GeForce RTX™ 3080 or NVIDIA® RTX A2000

Discrete Graphics Offering

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>Form Factor</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000</td>
<td>4GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000 8GB</td>
<td>8GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000</td>
<td>12GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3060</td>
<td>12GB GDDR6</td>
<td>170W</td>
<td>3x DP 1.4a, 1x HDMI® 2.1 FRL</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3070 Ti</td>
<td>8GB GDDR6</td>
<td>290W</td>
<td>3x DP 1.4a, 1x HDMI® 2.1 FRL</td>
<td>Triple slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3080</td>
<td>10GB GDDR6</td>
<td>320W</td>
<td>3x DP 1.4a, 1x HDMI® 2.1 FRL</td>
<td>Triple slot</td>
<td>None</td>
</tr>
</tbody>
</table>
Notes:

[1] Discrete graphics support may vary by configurations such as processor selection or power supply wattage.

**Monitor Support**

Monitor Support

- Models with Ryzen™ 3 Pro 4350G: no discrete graphic support. Onboard graphics supports up to 3 independent displays via onboard two DP, one HDMI®:
  - DP supports up to 4096x2160@60Hz
  - HDMI® supports up to 3840x2160@30Hz
- Models with Ryzen™ Pro 5000 processor: onboard video ports cannot work. Independent displays support depends on the discrete graphic card in use. Discrete graphics ports support:
  - miniDP supports up to 5120x2880@60Hz
  - HDMI® supports up to 7680x4320@60Hz

**Chipset**

Chipset

AMD PRO 565 chipset

**Memory**

Max Memory[1]

Up to 128GB (4x 32GB DDR4 UDIMM)

Memory Type**

- DDR4-3200 UDIMM ECC
- DDR4-3200 UDIMM non-ECC

Memory Slots

Four DDR4 UDIMM slots, dual-channel capable

Memory Protection

ECC on models with ECC DIMMs and ECC capable processor

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

Storage Support[2][3]

Up to 2x 3.5” SATA HDD + 1x 2.5” SATA HDD / SSD + 1x M.2 SSD
- 3.5” HDD up to 4TB each
- M.2 SSD up to 2TB
- No pre-configured 2.5” HDD / SSD options

Storage Type[3]

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB / 2TB / 4TB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe*, PCIe® 4.0 x4</td>
<td>-</td>
<td>256GB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe*, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Storage Controllers**[4]

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated SATA controller</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>0/1</td>
<td>None</td>
</tr>
<tr>
<td>Integrated NVMe® controller</td>
<td>Standard</td>
<td>PCIe® NVMe®</td>
<td>-</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] For detailed storage bays information and how to upgrade optional drives for ThinkStation® products, please visit ThinkStation® Storage Upgrade Guide
[3] System comes with one M.2 PCIe® Gen 3 slot for M.2 SSD.
RAID requires that BIOS version is equal or newer than S0HKT12A. RAID is only available on models with AMD Ryzen™ 3 Pro 4350G. Pre-configuration with RAID cannot be supported.

**Removable Storage**

**Optical Support**
Optional one 9.0mm DVD-ROM

**Card Reader**
- SD card reader
- No card reader

**Multi-Media**

**Audio Chip**
High Definition (HD) Audio, Realtek® ALC623-CG codec

**Speakers**
Single speaker, 2W x1

**Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>300W</td>
<td>Fixed</td>
<td>90%</td>
<td>Autosensing, 80 PLUS Gold qualified</td>
</tr>
<tr>
<td>500W</td>
<td>Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
<tr>
<td>750W</td>
<td>Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
</tbody>
</table>

**DESIGN**

**Mechanical**

**Form Factor**
Tower (17L)

**Dimensions (WxDxH)**
170 x 315.4 x 376 mm (6.7 x 12.4 x 14.8 inches)

**Weight**
9.8 kg (21.6 lbs, maximum configuration)

**Bays**
- 1x 3.5” disk bay (standard)
- 1x 3.5” disk bay (optional)
- 1x 2.5” disk bay (optional)
- 1x slim ODD bay (optional)

**M.2 Slots**
- One M.2 slot (for WLAN)
- One M.2 PCIe® Gen 3x4 slot (for SSD)

**Expansion Slots**
Supports two PCIe® slots with one PCIe® 3.0 x16 and one PCIe® 3.0 x1.
- Slot 1: PCIe® 3.0 x16, full height, full length, 75W, double-width
- Slot 2: PCIe® 3.0 x1, full height, half length, 25W

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**
Network
Onboard Ethernet
Gigabit Ethernet, Realtek® RTL8111EPV, 1x GbE RJ-45, supports Wake-on-LAN

Optional Ethernet
One additional Ethernet adapter support, up to one additional GbE port
• Gigabit Ethernet, Intel® I210-T1, 1x RJ-45, PCIe® x1
• Gigabit Ethernet, Realtek® RTL8168H, 1x RJ-45, PCIe® x1

WLAN + Bluetooth®
• MediaTek Wi-Fi® 6 MT7921, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1
• No WLAN and Bluetooth®

Ports[1]

Front Ports
• 1x USB-C® 3.2 Gen 1 (support data transfer)
• 2x USB 3.2 Gen 1
• 2x USB 3.2 Gen 2
• 1x headphone / microphone combo jack (3.5mm)
• 1x microphone (3.5mm)

Rear Ports[2]
• 4x USB 2.0 (one supports Smart Power On)
• 1x Ethernet (RJ-45)
• 1x line-out (3.5mm)
• 1x serial (9-pin)

Optional Rear Ports
• 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe® x1)
• 2x USB 2.0
• 1x HDMI® 2.1 TMDS (onboard, for AMD Ryzen™ 3 Pro 4350G models)
• 2x DisplayPort™ 1.4 (onboard, for AMD Ryzen™ 3 Pro 4350G models)
• 1x parallel
• 1x serial
• 4x serial (via 4-port serial expansion card, PCIe® x1)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Firmware TPM 2.0 integrated in processor

Physical Locks
• (Optional) E-lock
• (Optional) Smart Cable Clip
• Kensington® Security Slot™, 3 x 7 mm
• Padlock Loop

Chassis Intrusion Switch
• Chassis intrusion switch
• No chassis intrusion switch
BIOS Security
- Administrator password
- Power-on password
- Self-healing BIOS
- UEFI Secure Boot

MANAGEABILITY

System Management

AMD PRO Manageability

SERVICE

Warranty

Base Warranty
- 1-year limited onsite service
- 2-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade“ column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment

Temperature
- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

CERTIFICATIONS

Green Certifications

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications“ section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

ISV Certifications
ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
## OVERVIEW

1. Headphone / microphone combo jack (3.5mm)  
2. USB-A (USB 10Gbps)  
3. USB-A (USB 10Gbps), Always On  
4. USB-C (USB 10Gbps), data transfer only  
5. Power connector  
6. DisplayPort 1.4  
7. USB-A (USB 5Gbps)  
8. HDMI 2.1 TMDS  
9. USB-A (USB 5Gbps), with Smart Power On  
10. USB-A (USB 10Gbps)  
11. USB-A (USB 10Gbps)  
12. Ethernet (RJ-45)  
13. 2 Punch out ports or expansion card *

### Notes:
- Items with * are only available on selected models
## PERFORMANCE

### Processor

**Processor Family**

12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

**Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-12100T</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 2.2GHz</td>
<td>P-core 4.1GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-12300</td>
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<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz</td>
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<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
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<td>P-core 2.3GHz</td>
<td>P-core 4.2GHz</td>
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<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
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<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400T</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 1.8GHz</td>
<td>P-core 4.2GHz</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
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<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
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<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz</td>
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<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12500T</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.0GHz</td>
<td>P-core 4.4GHz</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12600</td>
<td>6 (6 P-core + 0 E-core)</td>
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<td>P-core 3.3GHz</td>
<td>P-core 4.8GHz</td>
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<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
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<tr>
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<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.1GHz</td>
<td>P-core 4.6GHz</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700T</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 1.4GHz / E-core 1.0GHz</td>
<td>Max Turbo up to 4.7GHz / P-core 4.6GHz / E-core 3.4GHz</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900T</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 1.4GHz / E-core 1.0GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

**Processor Sockets**

1x FCLGA1700

**Notes:**

[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see [http://www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

### Operating System

**Operating System**

**Operating System**

- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
ThinkStation P360 Tiny

- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

**Graphics**

**Integrated Graphics**

- Intel® UHD Graphics 730
- Intel® UHD Graphics 770
- None

**Discrete Graphics Support**

Supports up to one NVIDIA® T1000 on models with 35W processor

**Discrete Graphics Offering**

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T600</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000</td>
<td>4GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000</td>
<td>8GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>Quadro® P400</td>
<td>2GB GDDR5</td>
<td>30W</td>
<td>3x miniDP 1.4</td>
<td>None</td>
</tr>
<tr>
<td>Quadro® P620</td>
<td>2GB GDDR5</td>
<td>40W</td>
<td>4x miniDP 1.4</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:

[1] Discrete graphics support may vary by configurations such as processor selection or power supply wattage.

**Monitor Support**

**Monitor Support**

Onboard graphics supports up to 4 independent displays via (onboard DP, onboard HDMI®, punch out port 1 [VGA / HDMI® / DP / USB-C®], and punch out port 2 [VGA / HDMI® / DP]); the number of maximum monitors also depends on the discrete graphic card in use

**Chipset**

**Chipset**

Intel® Q670 chipset

**Memory**

**Max Memory**

Up to 64GB (2x 32GB DDR5 SO-DIMM)

**Memory Type**

DDR5-4800 SO-DIMM non-ECC

**Memory Slots**

Two DDR5 SO-DIMM slots, dual-channel capable

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

**Storage Support**

Up to two drives, 2x M.2 SSD, up to 2TB each

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>256GB / 512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

**Storage Controllers**

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
</table>
Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage
Optical Support
No optical support

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC256VB codec

Speakers**
• Single speaker
• Single speaker, premium

Power Supply
Power Supply**[1]

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>170W</td>
<td>Adapter</td>
<td>90%</td>
<td>100V - 240V</td>
</tr>
<tr>
<td>230W</td>
<td>Adapter</td>
<td>90%</td>
<td>100V - 240V</td>
</tr>
</tbody>
</table>

Notes:
[1] When work with TIO monitor, an appropriate power adapter is needed. Customer may need to:
• Order a Tiny for TIO MT (30FC or 30FD) models
• Or order an additional 230W power adapter if original power adapter is less than 230W.

DESIGN
Mechanical
Form Factor
Tiny (1L)

Dimensions (WxDxH)[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>179 x 182.9 x 37mm with rubber feet (7.0 x 7.2 x 1.5 inches with rubber feet)</td>
</tr>
<tr>
<td>Tiny &amp; ODD</td>
<td>204.2 x 186.6 x 64 mm with rubber feet (8.04 x 7.35 x 2.52 inches with rubber feet)</td>
</tr>
</tbody>
</table>

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiny only</td>
<td>1.4 kg (3 lbs, maximum configuration)</td>
</tr>
</tbody>
</table>

Bays
No bays

M.2 Slots
• Two M.2 PCIe® Gen 4x4 slots (for SSD)
• One M.2 slot (for WLAN)

Expansion Slots
One PCIe® 4.0 x8, low-profile[3]

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight
for each specific model.

Supports discrete graphic card by x16 riser card (x8 signal), and supports Ethernet card / Thunderbolt 4 card by x4 riser card. Riser card comes with the expansion cards.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**
One additional ethernet adapter support, up to one additional 2.5GbE port
- Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
- Gigabit Ethernet, Intel® I350-T4, 4x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1
- Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, BTB

**WLAN + Bluetooth®**
- Realtek® RTL8822CE, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.0
- Intel® Wireless-AC 9560, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1
- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)[1]
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready), Intel® vPro® technology support
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1[2]
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), Intel® vPro® technology support[3]
- No WLAN and Bluetooth®

Notes:

[1] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

[2], [3] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

**Ports**

**Front Ports**
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)

**Rear Ports**
- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), one supports Smart Power On
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

**Optional Rear Ports**
- Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® 5Gbps with DisplayPort™ and PD 3.0 functions)
- Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / RJ-45)
- 1x Thunderbolt™ 4 (via additional PCIe® adapter)
- USB-C® (USB 5Gbps / USB 3.2 Gen 1), with USB PD and DP
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), occupies port 1 and 2
- 1x 2.5GbE RJ-45, via RTL8125BGS
- 2x GbE RJ-45, via additional PCIe® adapter
- 4x GbE RJ-45, via additional PCIe® adapter

Notes:

[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower
than the theoretical speed.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
• (Optional) Cable lock
• Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

BIOS Security
• Administrator password
• Power-on password
• Hard disk password
• Boot sequence control
• Boot without keyboard and mouse
• Certificate based BIOS management
• Cover presence switch
• Individual USB port disablement
• Self-healing BIOS
• Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management
System Management[1]
• Intel® vPro® Enterprise with Intel® AMT 16
• Non-vPro®

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

SERVICE

Warranty[1]
Base Warranty**
• 1-year limited onsite service
• 2-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment
Temperature
• Operating: 10°C (50°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)
Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

CERTIFICATIONS

Green Certifications
(Optional) ENERGY STAR® 8.0
(Optional) EPEAT™ Gold Registered
ErP Lot 3
RoHS compliant
TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

ISV Certifications

ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.
• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
# OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Optical drive *</td>
<td>14. 3x USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>2. Flex bay *</td>
<td>15. USB-A (USB 5Gbps), with Smart Power On</td>
</tr>
<tr>
<td>3. Power button</td>
<td>16. Padlock loop *</td>
</tr>
<tr>
<td>4. Card reader *</td>
<td>17. PS/2 port (mouse) *</td>
</tr>
<tr>
<td>5. Microphone (3.5mm)</td>
<td>18. PS/2 port (keyboard) *</td>
</tr>
<tr>
<td>6. Headphone / microphone combo jack (3.5mm)</td>
<td>19. Ethernet (RJ-45)</td>
</tr>
<tr>
<td>7. USB-C (USB 10Gbps), data transfer only</td>
<td>20. E-lock slot *</td>
</tr>
<tr>
<td>8. 2x USB-A (USB 5Gbps)</td>
<td>21. Serial (9-pin) *</td>
</tr>
<tr>
<td>9. 2x USB-A (USB 10Gbps)</td>
<td>22. Smart cable clip slots *</td>
</tr>
<tr>
<td>10. Line-out (3.5mm)</td>
<td>23. Optional ports on expansion cards *</td>
</tr>
<tr>
<td>11. Flex IO *</td>
<td>24. Kensington Security Slot</td>
</tr>
<tr>
<td>12. HDMI</td>
<td>25. Power connector</td>
</tr>
<tr>
<td>13. 2x DisplayPort</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
## PERFORMANCE

### Processor

**Processor Family**

12th Generation Intel® Core™ i3 / i5 / i7 / i9 Processor

**Processor**[^1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-12100</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.3GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i3-12300</td>
<td>4 (4 P-core + 0 E-core)</td>
<td>8</td>
<td>P-core 3.5GHz</td>
<td>P-core 4.4GHz</td>
<td>12MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12400</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 2.5GHz</td>
<td>P-core 4.4GHz</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 730</td>
</tr>
<tr>
<td>Core i5-12500</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.0GHz</td>
<td>P-core 4.6GHz</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12600</td>
<td>6 (6 P-core + 0 E-core)</td>
<td>12</td>
<td>P-core 3.3GHz</td>
<td>P-core 4.8GHz</td>
<td>18MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i5-12600K</td>
<td>10 (6 P-core + 4 E-core)</td>
<td>16</td>
<td>P-core 3.7GHz / E-core 2.8GHz</td>
<td>P-core 4.9GHz / E-core 3.6GHz</td>
<td>20MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 2.1GHz / E-core 1.6GHz</td>
<td>Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700K</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 3.6GHz / E-core 2.7GHz</td>
<td>Max Turbo up to 5.0GHz / P-core 4.9GHz / E-core 3.8GHz</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 2.4GHz / E-core 1.8GHz</td>
<td>Max Turbo up to 5.1GHz / P-core 5.0GHz / E-core 3.8GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900K</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 3.2GHz / E-core 2.4GHz</td>
<td>Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 3.9GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel® UHD Graphics 770</td>
</tr>
</tbody>
</table>

**Processor Sockets**

1x FCLGA1700

---

Notes:

[^1]: Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see [http://www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

### Operating System

**Operating System**[^2]

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 8.7 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](https://www.redhat.com/certified-hardware))
- No preload operating system

### Graphics

**Integrated Graphics**[^3]

- Intel® UHD Graphics 730
- Intel® UHD Graphics 770

**Discrete Graphics Support**[^4]
Supports up to one NVIDIA® RTX A5000 or NVIDIA® GeForce RTX™ 3080

Discrete Graphics Offering***

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>Form Factor</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400</td>
<td>2GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T600</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000</td>
<td>4GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000 8GB</td>
<td>8GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000</td>
<td>6GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000 12GB</td>
<td>12GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4000</td>
<td>16GB GDDR6 with ECC</td>
<td>140W</td>
<td>4x DP 1.4a</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4500</td>
<td>20GB GDDR6 with ECC</td>
<td>200W</td>
<td>4x DP 1.4</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A5000</td>
<td>24GB GDDR6 with ECC</td>
<td>230W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3060</td>
<td>12GB GDDR6</td>
<td>170W</td>
<td>3x DP 1.4a, 1x HDMI® 2.1 FRL</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3070 Ti</td>
<td>8GB GDDR6</td>
<td>290W</td>
<td>3x DP 1.4a, 1x HDMI® 2.1 FRL</td>
<td>Triple slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® GeForce RTX™ 3080</td>
<td>10GB GDDR6</td>
<td>320W</td>
<td>3x DP 1.4a, 1x HDMI® 2.1 FRL</td>
<td>Triple slot</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:
[1] Discrete graphics support may vary by configurations such as processor selection or power supply wattage.

Monitor Support

Monitor Support

Onboard graphics supports up to 4 independent displays via onboard two DP, one HDMI® and one optional USB-C®; the number of maximum monitors also depends on the discrete graphic card in use.

Chipset

Chipset

Intel® W680 chipset

Memory

Max Memory[1]

Up to 128GB (4x 32GB DDR5 UDIMM)

Memory Type*[2]

- DDR5-4400 UDIMM ECC
- DDR5-4400 UDIMM non-ECC

Memory Slots

Four DDR5 UDIMM slots, dual-channel capable

Memory Protection

ECC on models with ECC DIMMs and ECC capable processor

Notes:
[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] DR5-4400 is maximum operating speed, memory operating speed varies depending on memory configuration:

- 1x 8GB / 2x 8GB / 1x 16GB / 2x 16GB / 2x 32GB configurations run as DDR5-4400;
- 4x 8GB / 4x 16GB configurations run as DDR5-4000;
- 4x 32GB configuration runs at DDR5-3600.

Storage

Storage Support*[2]

Up to 2x 3.5" SATA HDD or 4x 2.5" SATA HDD; also supports up to 3x M.2 SSD (2 by onboard, 1 by M.2 to PCIe® adapter)

- 3.5" HDD up to 4TB each
- 2.5" HDD up to 1TB each

Notes:
[2] DR5-4400 is maximum operating speed, memory operating speed varies depending on memory configuration:

- 1x 8GB / 2x 8GB / 1x 16GB / 2x 16GB / 2x 32GB configurations run as DDR5-4400;
- 4x 8GB / 4x 16GB configurations run as DDR5-4000;
- 4x 32GB configuration runs at DDR5-3600.
• Onboard M.2 SSD up to 4TB each
• M.2 SSD by M.2 to PCIe® adapter up to 2TB

### Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB / 1TB FIPS</td>
<td>-</td>
</tr>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB / 2TB / 4TB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD for Onboard M.2 slots</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4</td>
<td>-</td>
<td>256GB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

### Storage Controllers

<table>
<thead>
<tr>
<th>Storage Controller Type</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated NVMe® controller</td>
<td>Standard</td>
<td>PCIe® NVMe®</td>
<td>0/1</td>
<td>None</td>
</tr>
<tr>
<td>Integrated SATA controller</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>0/1/10/5</td>
<td>None</td>
</tr>
</tbody>
</table>

**Notes:**

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] For detailed storage bays information and how to upgrade optional drives for ThinkStation® products, please visit [ThinkStation® Storage Upgrade Guide](http://www.lenovo.com).
[3] When using M.2 to PCIe® adapter, M.2 SSD works at PCIe® Gen 3. 4TB M.2 SSD is pending availability.
[4] NVMe® RAID is supported on onboard M.2 slots. SATA RAID 5 and 10 are supported on 2.5" HDD.

### Removable Storage

**Optical Support**

Optional one 9.0mm optical drive, DVD-ROM, DVD±RW, and Blu-ray

**Card Reader**

- SD card reader
- No card reader

### Multi-Media

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC897Q-CG codec

**Speakers**

Single speaker, 2W x1

### Power Supply

**Power Supply**

<table>
<thead>
<tr>
<th>Power Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>500W Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
<tr>
<td>750W Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
</tbody>
</table>

### DESIGN

**Mechanical**

**Form Factor**

Tower (17L)

**Dimensions (WxDxH)**

170 x 315.4 x 376 mm (6.7 x 12.4 x 14.8 inches)

**Weight**

9.67 kg (21.32 lbs, maximum configuration)

**Bays**
• 1x 3.5” disk bay (standard)
• 1x 3.5” disk bay (optional)
• 2x 2.5” disk bay (optional)

**M.2 Slots**
- Up to 3x M.2 SSD:
  - 2 via onboard M.2 PCIe® Gen 4 slots
  - 1 via Single M.2 to PCIe® adapter, PCIe® Gen 3
- One M.2 slot for WiFi

**Expansion Slots**
Supports four PCIe® slots with two PCIe® 4.0 x16 and two PCIe® 3.0 x1.
- Slot 1: PCIe® 4.0 x16, full height, full length, 75W, double-width
- Slot 2: PCIe® 3.0 x1, full height, half length, 25W
- Slot 3: PCIe® 4.0 x16 (x4 lanes), full height, half length, 25W
- Slot 4: PCIe® 3.0 x1, full height, half length, 25W

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet**
Up to two additional PCIe® x1 Ethernet adapters or one PCIe® x4 Ethernet adapter support, up to one additional 10 GbE ports
- Gigabit Ethernet, Intel® I210-T1, 1x RJ-45, PCIe® x1
- Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1
- Gigabit Ethernet, Realtek® RTL8168H, 1x RJ-45, PCIe® x1
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
- 10 Gigabit Ethernet, Marvell AQtion AQN-107, 1x RJ-45, PCIe® x4

**WLAN + Bluetooth®**
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready), Intel® vPro® technology support
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), Intel® vPro® technology support[1]
- No WLAN and Bluetooth®

**Notes:**
[1] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

**Ports**[1]

**Front Ports**
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

**Rear Ports**[2]
- 4x USB-A (USB 5Gbps / USB 3.2 Gen 1), one supports Smart Power On
- 1x HDMI® 2.1 TMDS
- 2x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)
Optional Rear Ports

- 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with DisplayPort™ function (Flex IO)
- 1x HDMI® 2.1 TMDS (Flex IO)
- 1x DP 1.2 (Flex IO)
- 1x VGA (Flex IO)
- 1x parallel (via cable and PCIe® bracket)
- 1x Thunderbolt™ 4 (via additional PCIe® adapter)
- 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), support data transfer, via USB-C® PCIe® x4 card
- 2x USB-A (Hi-Speed USB / USB 2.0), via cable and PCIe® bracket
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via additional PCIe® adapter
- 1x serial (via cable)
- 4x serial (via 4-port serial expansion card, PCIe® x1)
- 2x PS/2 (via cable)

Notes:
1. The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower than the theoretical speed.
2. For video ports on discrete graphics, please see graphics section.
3. 2x USB 2.0 and 1x parallel can not be chosen simultaneously. USB 2.0 and parallel occupy a PCIe® slot.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
- (Optional) Cable lock
- (Optional) E-lock
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Chassis Intrusion Switch
- Chassis intrusion switch
- No chassis intrusion switch

BIOS Security
- Administrator password
- Power-on password

MANAGEABILITY

System Management

System Management
- Intel® vPro® Enterprise with Intel® AMT 16
- Non-vPro®

Notes:
1. Intel® vPro® offers a superset of DASH's defined capabilities.

SERVICE

Warranty

Base Warranty
- 1-year limited onsite service
- 2-year limited onsite service
- 3-year limited onsite service
**OPERATING REQUIREMENTS**

**Operating Environment**

Temperature
- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

**CERTIFICATIONS**

**Green Certifications**

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered
- ErP Lot 3
- RoHS compliant
- TCO Certified 9.0

**Notes:**
- The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).
- EPEAT™ is registered where applicable, please visit [epeat.net](https://www.epeat.net) for registration status by country.

**Other Certifications**

- Mil-Spec Test
  - MIL-STD-810H military test passed

**ISV Certifications**

- Please visit [ISV certifications for Lenovo® Workstations](https://www.lenovo.com/support)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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- The specifications on this page may not be available in all regions, and may be changed or updated without notice.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power button</td>
</tr>
<tr>
<td>2.</td>
<td>2x USB-A (USB 10Gbps) *</td>
</tr>
<tr>
<td>3.</td>
<td>2x USB-C (USB 10Gbps), data transfer only *</td>
</tr>
<tr>
<td>4.</td>
<td>Headphone (3.5mm)</td>
</tr>
<tr>
<td>5.</td>
<td>2x Audio ports (line-out and line-in)</td>
</tr>
<tr>
<td>6.</td>
<td>Serial (9-pin) *</td>
</tr>
<tr>
<td>7.</td>
<td>Ethernet (GbE RJ-45)</td>
</tr>
<tr>
<td>8.</td>
<td>2x USB-A (Hi-Speed USB)</td>
</tr>
<tr>
<td>9.</td>
<td>3x USB-A (USB 10Gbps)</td>
</tr>
<tr>
<td>10.</td>
<td>USB-C (USB 20Gbps / USB 3.2 Gen 2x2)</td>
</tr>
<tr>
<td>11.</td>
<td>PCIe slots</td>
</tr>
<tr>
<td>12.</td>
<td>Power supply</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
- Expansion cards are optional. More ports are available through the optional expansion cards
PERFORMANCE

Processor

Processor Family
Up to one 225W Intel® Xeon® W-2400 Series processor, supports up to 24 cores, up to 4.8GHz

**Notes:**

1. Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see [http://www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

### Processor

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xeon w3-2423</td>
<td>6</td>
<td>12</td>
<td>2.1GHz</td>
<td>4.2GHz</td>
<td>15MB</td>
<td>DDR5-4400</td>
</tr>
<tr>
<td>Xeon w3-2425</td>
<td>6</td>
<td>12</td>
<td>3.0GHz</td>
<td>4.4GHz</td>
<td>15MB</td>
<td>DDR5-4400</td>
</tr>
<tr>
<td>Xeon w3-2435</td>
<td>8</td>
<td>16</td>
<td>3.1GHz</td>
<td>4.5GHz</td>
<td>22.5MB</td>
<td>DDR5-4400</td>
</tr>
<tr>
<td>Xeon w5-2445</td>
<td>10</td>
<td>20</td>
<td>3.1GHz</td>
<td>4.6GHz</td>
<td>26.25MB</td>
<td>DDR5-4800</td>
</tr>
<tr>
<td>Xeon w5-2455X</td>
<td>12</td>
<td>24</td>
<td>3.2GHz</td>
<td>4.6GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
</tr>
<tr>
<td>Xeon w5-2465X</td>
<td>16</td>
<td>32</td>
<td>3.1GHz</td>
<td>4.7GHz</td>
<td>33.75MB</td>
<td>DDR5-4800</td>
</tr>
<tr>
<td>Xeon w7-2475X</td>
<td>20</td>
<td>40</td>
<td>2.6GHz</td>
<td>4.8GHz</td>
<td>37.5MB</td>
<td>DDR5-4800</td>
</tr>
<tr>
<td>Xeon w7-2495X</td>
<td>24</td>
<td>48</td>
<td>2.5GHz</td>
<td>4.8GHz</td>
<td>45MB</td>
<td>DDR5-4800</td>
</tr>
</tbody>
</table>

### Processor Sockets

1x FCLGA4677

**Notes:**

1. Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see [http://www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

Operating System

**Operating System**

- Windows® 11 Pro for Workstations
- Windows® 11 DG Windows® 10 Pro 64 for Workstations
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](https://www.redhat.com/certified-hardware))
- No preload operating system

Graphics

**Discrete Graphics Support**

Supports up to two NVIDIA® RTX 5000 Ada Generation or two NVIDIA® RTX A6000

### Discrete Graphics Offering

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>Form Factor</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000 8GB</td>
<td>8GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000 12GB</td>
<td>12GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4000</td>
<td>16GB GDDR6 with ECC</td>
<td>140W</td>
<td>4x DP 1.4a</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4500</td>
<td>20GB GDDR6 with ECC</td>
<td>200W</td>
<td>4x DP 1.4</td>
<td>Dual slot</td>
<td>NVLink</td>
</tr>
<tr>
<td>NVIDIA® RTX A5000</td>
<td>24GB GDDR6 with ECC</td>
<td>230W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A5500</td>
<td>24GB GDDR6 with ECC</td>
<td>230W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>NVLink</td>
</tr>
<tr>
<td>NVIDIA® RTX A6000[2]</td>
<td>48GB GDDR6 with ECC</td>
<td>300W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>NVLink</td>
</tr>
<tr>
<td>NVIDIA® RTX 4000 Ada Generation</td>
<td>20GB GDDR6 with ECC</td>
<td>130W</td>
<td>4x DP 1.4a</td>
<td>Single slot</td>
<td>-</td>
</tr>
<tr>
<td>NVIDIA® RTX 4500 Ada Generation</td>
<td>24GB GDDR6 with ECC</td>
<td>210W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>-</td>
</tr>
<tr>
<td>NVIDIA® RTX 5000 Ada Generation</td>
<td>32GB GDDR6 with ECC</td>
<td>250W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>-</td>
</tr>
</tbody>
</table>

**Notes:**
Monitor Support

Monitor Support

Supports multiple displays via discrete graphics, the number of maximum monitors supported depends on the graphic card in use.

Chipset

Chipset

Intel® W790 chipset

Memory

Max Memory

Up to 512GB (8x 64GB RDIMM)

Memory Type

DDR5-4800 RDIMM ECC

Memory Slots

8 DDR5 DIMM slots, 4 channels capable

Memory Protection

ECC

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.
[2] System comes with DDR5-4800 memory and some configurations will run as DDR5-4400 due to platform limitations.

Storage

Storage Support

Up to ten drives (3x 3.5" SATA HDD + 7x M.2 SSD)

• 3.5" HDD up to 12TB each
• M.2 SSD up to 4TB or 2TB each (see Storage Type)

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>2TB / 6TB / 12TB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD for Onboard / Front access M.2</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD for quad M.2 to PCIe® adapter³</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Storage Controllers⁴

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onboard Intel® RSTe SATA RAID</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>0/1/5</td>
<td>None</td>
</tr>
<tr>
<td>Integrated NVMe® controller</td>
<td>Standard</td>
<td>PCIe® NVMe®</td>
<td>-</td>
<td>None</td>
</tr>
<tr>
<td>NVMe® Basic</td>
<td>Optional</td>
<td>PCIe® NVMe®</td>
<td>0/1/10</td>
<td>None</td>
</tr>
<tr>
<td>NVMe® Premium</td>
<td>Optional</td>
<td>PCIe® NVMe®</td>
<td>0/1/10/5</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] For detailed storage bays information and how to upgrade optional drives for ThinkStation® products, please visit ThinkStation® Storage Upgrade Guide
[3] M.2 2280 SSD for quad M.2 to PCIe® adapter is PCIe® 4.0 x4, and the 4x M.2 slots on quad M.2 to PCIe® adapter are PCIe® 3.0 x4. See M.2 Slots section for more information.
[4] As planned, RAID for SATA and NVMe® SSD will be available on July 2023.
Removable Storage
Card Reader
- 15-in-1 card reader
- No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC897-Q codec
Speakers
Single speaker, 1.5W x1

Power Supply
Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>750W</td>
<td>Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
<tr>
<td>1000W</td>
<td>Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
</tbody>
</table>

DESIGN
Mechanical
Form Factor
Tower (33L)
Dimensions (WxDxH)\(^1\)
165 x 453.9 x 446 mm (6.5 x 17.9 x 17.6 inches, with feet)
Weight\(^2\)
19 kg (41.9 lbs, maximum configuration)
Bays
Three internal disk bays plus one front access M.2 bay:
- Bay 1 supports one 3.5" HDD, standard
- Bay 2 supports one 3.5" HDD, standard
- Bay 3 supports one 3.5" HDD, optional
- Front access M.2 bay supports one M.2 SSD, optional
M.2 Slots
Up to 7x M.2 SSD:
- 2 via onboard slots, PCIe® 4.0 x4
- 4 via Quad M.2 to PCIe® Gen 4 (4x M.2 PCIe® 4.0 x4) adapter or Quad M.2 to PCIe® Gen 3 (4x M.2 PCIe® 3.0 x4) adapter
- 1 via front access M.2 bay, PCIe® 4.0 x4
Expansion Slots
Supports 6 PCIe® slots with 2x PCIe® 5.0 slots and 4x PCIe® 4.0 slots.
- Slot 1: PCIe® 5.0 x16, full height, full length, 75W, double-width, by CPU
- Slot 2: PCIe® 4.0 x4, full height, full length, 25W, by PCH
- Slot 3: PCIe® 5.0 x16, full height, full length, 75W, double-width, by CPU
- Slot 4: PCIe® 4.0 x4, full height, full length, 25W, by PCH
- Slot 5: PCIe® 4.0 x8, full height, full length, 25W, by CPU
- Slot 6: PCIe® 4.0 x4, full height, full length, 25W, by PCH

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY
Network

Onboard Ethernet

Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet

Two additional Ethernet adapters support, up to four additional 10 GbE ports

• Gigabit Ethernet, Intel® I210-T1, 1x RJ-45, PCIe® x1
• Gigabit Ethernet, Realtek® RTL8168H, 1x RJ-45, PCIe® x1
• Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
• Gigabit Ethernet, Intel® I350-T4, 4x RJ-45, PCIe® x4
• Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
• Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1
• 10 Gigabit Ethernet, Intel® X550-T2, 2x RJ-45, PCIe® x4
• 10 Gigabit Ethernet, Intel® X710-DA2, 2x SFP+, PCIe® x8

WLAN + Bluetooth®

• Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), Intel® vPro® technology support[1]
• No WLAN and Bluetooth®

Notes:

[1] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

Ports[1]

Front Ports

1x headphone / microphone combo jack (3.5mm)

Optional Front Ports

• 2x USB-C* (USB 10Gbps / USB 3.2 Gen 2), data transfer only
• 2x USB-A (USB 10Gbps / USB 3.2 Gen 2), one Always On

Rear Ports[2]

• 1x USB-C* (USB 20Gbps / USB 3.2 Gen 2x2), data transfer only
• 2x USB-A (Hi-Speed USB / USB 2.0)
• 3x USB-A (USB 10Gbps / USB 3.2 Gen 2)
• 1x Ethernet (GbE RJ-45)
• 1x line-in (3.5mm)
• 1x line-out (3.5mm)

Optional Rear Ports

• 1x Thunderbolt™ 4 (via additional PCIe® adapter)
• 1x serial
• 2x PS/2

Notes:

[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower than the theoretical speed.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks

• (Optional) Access panel lock kit with common key
• (Optional) Access panel lock kit with unique key
• Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

BIOS Security
• Administrator password
• Power-on password
• Self-healing BIOS
• UEFI Secure Boot

MANAGEABILITY

System Management

System Management
• (Optional) Aspeed AST2600 graphics / management processor, IPMI 2.0-compliant baseboard management controller
  (BMC)
• Intel® vPro® Enterprise with Intel® AMT 16

Notes:
[1] Intel® vPro® offers a superset of DASH's defined capabilities.

Diagnostic

Diagnostic
• ThinkStation® Diagnostics
• Front diagnostic panel with QR code

SERVICE

Warranty

Base Warranty
• 1-year limited onsite service
• 2-year limited onsite service
• 3-year limited onsite service

Notes:
[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 10°C (50°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

CERTIFICATIONS

Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Gold Registered
Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

**ISV Certifications**

ISV Certifications

Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
### OVERVIEW

<table>
<thead>
<tr>
<th>1. Power button</th>
<th>7. 3x Audio ports (3.5mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Headphone / microphone combo jack (3.5mm)</td>
<td>8. Serial *</td>
</tr>
<tr>
<td>3. USB 3.2 Gen 2</td>
<td>9. 2x PS/2 ports (keyboard / mouse)</td>
</tr>
<tr>
<td>4. USB 3.2 Gen 2</td>
<td>10. 2x USB 2.0</td>
</tr>
<tr>
<td>5. USB-C 3.2 Gen 2</td>
<td>11. 4x USB 3.2 Gen 2</td>
</tr>
<tr>
<td>6. USB-C 3.2 Gen 2</td>
<td>12. Ethernet (10GbE RJ-45)</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
PERFORMANCE

Processor

Processor Family
Up to one 280W AMD Ryzen™ Threadripper PRO 5000 or 3000 Series Processor

Processor**

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ Threadripper PRO 3945WX</td>
<td>12</td>
<td>24</td>
<td>4.0GHz</td>
<td>4.3GHz</td>
<td>6MB L2 / 64MB L3</td>
<td>DDR4-3200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 3955WX</td>
<td>16</td>
<td>32</td>
<td>3.9GHz</td>
<td>4.3GHz</td>
<td>8MB L2 / 64MB L3</td>
<td>DDR4-3200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 3975WX</td>
<td>32</td>
<td>64</td>
<td>3.5GHz</td>
<td>4.2GHz</td>
<td>16MB L2 / 128MB L3</td>
<td>DDR4-3200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 3995WX</td>
<td>64</td>
<td>128</td>
<td>2.7GHz</td>
<td>4.2GHz</td>
<td>32MB L2 / 256MB L3</td>
<td>DDR4-3200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 5945WX</td>
<td>12</td>
<td>24</td>
<td>4.1GHz</td>
<td>4.5GHz</td>
<td>6MB L2 / 64MB L3</td>
<td>DDR4-3200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 5965WX</td>
<td>16</td>
<td>32</td>
<td>4.0GHz</td>
<td>4.5GHz</td>
<td>8MB L2 / 64MB L3</td>
<td>DDR4-3200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 5975WX</td>
<td>24</td>
<td>48</td>
<td>3.8GHz</td>
<td>4.5GHz</td>
<td>12MB L2 / 128MB L3</td>
<td>DDR4-3200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 5995WX</td>
<td>32</td>
<td>64</td>
<td>3.6GHz</td>
<td>4.5GHz</td>
<td>16MB L2 / 128MB L3</td>
<td>DDR4-3200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 5995WX</td>
<td>64</td>
<td>128</td>
<td>2.7GHz</td>
<td>4.5GHz</td>
<td>32MB L2 / 256MB L3</td>
<td>DDR4-3200</td>
</tr>
</tbody>
</table>

Processor Sockets
1x sWRX8

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 DG Windows® 10 Pro 64
- Windows® 10 Pro 64
- Ubuntu Linux LTS
- Ubuntu Linux with Data Science Preload
- Red Hat Enterprise Linux 8.5 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

Graphics

Discrete Graphics Support
Supports up to two NVIDIA® RTX 5000 Ada Generation

Discrete Graphics Offering***

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>Form Factor</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T600</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000 8GB</td>
<td>4GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000 12GB</td>
<td>12GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4000 16GB with ECC</td>
<td>16GB GDDR6 with ECC</td>
<td>140W</td>
<td>4x DP 1.4a</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4500 20GB with ECC</td>
<td>20GB GDDR6 with ECC</td>
<td>200W</td>
<td>4x DP 1.4</td>
<td>Dual slot</td>
<td>NVLink</td>
</tr>
</tbody>
</table>
**Monitor Support**

Monitor Support

Supports multiple displays via discrete graphics, the number of maximum monitors supported depends on the graphic card in use

**Chipset**

Chipset

AMD WRX80 chipset

**Memory**

Max Memory[^1]

Up to 512GB (8x 64GB or 4x 128GB)

Memory Type

DDR4-3200 RDIMM ECC

Memory Slots

8 DDR4 DIMM slots, 8 channels capable

Memory Protection

ECC

Notes:

[^1]: The max memory is based on the test results with current Lenovo® memory offerings.

**Storage**

Storage Support[^2]

Up to 5x 3.5” SATA HDD + 11x M.2 SSD
- 3.5” HDD up to 4TB each
- Onboard M.2 SSD up to 4TB each
- M.2 SSD by M.2 to PCIe® adapter up to 2TB

Storage Type***[^3]

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5” SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>1TB / 2TB / 4TB</td>
</tr>
</tbody>
</table>

[^1]: PSREF

[^2]: PSREF

[^3]: PSREF
M.2 PCIe® SSD | PCIe® NVMe®, PCIe® 3.0 - | 256GB / 512GB / 1TB / 2TB
M.2 PCIe® SSD | PCIe® NVMe®, PCIe® 4.0 - | 256GB / 512GB / 1TB / 2TB / 4TB

Storage Controllers

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated NVMe® controller</td>
<td>Standard</td>
<td>PCIe® NVMe®</td>
<td>0/1/10/5</td>
<td>None</td>
</tr>
<tr>
<td>Integrated SATA controller</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>0/1/10/5</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] For detailed storage bays information and how to upgrade optional drives for ThinkStation® products, please visit ThinkStation® Storage Upgrade Guide
[3] 4TB M.2 SSD is for onboard M.2 slots only.

Removable Storage

Optical Support
Optional one 9.0mm optical drive, DVD-ROM, DVD±RW, and Blu-ray

Card Reader
- 15-in-1 card reader
- No card reader

Multi-Media

Audio Chip
High Definition (HD) Audio, Realtek® ALC4050H codec

Speakers
Single speaker

Power Supply

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000W</td>
<td>Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
</tbody>
</table>

DESIGN

Mechanical

Form Factor
Tower (33L)

Dimensions (WxDxH):
165 x 455 x 446 mm (6.5 x 17.9 x 17.6 inches)

Weight:
24 kg (52.9I lbs, maximum configuration)

Bays
- 2x 3.5" disk bay (standard)
- 3x 3.5" disk bay (optional):
  2 bays come with 3rd disk or Storage Bay Upgrade Kit
  1 bay via flex bay

Flex Bays
1x flex bay, supports one of the following:
- Front Access Storage Enclosure
- 5.25" Slim ODD and HDD cage

M.2 Slots
Up to 11x M.2 SSD:
- 2 via onboard slots
- 8 via Quad M.2 to PCIe® Gen 4 (PCIe® 4.0 x4) adapter or Quad M.2 to PCIe® Gen 3 (PCIe® 3.0 x4) adapter
Expansion Slots
Supports 6 PCIe® slots with 4x PCIe® 4.0 x16 slots plus 2x PCIe® 4.0 x8 slots.
• Slot 1: PCIe® 4.0 x16, full height, full length, 75W, double-width, by CPU
• Slot 2: PCIe® 4.0 x8, full height, full length, 25W, by CPU
• Slot 3: PCIe® 4.0 x16, full height, full length, 75W, double-width, by CPU
• Slot 4: PCIe® 4.0 x16, full height, full length, 75W, by CPU
• Slot 5: PCIe® 4.0 x16, full height, full length, 75W, by CPU
• Slot 6: PCIe® 4.0 x8, full height, full length, 25W, by IOH

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Onboard Ethernet
10 GbE Ethernet, Marvell AQtion AQN-107, 1x 10GbE RJ-45

Optional Ethernet
One additional Ethernet adapter support, up to two additional 10 GbE ports
• Gigabit Ethernet, Intel® i350-T4, 4x RJ-45, PCIe® x4
• Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
• Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1
• 10 Gigabit Ethernet, Intel® X550-T2, 2x RJ-45, PCIe® x4
• 10 Gigabit Ethernet, Intel® X710-D2A, 2x SFP+, PCIe® x8
• 10 Gigabit Ethernet, Marvell AQtion AQN-107, 1x RJ-45, PCIe® x4

WLAN + Bluetooth®**
• Intel® Wireless-AC 9260, Wi-Fi® 5, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1
• Intel® Wi-Fi® 6E AX210, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready)\(^\text{[1]}\)
• No WLAN and Bluetooth®

Notes:
\(^{[1]}\) Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations.
\(^{[2]}\) Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

Ports\(^{[1]}\)
Front Ports
• 2x USB-C® 3.2 Gen 2 (support data transfer)
• 1x USB 3.2 Gen 2 (Always On and fast charge)
• 1x USB 3.2 Gen 2
• 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
1x USB-C® 3.2 Gen 1 (support data transfer, with flex module)

Rear Ports\(^{[2]}\)
• 2x USB 2.0
• 4x USB 3.2 Gen 2
• 1x Ethernet (10GbE RJ-45)
• 1x line-in (3.5mm)
• 1x line-out (3.5mm)
• 1x microphone (3.5mm)
• 2x PS/2 ports (keyboard / mouse)

Optional Rear Ports**
• 1x Thunderbolt™ 3
• 2x USB-C® 3.2 Gen 2 (support data transfer, via 2-port USB-C® expansion card, PCIe® x4)
• 1x serial
Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks

• (Optional) Access panel lock kit with common key
• (Optional) Access panel lock kit with unique key
• Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

BIOS Security

• Administrator password
• Power-on password

MANAGEABILITY

System Management

System Management
AMD PRO Manageability

Diagnostic

Diagnostic
• ThinkStation® Diagnostics
• Photo-audio transfer with Lenovo® PC Diagnostics for Android™ and iOS
• Front 4-digit diagnostic
• Lenovo® UEFI Bootable Diagnostics

SERVICE

Warranty[1]

Base Warranty
3-year limited onsite service

Notes:

[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment
Temperature
- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

CERTIFICATIONS

Green Certifications
- (Optional) ENERGY STAR® 8.0
- ENERGY STAR® 8.0 (on model 30E00006US)
- EPEAT™ Silver Registered
- GREENGUARD®
- RoHS compliant

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

ISV Certifications
Please visit www.thinkworkstations.com/isv-certifications/

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### OVERVIEW

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power button</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>2x USB-A (USB 10Gbps) *</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>2x USB-C (USB 10Gbps), data transfer only *</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Headphone (3.5mm)</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>2x Audio ports (line-out and line-in)</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>3x USB-A (USB 10Gbps)</td>
<td>13</td>
</tr>
<tr>
<td>7</td>
<td>2x USB-A (Hi-Speed USB)</td>
<td>14</td>
</tr>
</tbody>
</table>

Notes:
- Items with * are only available on selected models
- Expansion cards are optional. More ports are available through the optional expansion cards
PERFORMANCE

Processor

Processor Family
Up to one 350W Intel® Xeon® W-3400 Series processor, supports up to 56 cores, up to 4.8GHz

Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xeon w5-3423</td>
<td>12</td>
<td>24</td>
<td>2.1GHz</td>
<td>4.2GHz</td>
<td>30MB</td>
<td>DDR5-4400</td>
</tr>
<tr>
<td>Xeon w5-3425</td>
<td>12</td>
<td>24</td>
<td>3.2GHz</td>
<td>4.6GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
</tr>
<tr>
<td>Xeon w5-3433</td>
<td>16</td>
<td>32</td>
<td>2.0GHz</td>
<td>4.2GHz</td>
<td>45MB</td>
<td>DDR5-4400</td>
</tr>
<tr>
<td>Xeon w5-3435X</td>
<td>16</td>
<td>32</td>
<td>3.1GHz</td>
<td>4.7GHz</td>
<td>45MB</td>
<td>DDR5-4800</td>
</tr>
<tr>
<td>Xeon w7-3445</td>
<td>20</td>
<td>40</td>
<td>2.6GHz</td>
<td>4.8GHz</td>
<td>52.5MB</td>
<td>DDR5-4800</td>
</tr>
<tr>
<td>Xeon w7-3455</td>
<td>24</td>
<td>48</td>
<td>2.5GHz</td>
<td>4.8GHz</td>
<td>67.5MB</td>
<td>DDR5-4800</td>
</tr>
<tr>
<td>Xeon w7-3465X</td>
<td>28</td>
<td>56</td>
<td>2.5GHz</td>
<td>4.8GHz</td>
<td>75MB</td>
<td>DDR5-4800</td>
</tr>
<tr>
<td>Xeon w9-3475X</td>
<td>36</td>
<td>72</td>
<td>2.2GHz</td>
<td>4.8GHz</td>
<td>82.5MB</td>
<td>DDR5-4800</td>
</tr>
<tr>
<td>Xeon w9-3495X</td>
<td>56</td>
<td>112</td>
<td>1.9GHz</td>
<td>4.8GHz</td>
<td>105MB</td>
<td>DDR5-4800</td>
</tr>
</tbody>
</table>

Processor Sockets
1x FCLGA4677

Notes:
[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see [http://www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

Operating System

Operating System**
- Windows® 11 Pro for Workstations
- Windows® 11 DG Windows® 10 Pro 64 for Workstations
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](http://www.intel.com/technology/turboboost/))
- No preload operating system

Graphics

Discrete Graphics Support[2]
Supports up to three NVIDIA® RTX 6000 Ada Generation

Discrete Graphics Offering

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>Form Factor</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000 8GB</td>
<td>8GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000 12GB</td>
<td>12GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4000</td>
<td>16GB GDDR6 with ECC</td>
<td>140W</td>
<td>4x DP 1.4a</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4500</td>
<td>20GB GDDR6 with ECC</td>
<td>200W</td>
<td>4x DP 1.4</td>
<td>Dual slot</td>
<td>NVLink</td>
</tr>
<tr>
<td>NVIDIA® RTX A5000</td>
<td>24GB GDDR6 with ECC</td>
<td>230W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A5500</td>
<td>24GB GDDR6 with ECC</td>
<td>230W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>NVLink</td>
</tr>
<tr>
<td>NVIDIA® RTX A6000[2]</td>
<td>48GB GDDR6 with ECC</td>
<td>300W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>NVLink</td>
</tr>
<tr>
<td>NVIDIA® RTX 2000 Ada Generation</td>
<td>16GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX 4000 Ada Generation</td>
<td>20GB GDDR6 with ECC</td>
<td>130W</td>
<td>4x DP 1.4a</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX 4500 Ada Generation</td>
<td>24GB GDDR6 with ECC</td>
<td>210W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX 5000 Ada Generation</td>
<td>32GB GDDR6 with ECC</td>
<td>250W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
</tbody>
</table>
NVIDIA® RTX 5880 Ada Generation
48GB GDDR6 with ECC 285W 4x DP 1.4a Dual slot -

NVIDIA® RTX 6000 Ada Generation[^1]
48GB GDDR6 with ECC 300W 4x DP 1.4a Dual slot -

Notes:
[^1] Discrete graphics support may vary by configurations such as processor selection or power supply wattage.

Monitor Support
Monitor Support
Supports multiple displays via discrete graphics, the number of maximum monitors supported depends on the graphic card in use

Chipset
Chipset
Intel® W790 chipset

Memory
Max Memory[^1]
Up to 1TB (8x 128GB 3DS-RDIMM)

Memory Type[^2[^2]]
- DDR5-4800 3DS-RDIMM ECC
- DDR5-4800 RDIMM ECC

Memory Slots
8 DDR5 DIMM slots, 8 channels capable

Memory Protection
ECC

Notes:
[^1] The max memory is based on the test results with current Lenovo® memory offerings.
[^2] ThinkStation® P7 comes with DDR5-4800 memory, and some configurations will run as DDR5-4400 due to the memory support capability of processor.

Storage
Storage Support[^2[^2]]
Up to eleven drives (3x 3.5” SATA HDD + 8x M.2 SSD) or 9 drives (9x M.2 SSD)
- 3.5” HDD up to 12TB each
- M.2 SSD up to 4TB or 2TB each (see Storage Type)

Storage Type

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>2TB / 6TB / 12TB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD for quad M.2 to PCIe® adapter</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>M.2 2280 SSD for Onboard / HDD Bay / Front access M.2</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Storage Controllers

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onboard Intel® RSTe SATA RAID</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>0/1/5</td>
<td>None</td>
</tr>
<tr>
<td>Integrated NVMe® controller</td>
<td>Standard</td>
<td>PCIe® NVMe®</td>
<td>-</td>
<td>None</td>
</tr>
<tr>
<td>NVMe® Basic</td>
<td>Optional</td>
<td>PCIe® NVMe®</td>
<td>0/1/10</td>
<td>None</td>
</tr>
<tr>
<td>NVMe® Premium</td>
<td>Optional</td>
<td>PCIe® NVMe®</td>
<td>0/1/10/5</td>
<td>None</td>
</tr>
<tr>
<td>RAID 940-8i RAID Controller</td>
<td>Optional</td>
<td>SAS 12.0Gb/s, SATA 6.0Gb/s</td>
<td>0/1/5</td>
<td>4GB DDR4, SuperCap</td>
</tr>
</tbody>
</table>
Notes:
[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] For detailed storage bays information and how to upgrade optional drives for ThinkStation® products, please visit ThinkStation® Storage Upgrade Guide

Removable Storage
Card Reader
• 15-in-1 card reader
• No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC897-Q codec

Speakers
Single speaker, 1.5W x1

Power Supply
Power Supply**

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000W</td>
<td>Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
<tr>
<td>1400W[1]</td>
<td>Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
</tbody>
</table>

Notes:
[1] Countries with input voltage is 100 - 111.9V, output power is limited to 1125W; input voltage is 120V, output power is limited to 1250W.

DESIGN

Mechanical
Form Factor
Tower (39L) or 4U rack, optional rack rail kit needed

Dimensions (WxDxH)[2]
175 x 508 x 434.4 mm (6.9 x 20 x 17.1 inches, with feet)

Weight[2]
24.5 kg (50.0 lbs, maximum configuration)

Bays[3]
Three internal disk bays plus one front access M.2 bay:
• Bay 1 supports one 3.5” HDD, standard, optional support for M.2 SSD
• Bay 2 supports one 3.5” HDD, standard, optional support for M.2 SSD
• Bay 3 supports one 3.5” HDD, optional
• Front access M.2 bay supports one M.2 SSD, optional

M.2 Slots
Up to 9x M.2 SSD:
• 3 via onboard slots, 3rd M.2 slot is vertical and optional holder is needed
• 4 via Quad M.2 to PCIe® Gen 4 (4x M.2 PCIe® 4.0 x4) adapter or Quad M.2 to PCIe® Gen 3 (4x M.2 PCIe® 3.0 x4) adapter
• 2 via HDD bay or 1 via front access M.2 bay (choose one)[4]

Expansion Slots
Supports 7 PCIe® slots with 4x PCIe® 5.0 slots and 3x PCIe® 4.0 slots.
• Slot 1: PCIe® 5.0 x16, full height, full length, 75W, double-width
• Slot 2: PCIe® 4.0 x8, full height, full length, 25W
• Slot 3: PCIe® 5.0 x16, full height, full length, 75W, double-width
• Slot 4: PCIe® 4.0 x4, full height, full length, 25W
• Slot 5: PCIe® 5.0 x16, full height, full length, 75W, double-width
• Slot 6: PCIe® 4.0 x16, full height, full length, 75W
• Slot 7: PCIe® 5.0 x4, full height, full length, 25W

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] Only one of the following can be selected per system:
  • 2x 3.5” disk bay for M.2 SSD
  • 1x front access M.2 bay for M.2 SSD.
[4] M.2 slots on Quad M.2 to PCIe® Gen 5 adapter are PCIe® 5.0 compatible, and currently Lenovo® provides M.2 PCIe® 4.0 SSD.

CONNECTIVITY

Network

Onboard Ethernet
Two Ethernet, GbE + 10GbE, Intel® Ethernet Connection I219-LM and Marvell AQtion AQC-113C, 2x RJ-45, supports Wake-on-LAN

Optional Ethernet
Two additional Ethernet adapters support, up to eight additional GbE ports
  • Gigabit Ethernet, Intel® I210-T1, 1x RJ-45, PCIe® x1
  • Gigabit Ethernet, Realtek® RTL8168H, 1x RJ-45, PCIe® x1
  • Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
  • Gigabit Ethernet, Intel® I350-T4, 4x RJ-45, PCIe® x4
  • Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
  • Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1

WLAN + Bluetooth®
  • Intel® Wi-Fi® 6E AX210, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), Intel® vPro® technology support
  • No WLAN and Bluetooth®

Notes:
[1] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

Ports

Front Ports
1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
  • 2x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
  • 2x USB-A (USB 10Gbps / USB 3.2 Gen 2), one Always On

Rear Ports
  • 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), data transfer only
  • 2x USB-A (Hi-Speed USB / USB 2.0)
  • 3x USB-A (USB 10Gbps / USB 3.2 Gen 2)
  • 1x Ethernet (10GbE RJ-45)
  • 1x Ethernet (GbE RJ-45)
  • 1x line-in (3.5mm)
  • 1x line-out (3.5mm)

Optional Rear Ports
  • 1x Thunderbolt™ 4, via additional PCIe® adapter
  • 1x serial
  • 2x PS/2

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower
than the theoretical speed.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
• (Optional) Access panel lock kit with common key
• (Optional) Access panel lock kit with unique key
• Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

BIOS Security
• Administrator password
• Power-on password
• Self-healing BIOS
• UEFI Secure Boot

MANAGEABILITY

System Management

System Management

Intel® vPro® Enterprise with Intel® AMT 16

Notes:
[1] Intel® vPro® offers a superset of DASH’s defined capabilities.

Diagnostic

Diagnostic
• ThinkStation® Diagnostics
• Front diagnostic panel with QR code

SERVICE

Warranty

Warranty

Base Warranty**
• 1-year limited onsite service
• 2-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment

Temperature
• Operating: 10°C (50°F) to 35°C (95°F)
• Storage: -40°C (-40°F) to 60°C (140°F)
Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Relative Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

CERTIFICATIONS

Green Certifications\[1\]
Green Certifications
• (Optional) ENERGY STAR® 8.0
• (Optional) EPEAT™ Gold Registered
• (Optional) TCO Certified 9.0
• RoHS compliant

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

ISV Certifications
ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Power button
2. 2x USB-A (USB 10Gbps) *
3. 2x USB-C (USB 10Gbps), data transfer only *
4. Headphone (3.5mm)
5. 2x Audio ports (line-out and line-in)
6. 3x USB-A (USB 10Gbps)
7. 2x USB-A (Hi-Speed USB)
8. USB-C (USB 20Gbps / USB 3.2 Gen 2x2)
9. Serial (9-pin) *
10. Ethernet (GbE RJ-45)
11. Ethernet (10GbE RJ-45)
12. Upper PCIe slots (slots 1-4)
13. Lower PCIe slots (slots 5-7)
14. Power supply

Notes:
- Items with * are only available on selected models
- Expansion cards are optional. More ports are available through the optional expansion cards
PERFORMANCE

Processor

Processor Family
Up to one 350W AMD Ryzen™ Threadripper PRO 7000 WX Series processor, supports up to 96 cores; up to 5.3GHz; up to 350W TDP

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD Ryzen™ Threadripper PRO 7945WX</td>
<td>12</td>
<td>24</td>
<td>4.7GHz</td>
<td>5.3GHz</td>
<td>12MB L2 / 64MB L3</td>
<td>DDR5-5200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 7955WX</td>
<td>16</td>
<td>32</td>
<td>4.5GHz</td>
<td>5.3GHz</td>
<td>16MB L2 / 64MB L3</td>
<td>DDR5-5200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 7965WX</td>
<td>24</td>
<td>48</td>
<td>4.2GHz</td>
<td>5.3GHz</td>
<td>24MB L2 / 128MB L3</td>
<td>DDR5-5200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 7975WX</td>
<td>32</td>
<td>64</td>
<td>4.0GHz</td>
<td>5.3GHz</td>
<td>32MB L2 / 128MB L3</td>
<td>DDR5-5200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 7985WX</td>
<td>64</td>
<td>128</td>
<td>3.2GHz</td>
<td>5.1GHz</td>
<td>64MB L2 / 256MB L3</td>
<td>DDR5-5200</td>
</tr>
<tr>
<td>AMD Ryzen™ Threadripper PRO 7995WX</td>
<td>96</td>
<td>192</td>
<td>2.5GHz</td>
<td>5.1GHz</td>
<td>96MB L2 / 384MB L3</td>
<td>DDR5-5200</td>
</tr>
</tbody>
</table>

Processor Sockets
1x sTR5

Operating System

Operating System**
- Windows® 11 Pro
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- No preload operating system

Graphics

Discrete Graphics Support**
Supports up to three NVIDIA® RTX 6000 Ada Generation

Discrete Graphics Offering***

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>Form Factor</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® T1000 8GB</td>
<td>8GB GDDR6</td>
<td>50W</td>
<td>4x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A2000 12GB</td>
<td>12GB GDDR6</td>
<td>70W</td>
<td>4x miniDP 1.4a</td>
<td>Dual slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A4000</td>
<td>16GB GDDR6 with ECC</td>
<td>140W</td>
<td>4x DP 1.4a</td>
<td>Single slot</td>
<td>None</td>
</tr>
<tr>
<td>NVIDIA® RTX A6000</td>
<td>48GB GDDR6 with ECC</td>
<td>300W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>NVLink</td>
</tr>
<tr>
<td>NVIDIA® RTX 4000 Ada Generation</td>
<td>20GB GDDR6 with ECC</td>
<td>130W</td>
<td>4x DP 1.4a</td>
<td>Single slot</td>
<td>-</td>
</tr>
<tr>
<td>NVIDIA® RTX 4500 Ada Generation</td>
<td>24GB GDDR6 with ECC</td>
<td>210W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>-</td>
</tr>
<tr>
<td>NVIDIA® RTX 5000 Ada Generation</td>
<td>32GB GDDR6 with ECC</td>
<td>250W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>-</td>
</tr>
<tr>
<td>NVIDIA® RTX 6000 Ada Generation</td>
<td>48GB GDDR6 with ECC</td>
<td>300W</td>
<td>4x DP 1.4a</td>
<td>Dual slot</td>
<td>-</td>
</tr>
<tr>
<td>AMD Radeon™ PRO W6400</td>
<td>4GB GDDR6</td>
<td>50W</td>
<td>2x DP 1.4</td>
<td>Single slot</td>
<td>-</td>
</tr>
<tr>
<td>AMD Radeon™ PRO W7600</td>
<td>8GB GDDR6</td>
<td>130W</td>
<td>4x DP 2.1</td>
<td>Single slot</td>
<td>-</td>
</tr>
<tr>
<td>AMD Radeon™ PRO W7900</td>
<td>48GB GDDR6 with ECC</td>
<td>295W</td>
<td>3x DP 2.1, 1x miniDP 2.1</td>
<td>Triple slot</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
Monitor Support

Monitor Support
Supports multiple displays via discrete graphics, the number of maximum monitors supported depends on the graphic card in use.

Chipset

Chipset
AMD WRX90 chipset

Memory

Max Memory\(^1\)
Up to 1TB (8x 128GB 3DS-RDIMM)

Memory Type**
- DDR5-4800 3DS-RDIMM ECC
- DDR5-4800 RDIMM ECC

Memory Slots
8 DDR5 DIMM slots, 8 channels capable

Memory Protection
ECC

Notes:
[1] The max memory is based on the test results with current Lenovo\(^\circ\) memory offerings.

Storage

Storage Support\(^2\)
Up to 7 drives (HDD maximum, 3x 3.5" HDD + 4x M.2 SSD); or 8 drives (M.2 SSD maximum, 8x M.2 SSD); or 6 drives (U.3 SSD maximum, 2x U.3 SSD + 4x M.2 SSD)
• 3.5" HDD up to 12TB each
• M.2 SSD up to 4TB each
• U.3 SSD up to 15.36TB each

Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
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<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>2TB / 6TB / 12TB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD for Onboard / HDD Bay / Front access M.2</td>
<td>PCIe(^<em>) NVMe(^</em>), PCIe(^*) 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
<tr>
<td>U.3 2.5&quot; 15mm SSD for HDD Bay</td>
<td>PCIe(^<em>) NVMe(^</em>), PCIe(^*) 4.0</td>
<td>-</td>
<td>15.36TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

Storage Controllers

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated SATA controller</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>RAID 0/1/5</td>
<td>None</td>
</tr>
<tr>
<td>Integrated NVMe(^*) controller</td>
<td>Standard</td>
<td>PCIe(^<em>) NVMe(^</em>)</td>
<td>RAID 0/1/5/10</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:
[1] The storage capacity supported is based on the test results with current Lenovo\(^\circ\) storage offerings.
[2] For detailed storage bays information and how to upgrade optional drives for ThinkStation\(^\circ\) products, please visit ThinkStation\(^\circ\) Storage Upgrade Guide.
• 15-in-1 card reader
• No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC897-Q codec
Speakers
Single speaker

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000W</td>
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<tr>
<td>1400W</td>
<td>Fixed</td>
<td>92%</td>
<td>Autosensing, 80 PLUS Platinum qualified</td>
</tr>
</tbody>
</table>

DESIGN

Mechanical

Form Factor
Tower (39L) or 4U rack, optional rack rail kit needed

Dimensions (WxDxH)\(^[1]\)  
175 x 508 x 434.4 mm (6.9 x 20 x 17.1 inches, with feet)

Weight\(^[2]\)
22.7 kg (50.0 lbs, maximum configuration)

Bays
Three internal disk bays plus one front access M.2 bay:
• Bay 1 supports one 3.5" HDD, standard, optional support for two M.2 SSD or one U.3 SSD
• Bay 2 supports one 3.5" HDD, standard, optional support for two M.2 SSD or one U.3 SSD
• Bay 3 supports one 3.5" HDD, optional
• Front access M.2 bay supports one M.2 SSD, optional

M.2 Slots
Up to 8x M.2 SSD slots:
• 3 via onboard slots, PCIe\(^*\) 4.0 x4
• 4 via HDD bay, PCIe\(^*\) 4.0 x4
• 1 via front access M.2 bay, PCIe\(^*\) 4.0 x4\(^[3]\)

Expansion Slots
Supports 7 PCIe\(^*\) slots with 6x PCIe\(^*\) 5.0 slots and 1x PCIe\(^*\) 4.0 slot.
• Slot 1: PCIe\(^*\) 5.0 x16, full height, full length, 75W, double-width
• Slot 2: PCIe\(^*\) 5.0 x8, full height, full length, 25W
• Slot 3: PCIe\(^*\) 5.0 x16, full height, full length, 75W, double-width
• Slot 4: PCIe\(^*\) 5.0 x8, full height, full length, 25W
• Slot 5: PCIe\(^*\) 5.0 x16, full height, full length, 75W, double-width
• Slot 6: PCIe\(^*\) 5.0 x16, full height, full length, 75W
• Slot 7: PCIe\(^*\) 4.0 x8, full height, half length, 25W

Notes:
\(^[1]\) The system dimensions may vary depending on configurations.
\(^[2]\) The system weight is approximate and based on results in Lenovo\(^*\) lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
\(^[3]\) Onboard M.2 slots for ThinkStation\(^*\) P8 are PCIe\(^*\) 5.0 compatible, and currently Lenovo\(^*\) provides M.2 PCIe\(^*\) 4.0 SSD.

CONNECTIVITY

Network
Onboard Ethernet
Two Ethernet, GbE + 10GbE, Realtek® RTL8111EP and Marvell AQtion AQC-113, 2x RJ-45, supports Wake-on-LAN

Optional Ethernet
One additional Ethernet adapter support, up to four additional 25GbE ports
- Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
- Gigabit Ethernet, Intel® I350-T4, 4x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1
- 10 Gigabit Ethernet, Intel® X550-T2, 2x RJ-45, PCIe® x4
- 25 Gigabit Ethernet, NVIDIA® Mellanox ConnectX-6, 2x SFP28, PCIe® x8

WLAN + Bluetooth®
- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[1]
- No WLAN and Bluetooth®

Notes:
[1] Wi-Fi® 6E full features might be limited by country-level restrictions.
Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.
6GHz Wi-Fi® 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi® 6E, and the regional regulatory certifications & spectrum allocation.
Bluetooth® 5.3 operation requires Windows® 11. For more information please visit General Bluetooth® Support Information on Microsoft®.

Ports[1]
Front Ports
1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
- 2x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2), one Always On

Rear Ports[2]
- 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), data transfer only
- 2x USB-A (Hi-Speed USB / USB 2.0)
- 3x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x Ethernet (10GbE RJ-45)
- 1x Ethernet (GbE RJ-45)
- 1x line-in (3.5mm)
- 1x line-out (3.5mm)

Optional Rear Ports
- 1x serial (via cable)
- 2x PS/2 (via cable)

Notes:
[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower than the theoretical speed.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security
Security Chip
Discrete TPM 2.0, TCG certified

Physical Locks
- (Optional) Access panel lock kit with common key
- (Optional) Access panel lock kit with unique key
- Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch
BIOS Security
- Administrator password
- Power-on password
- Self-healing BIOS
- UEFI Secure Boot

MANAGEABILITY

System Management
AMD PRO Manageability

Diagnostic
- ThinkStation® Diagnostics
- Front diagnostic panel with QR code

SERVICE

Warranty
- Base Warranty**
  - 1-year limited onsite service
  - 2-year limited onsite service
  - 3-year limited onsite service
  - No base warranty

Notes:
[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS

Operating Environment
- Temperature
  - Operating: 10°C (50°F) to 35°C (95°F)
  - Storage: -40°C (-40°F) to 60°C (140°F)
- Altitude
  - Operating: 0 m (0 ft) to 3048 m (10,000 ft)
  - Storage: 0 m (0 ft) to 12192 m (40,000 ft)
- Relative Humidity
  - Operating: 20% to 80%
  - Storage: 10% to 90%

CERTIFICATIONS

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered
- (Optional) TCO Certified 9.0
- GREENGUARD®
- RoHS compliant

Notes:
The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

ISV Certifications
ISV Certifications
Please visit ISV certifications for Lenovo® Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.

• Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
### OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power button</td>
</tr>
<tr>
<td>2.</td>
<td>2x USB-A (USB 10Gbps) *</td>
</tr>
<tr>
<td>3.</td>
<td>2x USB-C (USB 10Gbps), data transfer only *</td>
</tr>
<tr>
<td>4.</td>
<td>Headphone (3.5mm)</td>
</tr>
<tr>
<td>5.</td>
<td>Front storage bays (HDD or M.2 SSD) *</td>
</tr>
<tr>
<td>6.</td>
<td>Lock for front storage bays *</td>
</tr>
<tr>
<td>7.</td>
<td>Power supply 2 *</td>
</tr>
<tr>
<td>8.</td>
<td>Power supply 1 or rear storage bay *</td>
</tr>
<tr>
<td>9.</td>
<td>PCIe slots 1-5 (top to bottom, by CPU 2) *</td>
</tr>
<tr>
<td>10.</td>
<td>PCIe slots 6-9 (top to bottom, by CPU 1)</td>
</tr>
<tr>
<td>11.</td>
<td>2x Audio ports (line-out and line-in)</td>
</tr>
<tr>
<td>12.</td>
<td>4x USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>13.</td>
<td>2x USB-A (Hi-Speed USB)</td>
</tr>
<tr>
<td>14.</td>
<td>USB-C (USB 20Gbps / USB 3.2 Gen 2x2)</td>
</tr>
<tr>
<td>15.</td>
<td>Serial (9-pin) *</td>
</tr>
<tr>
<td>16.</td>
<td>Ethernet (GbE RJ-45)</td>
</tr>
<tr>
<td>17.</td>
<td>Ethernet (10GbE RJ-45)</td>
</tr>
</tbody>
</table>

**Notes:**
- Items with * are only available on selected models
- Expansion cards are optional. More ports are available through the optional expansion cards
PERFORMANCE

Processor

Processor Family
Up to two 350W 4th Gen Intel® Xeon® Scalable family processors, Silver, Gold, or Platinum. Supports up to 120 cores (60 cores per processor), up to 4.1GHz

Processor**[1]

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xeon Silver 4410T</td>
<td>10</td>
<td>20</td>
<td>2.7GHz</td>
<td>4.0GHz</td>
<td>26.25MB</td>
<td>DDR5-4000 1DPC and 2DPC</td>
</tr>
<tr>
<td>Xeon Silver 4410Y</td>
<td>12</td>
<td>24</td>
<td>2.0GHz</td>
<td>3.9GHz</td>
<td>30MB</td>
<td>DDR5-4000 1DPC and 2DPC</td>
</tr>
<tr>
<td>Xeon Silver 4416+</td>
<td>20</td>
<td>40</td>
<td>2.0GHz</td>
<td>3.9GHz</td>
<td>37.5MB</td>
<td>DDR5-4000 1DPC and 2DPC</td>
</tr>
<tr>
<td>Xeon Gold 6444Y</td>
<td>16</td>
<td>32</td>
<td>3.6GHz</td>
<td>4.0GHz</td>
<td>45MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
<tr>
<td>Xeon Gold 5416S</td>
<td>16</td>
<td>32</td>
<td>2.0GHz</td>
<td>4.0GHz</td>
<td>30MB</td>
<td>DDR5-4400 1DPC and 2DPC</td>
</tr>
<tr>
<td>Xeon Gold 5418Y</td>
<td>24</td>
<td>48</td>
<td>2.0GHz</td>
<td>3.8GHz</td>
<td>45MB</td>
<td>DDR5-4400 1DPC and 2DPC</td>
</tr>
<tr>
<td>Xeon Gold 5420+</td>
<td>28</td>
<td>56</td>
<td>2.0GHz</td>
<td>4.1GHz</td>
<td>52.5MB</td>
<td>DDR5-4400 1DPC and 2DPC</td>
</tr>
<tr>
<td>Xeon Gold 6430</td>
<td>32</td>
<td>64</td>
<td>2.1GHz</td>
<td>3.4GHz</td>
<td>60MB</td>
<td>DDR5-4400 1DPC and 2DPC</td>
</tr>
<tr>
<td>Xeon Gold 6438Y+</td>
<td>32</td>
<td>64</td>
<td>2.0GHz</td>
<td>4.0GHz</td>
<td>60MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
<tr>
<td>Xeon Gold 6442Y</td>
<td>24</td>
<td>48</td>
<td>2.6GHz</td>
<td>4.0GHz</td>
<td>60MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
<tr>
<td>Xeon Gold 5415+</td>
<td>8</td>
<td>16</td>
<td>2.9GHz</td>
<td>4.1GHz</td>
<td>22.5MB</td>
<td>DDR5-4400 1DPC and 2DPC</td>
</tr>
<tr>
<td>Xeon Gold 6416H</td>
<td>18</td>
<td>36</td>
<td>2.2GHz</td>
<td>4.2GHz</td>
<td>45MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
<tr>
<td>Xeon Gold 6418H</td>
<td>24</td>
<td>48</td>
<td>2.1GHz</td>
<td>4.0GHz</td>
<td>60MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
<tr>
<td>Xeon Platinum 8452Y</td>
<td>36</td>
<td>72</td>
<td>2.0GHz</td>
<td>3.2GHz</td>
<td>67.5MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
<tr>
<td>Xeon Platinum 8460Y+</td>
<td>40</td>
<td>80</td>
<td>2.0GHz</td>
<td>3.7GHz</td>
<td>105MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
<tr>
<td>Xeon Platinum 8468</td>
<td>48</td>
<td>96</td>
<td>2.1GHz</td>
<td>3.8GHz</td>
<td>105MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
<tr>
<td>Xeon Platinum 8470</td>
<td>52</td>
<td>104</td>
<td>2.0GHz</td>
<td>3.8GHz</td>
<td>105MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
<tr>
<td>Xeon Platinum 8480+</td>
<td>56</td>
<td>112</td>
<td>2.0GHz</td>
<td>3.8GHz</td>
<td>105MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
<tr>
<td>Xeon Platinum 8490H</td>
<td>60</td>
<td>120</td>
<td>1.9GHz</td>
<td>3.5GHz</td>
<td>112.5MB</td>
<td>DDR5-4800 1DPC, DDR5-4400 2DPC</td>
</tr>
</tbody>
</table>

Processor Sockets
2x FCLGA4677

Notes:
[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

Operating System

Operating System**
- Windows® 11 Pro for Workstations
- Windows® 11 DG Windows® 10 Pro 64 for Workstations
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

Graphics

Discrete Graphics Support[3]
Supports up to four NVIDIA® RTX 6000 Ada Generation

Discrete Graphics Offering

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Memory</th>
<th>Power</th>
<th>Connector</th>
<th>Form Factor</th>
<th>SLI / NVLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® T400 4GB</td>
<td>4GB GDDR6</td>
<td>40W</td>
<td>3x miniDP 1.4</td>
<td>Single slot</td>
<td>None</td>
</tr>
</tbody>
</table>
## NVIDIA® T1000 8GB
- 8GB GDDR6
- 50W
- 4x miniDP 1.4
- Single slot
- None

## NVIDIA® RTX A2000 12GB
- 12GB GDDR6
- 70W
- 4x miniDP 1.4a
- Dual slot
- None

## NVIDIA® RTX A4000
- 16GB GDDR6 with ECC
- 140W
- 4x DP 1.4a
- Single slot
- None

## NVIDIA® RTX A4500
- 20GB GDDR6 with ECC
- 200W
- 4x DP 1.4
- Dual slot
- NVLink

## NVIDIA® RTX A5000
- 24GB GDDR6 with ECC
- 230W
- 4x DP 1.4a
- Dual slot
- None

## NVIDIA® RTX A5500
- 24GB GDDR6 with ECC
- 300W
- 4x DP 1.4a
- Dual slot
- NVLink

## NVIDIA® RTX A6000\[2\]
- 48GB GDDR6 with ECC
- 300W
- 4x DP 1.4a
- Dual slot
- NVLink

## NVIDIA® RTX 4000 Ada Generation
- 20GB GDDR6 with ECC
- 130W
- 4x DP 1.4a
- Single slot
- -

## NVIDIA® RTX 4500 Ada Generation
- 24GB GDDR6 with ECC
- 210W
- 4x DP 1.4a
- Dual slot
- -

## NVIDIA® RTX 5000 Ada Generation
- 32GB GDDR6 with ECC
- 250W
- 4x DP 1.4a
- Dual slot
- -

## NVIDIA® RTX 6000 Ada Generation[3]
- 48GB GDDR6 with ECC
- 300W
- 4x DP 1.4a
- Dual slot
- -

### Notes:

1. Discrete graphics support may vary by configurations such as processor selection or power supply wattage.
2. Available in specific countries and regions.

### Monitor Support

#### Monitor Support
Supports multiple displays via discrete graphics, the number of maximum monitors supported depends on the graphic card in use.

### Chipset

#### Chipset
Intel® C741 chipset

### Memory

#### Max Memory[1]
Up to 2TB (16x 128GB 3DS-RDIMMs and dual processor)

#### Memory Type*[2]
- DDR5-4800 3DS-RDIMM ECC
- DDR5-4800 RDIMM ECC
- DDR5-5600 RDIMM ECC

#### Memory Slots
16 DDR5 DIMM slots, 16 channels capable (8 DIMM slots with 8 channels per processor)

#### Memory Protection
ECC

### Storage

#### Storage Support*[2]
Up to seven drives (4x 3.5" SATA HDD + 3x M.2 SSD) or 9 drives (2x 3.5" SATA HDD + 7x M.2 SSD)
- 3.5" HDD supports hot-swap
- 3.5" HDD up to 12TB each
- M.2 SSD up to 4TB each

#### Storage Type***

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
<td>2TB / 6TB / 12TB</td>
<td>-</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe® 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB / 4TB</td>
<td>Opal 2.0</td>
</tr>
</tbody>
</table>

### Notes:

1. The max memory is based on the test results with current Lenovo® memory offerings.
2. System comes with DDR5-4800 memory and some configurations will run as DDR5-4400 or DDR5-4000 due to platform limitations.
**Storage Controllers**

<table>
<thead>
<tr>
<th>Storage Controller</th>
<th>Type</th>
<th>Interface</th>
<th>RAID</th>
<th>Cache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onboard Intel® RSTe SATA RAID</td>
<td>Standard</td>
<td>SATA 6.0Gb/s</td>
<td>0/1/10/5</td>
<td>None</td>
</tr>
<tr>
<td>Integrated NVMe® controller</td>
<td>Standard</td>
<td>PCIe® NVMe®</td>
<td>-</td>
<td>None</td>
</tr>
<tr>
<td>NVMe® Basic</td>
<td>Optional</td>
<td>PCIe® NVMe®</td>
<td>0/1/10</td>
<td>None</td>
</tr>
<tr>
<td>NVMe® Premium</td>
<td>Optional</td>
<td>PCIe® NVMe®</td>
<td>0/1/10/5</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

[2] For detailed storage bays information and how to upgrade optional drives for ThinkStation® products, please visit [ThinkStation® Storage Upgrade Guide](#).

**Removable Storage**

Card Reader

No card reader

**Multi-Media**

Audio Chip

High Definition (HD) Audio, Realtek® ALC897-Q codec

Speakers

Single speaker, 1.5W x1

**Power Supply**

<table>
<thead>
<tr>
<th>Power Supply Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot-swap</td>
<td>92%</td>
<td>Up to two power supplies, autosensing, 80 PLUS Platinum qualified, team or redundant mode support with two power supplies, up to 2350W configuration under team mode</td>
</tr>
</tbody>
</table>

Notes:

[1] Countries with input voltage under 111V, output power limited to 1500 watts.

**DESIGN**

**Mechanical**

Form Factor

Tower (54L) or 5U rack, optional rack rail kit needed

Dimensions (WxDxH)

220 x 575 x 440.4mm (8.7 x 22.6 x 17.3 inches, with feet)

Weight

35.6 kg (78.5 lbs, maximum configuration)

Bays

Three front disk bays and one rear disk bay:

- Front bay 1 supports one 3.5" hot-swap HDD, standard
- Front bay 2 supports one 3.5" hot-swap HDD, standard; or two M.2 SSD via optional front access M.2 bay
- Front bay 3 supports one 3.5" hot-swap HDD, standard; or two M.2 SSD via optional front access M.2 bay
- Rear bay supports one 3.5" hot-swap HDD, optional, occupies 1st PSU cage

M.2 Slots

Up to 11x M.2 SSD:

- 3 via onboard slots, PCIe® 4.0 x4
- 4 via front access M.2 bay, PCIe® 4.0 x4
- 4 via Quad M.2 to PCIe® Gen 4 (4x M.2 PCIe® 4.0 x4) adapter

Expansion Slots

Supports up to 9 PCIe® slots with 4 PCIe® 5.0 slots and 5 PCIe® 4.0 slots, slots 1-5 require 2nd CPU installed.
• Slot 1: PCIe® 4.0 x16, full height, full length, 75W, by CPU 2
• Slot 2: PCIe® 4.0 x16, full height, full length, 75W, by CPU 2
• Slot 3: PCIe® 5.0 x16, full height, full length, 75W, by CPU 2
• Slot 4: PCIe® 5.0 x16, full height, full length, 75W, by CPU 2
• Slot 5: PCIe® 4.0 x8, full height, full length, 25W, by CPU 2
• Slot 6: PCIe® 5.0 x16, full height, full length, 75W, by CPU 1
• Slot 7: PCIe® 4.0 x16, full height, full length, 75W, by CPU 1
• Slot 8: PCIe® 5.0 x16, full height, full length, 75W, by CPU 1
• Slot 9: PCIe® 4.0 x16, full height, full length, 75W, by CPU 1

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
[3] M.2 slots on Quad M.2 to PCIe® Gen 5 adapter are PCIe® 5.0 compatible, and currently Lenovo® provides M.2 PCIe® 4.0 SSD.

CONNECTIVITY

Network

Onboard Ethernet
Two Ethernet, GbE + 10GbE, Intel® Ethernet Connection I219-LM and Marvell AQtion AQC-113C, 2x RJ-45, supports Wake-on-LAN

Optional Ethernet
Two additional Ethernet adapters support, up to four additional 25GbE ports
• Gigabit Ethernet, Intel® I210-T1, 1x RJ-45, PCIe® x1
• Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
• Gigabit Ethernet, Intel® I350-T4, 4x RJ-45, PCIe® x4
• Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
• Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1
• Gigabit Ethernet, Realtek® RTL8168H, 1x RJ-45, PCIe® x1
• 25 Gigabit Ethernet, NVIDIA® Mellanox ConnectX-6, 2x SFP28, PCIe® x8

WLAN + Bluetooth®
• Intel® Wi-Fi® 6E AX210, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), Intel® vPro® technology support[1]
• No WLAN and Bluetooth®

Notes:
[1] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

Ports[1]

Front Ports
1x headphone / microphone combo jack (3.5mm)

Optional Front Ports
• 2x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
• 2x USB-A (USB 10Gbps / USB 3.2 Gen 2), one Always On

Rear Ports[2]
• 1x USB-C® (USB 20Gbps / USB 3.2 Gen 2x2), data transfer only
• 2x USB-A (Hi-Speed USB / USB 2.0)
• 4x USB-A (USB 5Gbps / USB 3.2 Gen 1)
• 1x Ethernet (10GbE RJ-45)
• 1x Ethernet (GbE RJ-45)
• 1x line-in (3.5mm)
• 1x line-out (3.5mm)

Optional Rear Ports
• 1x Thunderbolt™ 4 (via additional PCIe® adapter)
• 1x serial
Notes:

[1] The transfer speed of the ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes, and other factors related to system configuration and your operating environment, will be slower than the theoretical speed.

[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

Security Chip
Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks
• (Optional) Access panel lock kit with common key
• (Optional) Front storage bay lock with common key
• Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch
Chassis intrusion switch

BIOS Security
• Administrator password
• Power-on password
• Self-healing BIOS
• UEFI Secure Boot

MANAGEABILITY

System Management

System Management
• (Optional) Aspeed AST2600 graphics / management processor, IPMI 2.0-compliant baseboard management controller (BMC)
• Intel® vPro® Enterprise with Intel® AMT 16

Notes:

[1] Intel® vPro® offers a superset of DASH's defined capabilities.

Diagnostic

Diagnostic
• ThinkStation® Diagnostics
• Front Diagnostic Panel with QR code

SERVICE

Warranty

Base Warranty
• 1-year limited onsite service
• 2-year limited onsite service
• 3-year limited onsite service
• No base warranty

Notes:

[1] The warranty upgrades may be bundled with some models, please check the “Included upgrade” column in the specific model’s configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

OPERATING REQUIREMENTS
Operating Environment

Temperature
- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Altitude
- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Relative Humidity
- Operating: 20% to 80%
- Storage: 10% to 90%

CERTIFICATIONS

Green Certifications
- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered
- RoHS compliant

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

ISV Certifications

Please visit ISV certifications for Lenovo® Workstations

Feature with ** means that only one offering listed under the feature is configured on selected models.

Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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**Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.

**Lenovo Services:**
- **Carry-in or Mail-in Service:** Parts and labor repair coverage where the customer is responsible for shipping (including packaging) or delivery to authorized warranty provider or repair center.
- **Depot or Courier Service:** Parts and labor repair coverage where shipping (including packaging) or delivery to the repair center is paid for by Lenovo.
- **Expedited Depot:** Parts and labor coverage with expedited turnaround. Shipping (including packaging) or delivery to the repair center is paid for by Lenovo.
- **Onsite / In-home Service:** Parts and labor repair coverage where labor is provided onsite at your place of business. If Lenovo determines your product problem is covered by the product warranty and cannot be resolved over the telephone, a technician will be dispatched to arrive onsite, typically the next day.


**Included software:** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

**Battery life:** Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.


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Lenovo 1009 Think Place Morrisville, NC 27560 U.S.A.
<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover</td>
<td>1</td>
</tr>
<tr>
<td>Contents</td>
<td>2</td>
</tr>
<tr>
<td>Summary Of Change</td>
<td>4</td>
</tr>
<tr>
<td><strong>20 Inch - 23 Inch</strong></td>
<td></td>
</tr>
<tr>
<td>ThinkVision E20-1b</td>
<td>5</td>
</tr>
<tr>
<td>ThinkVision E20-30</td>
<td>10</td>
</tr>
<tr>
<td>ThinkVision E22-28</td>
<td>15</td>
</tr>
<tr>
<td>ThinkVision E22-30</td>
<td>20</td>
</tr>
<tr>
<td>ThinkVision S22e-18</td>
<td>26</td>
</tr>
<tr>
<td>ThinkVision S22e-20</td>
<td>27</td>
</tr>
<tr>
<td>ThinkVision S22i-30</td>
<td>33</td>
</tr>
<tr>
<td>ThinkVision T22i-20</td>
<td>39</td>
</tr>
<tr>
<td>ThinkVision T22i-30</td>
<td>45</td>
</tr>
<tr>
<td>ThinkVision T22v-20</td>
<td>51</td>
</tr>
<tr>
<td>ThinkVision T23d-10</td>
<td>57</td>
</tr>
<tr>
<td>ThinkVision T23i-30</td>
<td>63</td>
</tr>
<tr>
<td><strong>24 Inch - 26 Inch</strong></td>
<td></td>
</tr>
<tr>
<td>ThinkVision E24-27</td>
<td>69</td>
</tr>
<tr>
<td>ThinkVision E24-28</td>
<td>70</td>
</tr>
<tr>
<td>ThinkVision E24-29</td>
<td>76</td>
</tr>
<tr>
<td>ThinkVision E24-30</td>
<td>82</td>
</tr>
<tr>
<td>ThinkVision E24q-20</td>
<td>88</td>
</tr>
<tr>
<td>ThinkVision E24q-30</td>
<td>94</td>
</tr>
<tr>
<td>ThinkVision P24h-2L</td>
<td>100</td>
</tr>
<tr>
<td>ThinkVision P24h-30</td>
<td>106</td>
</tr>
<tr>
<td>ThinkVision P24q-20</td>
<td>112</td>
</tr>
<tr>
<td>ThinkVision P24q-30</td>
<td>118</td>
</tr>
<tr>
<td>ThinkVision P25i-30</td>
<td>124</td>
</tr>
<tr>
<td>ThinkVision S24e-03</td>
<td>130</td>
</tr>
<tr>
<td>ThinkVision S24e-20</td>
<td>131</td>
</tr>
<tr>
<td>ThinkVision S24i-30</td>
<td>137</td>
</tr>
<tr>
<td>ThinkVision S25e-30</td>
<td>143</td>
</tr>
<tr>
<td>ThinkVision T24d-10</td>
<td>149</td>
</tr>
<tr>
<td>ThinkVision T24i-2L</td>
<td>154</td>
</tr>
<tr>
<td>ThinkVision T24i-30</td>
<td>160</td>
</tr>
<tr>
<td>ThinkVision T24m-20</td>
<td>166</td>
</tr>
<tr>
<td>ThinkVision T24m-29</td>
<td>172</td>
</tr>
<tr>
<td>ThinkVision T24mv-30</td>
<td>178</td>
</tr>
<tr>
<td>ThinkVision T24t-20</td>
<td>184</td>
</tr>
<tr>
<td>ThinkVision T24v-30</td>
<td>190</td>
</tr>
<tr>
<td><strong>27 Inch - 30 Inch</strong></td>
<td></td>
</tr>
<tr>
<td>ThinkVision 27 3D</td>
<td>196</td>
</tr>
<tr>
<td>ThinkVision Creator Extreme</td>
<td>203</td>
</tr>
<tr>
<td>ThinkVision E27q-20</td>
<td>209</td>
</tr>
<tr>
<td>ThinkVision E28u-20</td>
<td>215</td>
</tr>
<tr>
<td>ThinkVision E29w-20</td>
<td>221</td>
</tr>
<tr>
<td>ThinkVision P27h-20</td>
<td>227</td>
</tr>
<tr>
<td>ThinkVision P27h-28</td>
<td>233</td>
</tr>
<tr>
<td>ThinkVision P27h-30</td>
<td>239</td>
</tr>
<tr>
<td>ThinkVision P27pz-30</td>
<td>245</td>
</tr>
<tr>
<td>ThinkVision P27q-30</td>
<td>251</td>
</tr>
</tbody>
</table>
Contents

ThinkVision P27u-20 257
ThinkVision S27e-20 263
ThinkVision S27i-30 268
ThinkVision T27h-2L 274
ThinkVision T27h-30 280
ThinkVision T27hv-20 286
ThinkVision T27hv-30 292
ThinkVision T27i-30 298
ThinkVision T27i-37 304
ThinkVision T27p-30 310
ThinkVision T27q-20 316

Above 30 Inch 321
ThinkVision P32p-20 321
ThinkVision P32p-30 327
ThinkVision P32pz-30 333
ThinkVision P34w-20 339
ThinkVision P40w-20 345
ThinkVision P49w-30 351
ThinkVision T32h-30 357
ThinkVision T32p-30 363
ThinkVision T34w-20 369
ThinkVision T34w-30 375
ThinkVision T65 381
ThinkVision T75 387
ThinkVision T86 393

Under 20 Inch 399
ThinkVision M14 399
ThinkVision M14d 404
ThinkVision M14t 410
ThinkVision M14t Gen 2 416
ThinkVision M15 422

Legal Information 427
Summary of Changes

This section describes the technical changes made in this edition. This edition might also include minor corrections and editorial changes which are not identified.

June 5, 2024 - Version 631

► New product(s)
ThinkVision M14t Gen 2

► Spec updated
None

Withdrawals in this update

► Withdrawn product(s)
None
OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power connector</td>
</tr>
<tr>
<td>2</td>
<td>HDMI 1.4</td>
</tr>
<tr>
<td>3</td>
<td>VGA</td>
</tr>
</tbody>
</table>
**PERFORMANCE**

**Panel**

Twisted Nematic (TN)

**Backlight**

WLED

**Display Size**

19.5 inches

**Max View Area**

WxH: 432.0 x 239.8 mm

**Resolution**

1600 x 900

**Aspect Ratio**

16:9

**Pixel Pitch**

0.270 x 0.266 mm

**Dot / Pixel Per Inch**

94 dpi

**Brightness**

250 cd/m²

**Contrast Ratio**

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

**View Angle (H / V)**

Horizontal: 178°, Vertical: 178°

**Response Time**

- Extreme Mode: 2 ms
- Normal Mode: 5 ms

**Refresh Rate**

60Hz

**Color Gamut**

72% NTSC

**Color Support**

16.7 Million

**Screen Surface Treatment**

Anti-glare

**Operating System**

Operating System

- Windows® 11 Support
- Windows® 10 Support

**Power Supply**

Power Consumption

- Typical / Max: 12W / 13W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Internal Power Supply

**Voltage Required**

AC 100 to 240 V (47-63Hz)

**DESIGN**
Mechanical

ThinkCentre® M Series Support

- ThinkCentre® M Series Nano
  For supporting Nano devices, additional Nano VESA mount (PN: 4XF0V81630) is needed (sold separately).
- ThinkCentre® M Series Tiny Support
  By Tiny VESA Mount II (PN: 4XF0N03161)

Bezel Width

- Side: 15.8 mm
- Top / Bottom: 17.4mm / 25.1mm

Case Color

Raven black

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>464.8 x 204.8 x 352.6 mm (18.30 x 8.06 x 13.88 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>464.8 x 204.8 x 352.6 mm (18.30 x 8.06 x 13.88 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>464.8 x 48.3 x 283.5 mm (18.30 x 1.90 x 11.16 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)

341 x 531 x 139 mm (13.43 x 20.91 x 5.47 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>2.5 kg (5.5 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>2.2 kg (4.8 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight

3.7 kg (8.2 lbs)

Mounting

Supports VESA mount 100mm

Stand

Supports -5° to +22° tilt

In the Box

- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide
- Warranty Booklet

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports[1]

Rear Ports

- 1x HDMI® 1.4
- 1x VGA

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

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## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power connector</td>
</tr>
<tr>
<td>2.</td>
<td>HDMI 1.4</td>
</tr>
<tr>
<td>3.</td>
<td>VGA</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
Twisted Nematic (TN)

Backlight
WLED

Display Size
19.5 inches

Max View Area
WxH: 432.96 x 238.05 mm

Resolution
1600 x 900

Aspect Ratio
16:9

Pixel Pitch
0.271 x 0.264 mm

Dot / Pixel Per Inch
94 dpi

Brightness
250 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 170°, Vertical: 160°

Response Time
- 2 ms (On)
- 5 ms (Off)

Refresh Rate
60Hz

Color Gamut
72% NTSC

Color Support
16.7 Million

Screen Surface Treatment
- Hard Coating (3H)
- Anti-glare

Operating System
Operating System
- Windows® 11 Support
- Windows® 10 Support
- Windows® 7 Support

Power Supply
Power Consumption
- Typical / Max: 12W / 15W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 9.84W
- Energy Star TEC: 31.82kWh
- Internal Power Supply
Voltage Required
AC 100 to 240 V (50-60Hz)

**DESIGN**

**Mechanical**

ThinkCentre® M Series Support
- ThinkCentre® M Series Nano
  - For supporting Nano devices, additional Nano VESA mount (PN: 4XF0V81630) is needed (sold separately).
- ThinkCentre® M Series Tiny Support
  - By Tiny VESA Mount II (PN: 4XF0N03161)

**Bezel Width**
- Side: 15.3mm
- Top / Bottom: 18.2mm / 26mm

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>464.8 x 180.4 x 352.6 mm (18.30 x 7.1 x 13.88 inches)</td>
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<td>Highest Position</td>
<td>464.8 x 180.4 x 352.6 mm (18.30 x 7.1 x 13.88 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>464.8 x 48.3 x 283.5 mm (18.30 x 1.90 x 11.16 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
560 x 125 x 350 mm (22.05 x 4.92 x 13.78 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>2.5 kg (5.5 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>2.2 kg (4.8 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
3.7 kg (8.2 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +22° tilt

**In the Box**
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Ports**

<table>
<thead>
<tr>
<th>Rear Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1x HDMI® 1.4</td>
</tr>
<tr>
<td>1x VGA</td>
</tr>
</tbody>
</table>

ThinkVision E20-30 - September 06 2023
Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Silver Registered[2]
- RoHS compliant
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light

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**OVERVIEW**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power connector</td>
</tr>
<tr>
<td>2.</td>
<td>DisplayPort</td>
</tr>
<tr>
<td>3.</td>
<td>HDMI</td>
</tr>
<tr>
<td>4.</td>
<td>VGA</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
In-Plane Switching (IPS)

Backlight
WLED

Display Size
21.5 inches

Max View Area
WxH: 476.06 x 267.79 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.248 x 0.248 mm

Dot / Pixel Per Inch
102 dpi

Brightness
250 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
72% NTSC

Color Support
16.7 Million

Screen Surface Treatment
Anti-glare

Operating System

Operating System
- Windows® 10 Support
- Windows® 7 Support

Multi-Media

Speakers
Integrated Speakers, 2x 1.5W

Power Supply

Power Consumption
- Typical / Max: 13W / 17W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.5W
- Energy Star Power On: 13W
• Energy Star TEC: 41kWh
• Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**[1]

ThinkCentre® M Series Tiny
For supporting Tiny devices, additional Sandwich Mounting Kit (PN: 4XH0N04098) are needed (sold separately).

**Bezel Width**
- Side: 15 mm
- Top / Bottom: 17.6mm / 20.8mm

**Case Color**
Raven black

**Dimensions (WxDxH)**[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>508.0 x 178.6 x 301.6 mm (20.00 x 7.03 x 11.87 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>508.0 x 178.6 x 443.4 mm (20.00 x 7.03 x 17.46 inches)</td>
</tr>
<tr>
<td>Unpacked Head Only</td>
<td>508.0 x 43.4 x 307.9 mm (20.00 x 1.71 x 12.12 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
610 x 131 x 405 mm (24.02 x 5.16 x 15.94 inches)

**Weight**[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>3.90 kg (8.60 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>2.20 kg (4.85 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
5.40 kg (11.9 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +22° tilt, left & right 360° swivel, -90° to +90° pivot, up to 155mm lift

**In the Box**
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

**Notes:**
[1] Tiny support model (62BA) only.
[2] The system dimensions may vary depending on configurations.
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Ports**[1]

**Rear Ports**
- 1x HDMI® 1.4
• 1x DisplayPort™ 1.2
• 1x VGA

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Silver Registered[2]
• RoHS compliant
• TCO Certified 8.0
• TCO edge 2.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Flicker Free

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OVERVIEW

1. HDMI 1.4
2. DisplayPort 1.2
3. VGA
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
21.5 inches

Max View Area
WxH: 476.1 x 267.8 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.248 x 0.248 mm

Dot / Pixel Per Inch
102 dpi

Brightness
250 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms
- Off Mode: 14 ms

Refresh Rate
75Hz

Color Gamut
Coverage Ratio: 99% sRGB

Color Support
16.7 Million

Color Depth
8-bit (6-bit+FRC)

Screen Surface Treatment
Anti-glare

Curvature
Flat Panel

Operating System

Operating System
- Windows® 11 Support
- Windows® 10 Support

Multi-Media

Speakers
Integrated Speakers, 2x 2W
Power Supply

Power Consumption
• Typical / Max: 11W / 27W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 9.2W
• Energy Star TEC: 29.1kWh
• Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Special Features
Natural Low Blue Light

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional Tiny VESA mount II (PN: 4XF0N03161) are needed (sold separately).
For supporting Nano devices, additional Nano VESA mount (PN: 4XF0V81630) are needed (sold separately).

Bezel Width
• Side: 1.8mm
• Top / Bottom: 1.8mm / 18.3mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)\(^{(3)}\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>488.9 x 178.6 x 315.3 mm (19.25 x 7.03 x 12.41 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>488.9 x 178.6 x 470.3 mm (19.25 x 7.03 x 18.52 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>488.9 x 46 x 295.1 mm (19.25 x 1.81 x 11.62 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
570 x 131 x 358 mm (22.44 x 5.16 x 14.09 inches)

Weight\(^{(2)}\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>4.3 kg (9.4 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>2.7 kg (6.0 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
6.1 kg (13.4 lbs)

Mounting
Supports VESA mount 100 x 100 mm

Stand
Supports -5° to +22° tilt, left & right 360° swivel, -90° to +90° pivot, up to 155mm lift

In the Box
• Monitor with Stand
• 1x HDMI® cable (1.8m)
• 1x Power cable (1.8m)
• 1x Quick Setup Guide
• 4x Screws

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
• 1x HDMI® 1.4
• 1x DisplayPort™ 1.2
• 1x VGA

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Supports 1920x1080@75Hz as specified in HDMI® 1.4

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™ (3 mm x 7 mm)

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• EU Energy Label (C-class)
• RoHS (2011/65/EU)
• TCO Certified 9.0
• TCO edge 2.0
• Volatile Organic Compound Certification

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications
Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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DISPLAY
Tamanho do Painel
21,5 polegadas
Dimensão da Tela (L x A)
476,06 x 267,79 mm
Tipo de Painel
3-side NearEdgeless, VA ou IPS
Luz de Fundo
WLED
Proporção da Tela
16:9
Resolução
1920 x 1080 mm
Distância entre pixels (A x V)
0.2480 x 0.2480 mm
Ponto/Pixel por polegada (DPI/PPPI)
102
Ângulo de Visão (H x V)
178°/ 178°
Tempo de Resposta (cinza a cinza)
4 ms (modo extremo)
6 ms (modo normal)
Taxa de Contraste (típica)
3000:1
Taxa de Contraste Dinâmico (típica)
3M:1
Cor Gamut NTSC (CIE 1931)
72% NTSC
Suporte de Cores (típico)
16.7M
Taxa de Atualização
60 Hz
Brilho (típico)
250 cd/m²
CONECTIVIDADE
Sinais de Entrada de Vídeo
1x VGA
1x HDMI 1.4
Saída de Áudio
Sim (3.5 mm)
MULTI-MEDIA
Suporte Opicional à Barra de Som
Sim
CARACTERÍSTICAS ESPECIALS
Antirreflexo
Sim
Suporte ao Cliente Tiny
Sim (pelo suporte VESA PN: 4XF0N03161)
Tecnologia Sync
FreeSync™
CONSUMO DE ENERGIA
Consumo de energia (Tipo/Máx.)
18W / 22W
MÉCANICO
Ângulo de Inclinação (frente/trás)
-5°/ 22°
Montagem VESA
Sim (100 x 100 mm)
Trava Kensington™
Sim
Gerenciamento de Cabos
Sim
Cor da Moldura
Raven Black
Largura da Moldura (laterais)
2.0 mm
Largura do Painel (superior/inferior)
2.0 / 21.2 mm
O QUE VEM NA CAIXA?
Monitor com Suporte
1x Cabo HDMI
1x Cabo de Energia
Guia de Configuração Rápida
CERTIFICAÇÕES
Classificação ENERGY STAR®
7.1
CCC
Sim
TCO
TCO 7.0/ TCO Nível 2.0
EPEAT™
Prata
ULE
Ouro
RoHS
Sim
Certificação Windows
Windows 7, Windows 10
Padrão de Eficiência Energética da China
Nível 2
Temperatura Operacional de Acordo com o Ambiente
0°C to 40°C
Baixa Luz Azul
Sim
DIMENSÕES ThinkVision® S22e-18 (LTPS)
Ângulo de inclinação (frente/trás):
-5° ~+22°
Tamanho embalado (D x A x L):
655 x 184 x 358 mm
Ajuste de altura:
Sim, até 130 mm
Tamanho desembalado com suporte posição mais baixa (D x A x L):
244,6 x 380,3 x 489,3 mm
Tamanho desembalado com suporte posição mais alta (D x A x L):
244,6 x 510,3 x 489,3 mm
Peso embalado:
6,35 KG
Peso desembalado:
4,68 KG
DIMENSÕES ThinkVision® S22e-19 (TILT)
Ângulo de Inclinação (frente/trás):
-5° ~+22°
Tamanho embalado (D x A x L):
555 x 134 x 348 mm
Ajuste de altura:
Não
Tamanho desembalado com suporte (D x A x L):
200 x 373.8 x 489.3 mm
Tamanho desembalado com suporte posição mais alta (D x A x L):
244,6 x 510,3 x 489,3 mm
Peso embalado:
4,07 KG
Peso desembalado:
2,75 KG


As especificações podem variar dependendo da região.
**OVERVIEW**

<table>
<thead>
<tr>
<th></th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>2</td>
<td>Power connector</td>
</tr>
<tr>
<td>3</td>
<td>HDMI 1.4</td>
</tr>
<tr>
<td>4</td>
<td>VGA</td>
</tr>
<tr>
<td>5</td>
<td>Audio line-out (3.5mm)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
Panel
3-side NearEdgeless, VA
Backlight
WLED
Display Size
21.5 inches
Max View Area
WxH: 476.06 x 267.79 mm
Resolution
1920 x 1080
Aspect Ratio
16:9
Pixel Pitch
0.248 x 0.248 mm
Dot / Pixel Per Inch
102 dpi
Brightness
250 cd/m²
Contrast Ratio
• Contrast Ratio: 3000:1
• Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
Refresh Rate
75Hz (HDMI® only)
Color Gamut
72% NTSC
Color Support
16.7 Million
Screen Surface Treatment
• Hard Coating (3H)
• Anti-glare

Operating System
Operating System
• Windows® 10 Support
• Windows® 7 Support

Multi-Media
Speakers
Optional Soundbar support (PN: 0A36190)

Power Supply
Power Consumption
• Typical / Max: 15W / 19W
• Sleep / Off mode: <0.3W
• Switch-off Mode: <0.3W
**ThinkVision S22e-20**

- Energy Star Power On: 15W
- Energy Star TEC: 43kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (47-63Hz)

**Special Features**

**Special Features**

AMD FreeSync™
AMD FreeSync™ technology only can work with AMD Radeon™ series graphics card.

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano

For supporting Tiny devices, additional Tiny VESA mount II (PN: 4XF0N03161) are needed (sold separately).

For supporting Nano devices, additional Nano VESA mount (PN: 4XF0V81630) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 21.2mm

**Cable Management**

Support

**Case Color**

Raven black

**Dimensions (WxDxH)[1]**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpacked Head Only</td>
<td>489.3 x 45.5 x 296.8 mm (19.26 x 1.79 x 11.69 inches)</td>
</tr>
<tr>
<td>Unpacked with Stand</td>
<td>489.3 x 173.1 x 405.1 mm (19.26 x 6.81 x 15.95 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

587 x 140 x 352 mm (23.11 x 5.51 x 13.86 inches)

**Weight[2]**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>3.14 kg (6.92 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>2.39 kg (5.27 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

4.68 kg (10.32 lbs)

**Mounting**

Supports VESA mount 100mm

**Stand**

supports -5° to +22° tilt

**In the Box**

- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
CONNECTIVITY

Ports

Rear Ports
- 1x HDMI® 1.4
- 1x VGA
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
- Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
- 3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered[2]
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light

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OVERVIEW

1. Control Buttons
2. Kensington Security Slot
3. AC Power-in
4. HDMI 1.4
5. VGA
6. Audio-out (3.5mm)
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
21.5 inches

Max View Area
WxH: 476.1 x 267.8 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.248 x 0.248 mm

Dot / Pixel Per Inch
102 dpi

Brightness
250 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
75Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Color Depth
8-bit (6-bit+FRC)

Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows* 11 Support
• Windows* 10 Support

Power Supply

Power Consumption
• Typical / Max: 15.1W / 21W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 13.1W
• Energy Star TEC: 42.6kWh
• Internal Power Supply
Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features
Natural Low Blue Light

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional VESA Mount II (PN 4XF0N03161) and sandwich mounting kit (PN: 4XH0N04098) are needed (sold separately). Additional flexible arm/stand are required to support sandwich mounting kit installation.

Bezel Width
- Thickness of Head: 6.9mm (Minimum)
- Side: 1.5 mm
- Top / Bottom: 1.5mm / 22mm

Buttons
- Menu joystick
- Power button
- Source Key

Cable Management

Support

Case Color
Raven black / storm grey

Dimensions (WxDxH)\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>488 x 182.9 x 408.6 mm (19.21 x 7.2 x 16.09 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>488 x 182.9 x 408.6 mm (19.21 x 7.2 x 16.09 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>488 x 41 x 297.3 mm (19.21 x 1.61 x 11.70 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
580 x 115 x 355 mm (22.83 x 4.53 x 13.98 inches)

Weight\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>3.1 kg (6.8 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>2.3 kg (5.1 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
4.6 kg (10.1 lbs)

Mounting
Supports VESA mount 100 x 100 mm

Stand
Supports -5° to +22° tilt

In the Box
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable
- 1x Screw
- Quick Setup Guide

Notes:
The system dimensions may vary depending on configurations.

The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x HDMI® 1.4
- 1x VGA
- 1x audio-out (3.5mm)

Notes:

The system dimensions may vary depending on configurations.
The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™ (2.5 mm x 6 mm)

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- EU Energy Label (E-class)
- TCO Certified 9.0
- TCO edge 2.0

Notes:

The system dimensions may vary depending on configurations.
The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

Other Certifications

Other Certifications
- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification 2.0
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Blue Light (Hardware Solution)
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**OVERVIEW**

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<table>
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power connector</td>
</tr>
<tr>
<td>2.</td>
<td>DP 1.2</td>
</tr>
<tr>
<td>3.</td>
<td>HDMI 1.4</td>
</tr>
<tr>
<td>4.</td>
<td>VGA</td>
</tr>
<tr>
<td>5.</td>
<td>USB-B 3.2 Gen 1</td>
</tr>
<tr>
<td>6.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>7.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>8.</td>
<td>Audio line-out (3.5mm)</td>
</tr>
<tr>
<td>9.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>10.</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel

3-side NearEdgeless, In-Plane Switching

Backlight

WLED

Display Size

21.5 inches

Max View Area

WxH: 476.06 x 267.79 mm

Resolution

1920 x 1080

Aspect Ratio

16:9

Pixel Pitch

0.2479 x 0.2479 mm

Dot / Pixel Per Inch

102 dpi

Brightness

250 cd/m²

Contrast Ratio

• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

Extreme Mode: 4 ms

Refresh Rate

60Hz

Color Gamut

72% NTSC

Color Support

16.7 Million

Screen Surface Treatment

Anti-glare

Operating System

Operating System

• Windows® 10 Support
• Windows® 7 Support

Multi-Media

Speakers

Optional Soundbar support (PN: 0A36190)

Power Supply

Power Consumption

• Typical / Max: 12W / 43W
• Sleep / Off mode: <0.3W
• Switch-off Mode: <0.3W
• Energy Star Power On: 10.4W
• Energy Star TEC: 32.97kWh
ThinkVision T22i-20

- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

**ThinkCentre® M Series Tiny**

For supporting Tiny devices, additional Tiny monitor kits are needed (sold separately).

**Bezel Width**

- Side: 1.8mm
- Top / Bottom: 1.8mm / 22mm

**Cable Management**

Support

**Case Color**

Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>489.3 x 205.0 x 396.0 mm (19.26 x 8.07 x 15.59 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>489.3 x 205.0 x 546.0 mm (19.26 x 8.07 x 21.50 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>489.3 x 48.5 x 297.4 mm (19.26 x 1.91 x 11.71 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

577 x 390 x 187 mm (22.72 x 15.35 x 7.36 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.47 kg (12.06 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.01 kg (6.64 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

7.20 kg (15.87 lbs)

**Mounting**

Supports VESA mount 100mm

**Stand**

Supports -5° to +35° tilt, left & right 45 swivel, -90° to +90° pivot, up to 150mm lift

**In the Box**

- Monitor with Stand
- 1x DP Cable (1.8m)
- 1x USB-A to USB-B Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Ports**

- Rear Ports
1x USB-B 3.2 Gen 1, USB upstream
4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
1x HDMI® 1.4
1x DisplayPort™ 1.2
1x VGA
1x Power Connector
1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]
Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Silver Registered[2]
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
TÜV Rheinland® Eye Comfort Certification

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you.

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# OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power connector</td>
<td>6</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>2</td>
<td>DP 1.2</td>
<td>7</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3</td>
<td>HDMI 1.4</td>
<td>8</td>
<td>Audio line-out (3.5mm)</td>
</tr>
<tr>
<td>4</td>
<td>VGA</td>
<td>9</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>5</td>
<td>USB-B 3.2 Gen 1</td>
<td>10</td>
<td>USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
21.5 inches

Max View Area
WxH: 476.1 x 267.8 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.248 x 0.248 mm

Dot / Pixel Per Inch
102 dpi

Brightness
250 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
• Off Mode: 14 ms

Refresh Rate
60Hz

Color Gamut
• Color Area Ratio: 108% sRGB
• Coverage Ratio: 99% sRGB

Color Support
16.7 Million

Color Depth
8-bit (6-bit+FRC)

Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support

Power Supply

Power Consumption
• Typical / Max: 15W / 48W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 11W
ThinkVision T22i-30

- Energy Star TEC: 34.41 kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems). Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 17.3mm

**Cable Management**

Support

**Case Color**

Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>498.3 x 194.7 x 332.4 mm (19.62 x 7.67 x 13.09 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>498.3 x 194.7 x 487.4 mm (19.62 x 7.67 x 19.19 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>489.3 x 46.4 x 294.7 mm (19.26 x 1.83 x 11.60 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

563 x 144 x 414 mm (22.17 x 5.67 x 16.30 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>4.9 kg (10.8 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.0 kg (6.61 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

6.8 kg (14.99 lbs)

**Mounting**

Supports VESA mount 100mm

**Stand**

Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

**In the Box**

- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x USB-A to USB-B Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide
- Warranty Booklet

**Notes:**
The system dimensions may vary depending on configurations.

The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x USB-B 3.2 Gen 1, USB upstream
- 4x USB 3.2 Gen 1, USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x VGA
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Power connector
2. DP 1.2
3. HDMI 1.4
4. VGA
5. USB-B 3.2 Gen 1
6. Audio-combo (3.5mm, In/Out)
7. USB 3.2 Gen 1
8. USB 3.2 Gen 1 (BC 1.2)
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching
Backlight
WLED
Display Size
21.5 inches
Max View Area
WxH: 476.06 x 267.79 mm
Resolution
1920 x 1080
Aspect Ratio
16:9
Pixel Pitch
0.2479 x 0.2479 mm
Dot / Pixel Per Inch
102 dpi
Brightness
250 cd/m²
Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms
Refresh Rate
60Hz
Color Gamut
72% NTSC
Color Support
16.7 Million
Screen Surface Treatment
Anti-glare

Operating System
Operating System
- Windows® 10 Support
- Windows® 7 Support

Multi-Media
Camera
FHD 1080p + IR camera
Microphone
Integrated microphone
Speakers
Integrated Speakers, 2x 3W

Power Supply
Power Consumption
• Typical / Max: 13W / 43W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 10.75W
• Energy Star TEC: 33.81kWh
• Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features
Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems). Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

DESIGN

Mechanical
ThinkCentre® M Series Support
ThinkCentre® M Series Tiny
For supporting Tiny devices, additional Tiny monitor kits are needed (sold separately).

Bezel Width
• Side: 1.8mm
• Top / Bottom: 1.8mm / 22mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)\(^{(1)}\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>489.3 x 205.0 x 413 mm (19.26 x 8.07 x 16.26 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>489.3 x 205.0 x 563.0 mm (19.26 x 8.07 x 22.17 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>489.3 x 48.3 x 314.4 mm (19.26 x 1.9 x 12.38 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
577 x 390 x 187 mm (22.72 x 15.35 x 7.36 inches)

Weight\(^{(2)}\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.49 kg (12.10 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.03 kg (6.68 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
7.22 kg (15.92 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +35° tilt, left & right 45 swivel, -90° to +90° pivot, up to 150mm lift

In the Box
• Monitor with Stand
• 1x DP Cable (1.8m)
• 1x USB-A to USB-B Cable (1.8m)
• 1x Power cable (1.8m)
• Quick Setup Guide
Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports

• 1x USB-B 3.2 Gen 1, USB upstream
• 2x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
• 1x HDMI® 1.4
• 1x DisplayPort™ 1.2
• 1x VGA
• 1x Power Connector
• 1x audio-combo (3.5mm, In/Out)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications

• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• RoHS compliant
• TCO Certified 8.0
• TCO edge 2.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.
Other Certifications

TÜV Rheinland® Eye Comfort Certification

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OVERVIEW

1. Power connector
2. HDMI 1.4
3. DisplayPort 1.2
4. VGA
PERFORMANCE

Panel
In-Plane Switching (IPS)

Backlight
WLED

Display Size
22.5 inches

Max View Area
WxH: 496.2 x 313.9 mm

Resolution
1920 x 1200

Aspect Ratio
16:10

Pixel Pitch
0.25 x 0.25 mm

Dot / Pixel Per Inch
100.6 dpi

Brightness
250 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
72% NTSC

Color Support
16.7 Million

Screen Surface Treatment
Anti-glare

Operating System
Operating System
• Windows® 10 Support
• Windows® 7 Support

Multi-Media
Speakers
Optional Modular Soundbar support

Power Supply
Power Consumption
• Typical / Max: 15W / 18W
• Sleep / Off mode: <0.3W
• Switch-off Mode: <0.3W
• Internal Power Supply
Voltage Required
AC 90 to 264 V (47-63Hz)

**DESIGN**

**Mechanical**

ThinkCentre® M Series Support

ThinkCentre® M Series Tiny

For supporting Tiny devices, additional Tiny monitor clamp (PN: 4XF0N82412) and Tiny VESA mount (PN: 4XF0N03161) are needed (sold separately).

**Bezel Width**

Side: 2.3mm

**Cable Management**

Support

**Case Color**

Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>501.2 x 251.9 x 381.9 mm (19.73 x 9.9 x 15.04 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>501.2 x 251.9 x 491.9 mm (19.73 x 9.9 x 19.37 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>501.2 x 43.4 x 326.5 mm (19.73 x 1.71 x 13.54 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

160 x 655 x 422 mm (6.3 x 25.79 x 16.61 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>4.85 kg (10.69 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>2.87 kg (6.33 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

6.84 kg (15.08 lbs)

**Mounting**

Supports VESA mount 100mm

**Stand**

Supports -5° to +30° tilt, left & right 45 swivel, -90° to +90° pivot, up to 110mm lift

**In the Box**

- Monitor with Stand
- 1x DP Cable
- 1x VGA Cable
- 1x Power cable
- Quick Setup Guide

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Ports**

**Rear Ports**

- 1x HDMI® 1.4
• 1x DisplayPort™ 1.2
• 1x VGA
• 1x Power Connector

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered[2]
• TCO Certified
• TCO edge 2.0
• ULE Gold

Notes:

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Other Certifications

Other Certifications
TÜV Rheinland® Eye Comfort Certification

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notice.
OVERVIEW

1. DisplayPort 1.2
2. HDMI 1.4
3. VGA
4. USB-B 3.2 Gen 1
5. USB 3.2 Gen 1
6. USB 3.2 Gen 1
7. Audio-out (3.5mm)
8. USB 3.2 Gen 1
9. USB 3.2 Gen 1
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching
Backlight
WLED
Display Size
23 inches
Max View Area
WxH: 509.1 x 286.4 mm
Resolution
1920 x 1080
Aspect Ratio
16:9
Pixel Pitch
0.265 x 0.265 mm
Dot / Pixel Per Inch
96 dpi
Brightness
250 cd/m²
Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
• Off Mode: 14 ms
Refresh Rate
60Hz
Color Gamut
72% NTSC
Color Support
16.7 Million
Color Depth
8-bit (6-bit+FRC)
Screen Surface Treatment
Anti-glare

Operating System
Operating System
• Windows® 11 Support
• Windows® 10 Support

Power Supply
Power Consumption
• Typical / Max: 15W / 48W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 11.88W
• Energy Star TEC: 37.05kWh
• Internal Power Supply
  **Voltage Required**
  AC 90 to 264 V (50-60Hz)

**Special Features**

**Special Features**

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

ThinkCentre® M Series Tiny Support

For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**

- Side: 2mm
- Top / Bottom: 2mm / 17.3mm

**Cable Management Support**

**Case Color**

Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>522.0 x 199.7 x 338.8 mm (20.55 x 7.86 x 13.34 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>522.0 x 199.7 x 493.8 mm (20.55 x 7.86 x 19.44 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>522.0 x 46.4 x 313.1 mm (20.55 x 1.83 x 12.33 inches)</td>
</tr>
<tr>
<td>Minimal Height</td>
<td>28 mm (1.1 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

592 x 150 x 421 mm (23.31 x 5.91 x 16.57 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.2 kg (11.46 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.2 kg (7.05 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

7.3 kg (16.09 lbs)

**Mounting**

Supports VESA mount 100mm

**Stand**

Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

**In the Box**

- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x USB-A to USB-B Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide
- Warranty Booklet

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Notes:
The system dimensions may vary depending on configurations.

The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Ports**

- **Rear Ports**
  - 1x USB-B 3.2 Gen 1, USB upstream
  - 4x USB 3.2 Gen 1, USB downstream
  - 1x HDMI® 1.4
  - 1x DisplayPort™ 1.2
  - 1x VGA
  - 1x Power Connector
  - 1x audio-out (3.5mm)

**Notes:**

The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

**SECURITY & PRIVACY**

**Security**

**Physical Locks**

Kensington® Security Slot™

**SERVICE**

**Warranty**

**Base Warranty**

3-year limited warranty

**CERTIFICATIONS**

**Green Certifications**

**Green Certifications**

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification

**Notes:**

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**Other Certifications**
Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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# ThinkVision E24-27

## Display
- **Panel Size**: 23.8-inch
- **Screen Dimensions**: 534.44 mm x 303.66 mm
- **Panel Type**: In-Plane Switching
- **Active Area**: 527.04 mm x 296.46 mm
- **Backlight**: WLED
- **Aspect Ratio**: 16:9
- **Resolution**: 1920 x 1080
- **Pixel Pitch**: 0.2745 mm x 0.2745 mm
- **Dot/Pixel Per Inch (DPI/PPI)**: 93
- **Viewing angle (H x V @ CR 10:1)**: 178° / 178°
- **Response Time**:
  - 4ms (Extreme mode)
  - 6ms (Normal mode)
- **Refresh Rate**: 60 Hz
- **Brightness (typical)**: 250 cd/m²
- **Contrast Ratio (typical)**: 1000:1
- **Dynamic Contrast Ratio (typical)**: 3M:1
- **Color Gamut**: 72% NTSC (CIE 1931)
- **Color Support (typical)**: 16.7 Million
- **Anti-glare**: Yes

*Optional support.*

## Connectivity
- **Video Signal**:
  - 1 x HDMI 1.4
  - 1 x DP 1.2
  - 1 x VGA

## Multi-Media
- **Integrated Speakers**: Yes (2 x 1.5W)

## Power
- **Power Consumption (typ./max)**:
  - 18W / 24W
- **Power Consumption Switch Off-Mode**:
  - < 0.5W
- **Energy STAR Power Consumption (Pm/Etu)**:
  - 13W / 41kWh
- **Power Supply**: Internal
- **Voltage Required**: AC 90 to 264 V (47-63 Hz)

## Mechanical
- **Tilt Angle (front/back)**: -5° / 22°
- **Swivel Angle (left/right)**: -360° / 360°
- **Lift (max range)**: 155 mm
- **Pivot**:
  - -90° / 90°
- **VESA Mount Capability**: Yes (100 x 100 mm)
- **Kensington Lock Slot**: Yes
- **Bezel Color**: Raven Black
- **Bezel Width (side)**: 3.1 mm
- **Bezel Width (top/bottom)**: 3.1 / 20.9 mm

## Dimension
- **Size Packed** (D x H x W, mm/inch):
  - 145.0 x 397.0 x 638.0 mm
  - 5.71 x 15.63 x 25.12 inches
- **Size Unpacked w/ Stand** (D x H x W, mm/inch)
  - **(lowest position)**: 178.6 x 317.1 x 541.8 mm
  - **(highest position)**: 178.6 x 462.5 x 541.8 mm
- **Size Unpacked w/o Stand** (D x H x W, mm/inch)
  - Head only: 41.7 x 326.4 x 541.8 mm
- **Weight Packed (kg/lbs.)**: 5.70 kg / 12.57 lbs.
- **Weight Unpacked (kg/lbs.)**: 4.80 kg / 10.58 lbs.
- **Weight (Monitor Head Only) (kg/lbs.)**: 3.10 kg / 6.83 lbs.

## What’s in the Box
- Monitor with stand
- 1 x Power cable (1.8 m)
- 1 x HDMI cable (1.8 m)
- Quick setup guide

## Certification
- **ENERGY STAR Certification**: Yes
- **CCC**: Yes
- **TCO**: 8.0
- **TCO Edge**: 2.0
- **EPEAT**: Gold
- **RoHS (2011/65/EU)**: Yes
- **Windows Certification**: Windows 7, Windows 10
- **China Energy Efficiency Standard**: Tier 1
- **TÜV Rheinland Eye Comfort**: Yes

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Specifications may vary depending upon region.
## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power connector</td>
</tr>
<tr>
<td>2.</td>
<td>DP 1.2</td>
</tr>
<tr>
<td>3.</td>
<td>HDMI 1.4</td>
</tr>
<tr>
<td>4.</td>
<td>VGA</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
23.8 inches

Max View Area
WxH: 527.0 x 296.5 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.275 x 0.275 mm

Dot / Pixel Per Inch
93 dpi

Brightness
250 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
72% NTSC

Color Support
16.7 Million

Color Depth
8-bit (6-bit+FRC)

Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows® 10 Support
• Windows® 7 Support

Multi-Media

Speakers
Integrated Speakers, 2x 1.5W

Power Supply

Power Consumption
• Typical / Max: 25W / 33W
Sleep / Off mode: <0.5W
Switch-off Mode: <0.3W
Energy Star Power On: 11.85W
Energy Star TEC: 37.81kWh
Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

**DESIGN**

**Mechanical**

ThinkCentre® M Series Support

For supporting Tiny devices, additional Sandwich Mounting Kit (PN: 4XH0N04098) are needed (sold separately)

**Bezel Width**
- Side: 2.3mm
- Top / Bottom: 2.3mm / 20.5mm

**Cable Management**

**Case Color**

Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>540.4 x 185.7 x 336.3 mm (21.28 x 7.31 x 13.24 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>540.4 x 185.7 x 462.1 mm (21.28 x 7.31 x 18.19 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>540.4 x 43.5 x 325.3 mm (21.28 x 1.71 x 12.81 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

638 x 145 x 397 mm (25.12 x 5.71 x 15.63 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>4.5 kg (9.92 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>2.9 kg (6.4 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

6.0 kg (13.2 lbs)

**Mounting**

Supports VESA mount 100mm

**Stand**

Supports -5° to +22° tilt, left & right 360° swivel, -90° to +90° pivot, up to 155mm lift

**In the Box**

- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

**Notes:**

[1] Tiny support models (62C8 and 62B8) only.
[2] The system dimensions may vary depending on configurations.
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**
**Ports**

**Rear Ports**
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x VGA
- 1x Power Connector

**Notes:**
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

**SECURITY & PRIVACY**

**Security**

**Physical Locks**
Kensington® Security Slot™

**SERVICE**

**Warranty**

**Base Warranty**
3-year limited warranty

**CERTIFICATIONS**

**Green Certifications**

**Green Certifications**
- ENERGY STAR® Certified
- EPEAT™ Gold Registered[2]
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

**Notes:**
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

**Other Certifications**

**Other Certifications**
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light

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OVERVIEW

<table>
<thead>
<tr>
<th>1. Power connector</th>
<th>2. DP 1.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. HDMI 1.4</td>
<td>4. VGA</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, VA

Backlight
WLED

Display Size
23.8 inches

Max View Area
WxH: 527.0 x 296.5 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.275 x 0.275 mm

Dot / Pixel Per Inch
93 dpi

Brightness
250 cd/m²

Contrast Ratio
• Contrast Ratio: 3000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
72% NTSC

Color Support
16.7 Million

Color Depth
8-bit (6-bit+FRC)

Screen Surface Treatment
Anti-glare

Operating System
Operating System
• Windows® 10 Support
• Windows® 7 Support

Multi-Media
Speakers
Integrated Speakers, 2x 1.5W

Power Supply
Power Consumption
• Typical / Max: 25W / 33W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 12W
• Energy Star TEC: 39kWh
• Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

DESIGN

Mechanical
ThinkCentre® M Series Support
For supporting Tiny devices, additional Sandwich Mounting Kit (PN: 4XH0N04098) are needed (sold separately)

Bezel Width
• Side: 2.3mm
• Top / Bottom: 2.3mm / 20.5mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
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<td>540.4 x 43.5 x 325.3 mm (21.28 x 1.71 x 12.81 inches)</td>
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Packaging Dimensions (WxDxH)
638 x 145 x 397 mm (25.12 x 5.71 x 15.63 inches)

Weight

<table>
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<td>4.5 kg (9.92 lbs)</td>
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<tr>
<td>Monitor Head Only</td>
<td>2.9 kg (6.4 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
6.0 kg (13.2 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +22° tilt, left & right 360° swivel, -90° to +90° pivot, up to 155mm lift

In the Box
• Monitor with Stand
• 1x HDMI® cable (1.8m)
• 1x Power cable (1.8m)
• Quick Setup Guide

Notes:
[1] Tiny support model (63DO) only.
[2] The system dimensions may vary depending on configurations.
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY
**Ports**

Rear Ports
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x VGA
- 1x Power Connector

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

**SECURITY & PRIVACY**

**Security**

Physical Locks
Kensington® Security Slot™

**SERVICE**

**Warranty**

Base Warranty
3-year limited warranty

**CERTIFICATIONS**

**Green Certifications**

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

Notes:

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**Other Certifications**

Other Certifications
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light

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OVERVIEW

1. HDMI 1.4
2. DisplayPort 1.2
3. VGA
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
23.8 inches

Max View Area
WxH: 527 x 296.5 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.275 x 0.275 mm

Dot / Pixel Per Inch
93 dpi

Brightness
250 cd/m²

Contrast Ratio
- Contrast Ratio: 1300:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms
- Off Mode: 14 ms

Refresh Rate
100Hz

Color Gamut
Coverage Ratio: 99% sRGB

Color Support
16.7 Million

Color Depth
8-bit (6-bit+FRC)

Screen Surface Treatment
Anti-glare

Curvature
Flat Panel

Operating System
Operating System
- Windows® 11 Support
- Windows® 10 Support

Multi-Media
Speakers
Integrated Speakers, 2x 2W
**Power Supply**

**Power Consumption**
- Typical / Max: 12W / 29W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 11W
- Energy Star TEC: 35.4kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

**Natural Low Blue Light**

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano

For supporting Tiny devices, additional Tiny VESA mount II (PN: 4XF0N03161) are needed (sold separately).
For supporting Nano devices, additional Nano VESA mount (PN: 4XF0V81630) are needed (sold separately).

**Bezel Width**
- Side: 1.8mm
- Top / Bottom: 1.8mm / 18.3mm

**Cable Management**

Support

**Case Color**

Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.4 x 178.6 x 342.2 mm (21.24 x 7.03 x 13.47 inches)</td>
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<tr>
<td>Highest Position</td>
<td>539.4 x 178.6 x 497.2 mm (21.24 x 7.03 x 19.57 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.4 x 46 x 322 mm (21.24 x 1.81 x 12.68 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

621 x 126 x 385 mm (24.45 x 4.96 x 15.16 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>4.7 kg (10.4 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.1 kg (6.9 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

6.7 kg (14.8 lbs)

**Mounting**

Supports VESA mount 100 x 100 mm

**Stand**

Supports -5° to +22° tilt, left & right 360° swivel, -90° to +90° pivot, up to 155mm lift

**In the Box**
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- 1x Quick Setup Guide
• 4x Screws

Notes:
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[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
• 1x HDMI® 1.4
• 1x DisplayPort™ 1.2
• 1x VGA

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Supports 1920x1080@100Hz as specified in HDMI® 1.4

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™ (3 mm x 7 mm)

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• EU Energy Label (C-class)
• RoHS (2011/65/EU)
• TCO Certified 9.0
• TCO edge 2.0
• Volatile Organic Compound Certification

Notes:
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Other Certifications
Other Certifications

• Eyesafe® Certified 2.0
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light
• TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Power connector
2. HDMI
3. DisplayPort
4. Audio-out (3.5mm)
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
23.8 inches

Max View Area
WxH: 526.9 x 296.4 mm

Resolution
2560 x 1440

Aspect Ratio
16:9

Pixel Pitch
0.2058 x 0.2058 mm

Dot / Pixel Per Inch
123 dpi

Brightness
300 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
75Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Color Depth
8-bit (6-bit+FRC)

Screen Surface Treatment
Anti-glare

Operating System
Operating System
• Windows® 10 Support
• Windows® 7 Support

Multi-Media
Speakers
Integrated Speakers, 2x 2W

Power Supply
Power Consumption
• Typical / Max: 22W / 32W
ThinkVision E24q-20

- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 16.68W
- Energy Star TEC: 53.41kWh
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

DESIGN

Mechanical

ThinkCentre® M Series Support

ThinkCentre® M Series Tiny
For supporting Tiny devices, additional Sandwich Mounting Kit (PN: 4XH0N04098) are needed (sold separately).

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 21.4mm

Case Color
Raven black

Dimensions (WxDxH)\(^1\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.8 x 180.3 x 320.6 mm (21.25 x 7.10 x 12.62 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.8 x 180.3 x 475.6 mm (21.25 x 7.10 x 18.72 inches)</td>
</tr>
<tr>
<td>Unpacked Head Only</td>
<td>539.8 x 44.0 x 325.7 mm (21.25 x 1.73 x 12.82 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)

690 x 421 x 159 mm (27.17 x 16.57 x 6.26 inches)

Weight\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.1 kg (11.2 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.3 kg (7.3 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
7.0 kg (15.43 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +22° tilt, left & right 360° swivel, -90° to +90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:

\(^1\) The system dimensions may vary depending on configurations.

\(^2\) The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports\(^1\)

Rear Ports
• 1x HDMI® 1.4
• 1x DisplayPort™ 1.2
• 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Silver Registered[2]
• RoHS compliant
• TCO Certified 8.0
• TCO edge 2.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
• Eyesafe® Certified
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. HDMI 2.1 TMDS
2. DisplayPort 1.2
PERFORMANCE

Panel

3-side NearEdgeless, In-Plane Switching

Backlight

WLED

Display Size

23.8 inches

Max View Area

WxH: 526.8x296.4 mm

Resolution

2560 x 1440

Aspect Ratio

16:9

Pixel Pitch

0.206 x 0.206 mm

Dot / Pixel Per Inch

123 dpi

Brightness

300 cd/m²

Contrast Ratio

• Contrast Ratio: 1300:1
  • Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

• Extreme Mode: 4 ms
  • Normal Mode: 6 ms
  • Off Mode: 14 ms

Refresh Rate

100Hz

Color Gamut

Coverage Ratio: 99% sRGB

Color Support

16.7 Million

Color Depth

8-bit (6-bit+FRC)

Screen Surface Treatment

Anti-glare

Curvature

Flat Panel

Operating System

Operating System

• Windows® 11 Support
  • Windows® 10 Support

Multi-Media

Speakers

Integrated Speakers, 2x 2W
Power Supply

Power Consumption
- Typical / Max: 16W / 38.5W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 12.2W
- Energy Star TEC: 38.5kWh
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

- Natural Low Blue Light

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional Tiny VESA mount II (PN: 4XF0N03161) are needed (sold separately).
For supporting Nano devices, additional Nano VESA mount (PN: 4XF0V81630) are needed (sold separately).

Bezel Width
- Side: 1.8mm
- Top / Bottom: 1.8mm / 18.3mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.4 x 178.6 x 342.2 mm (21.24 x 7.03 x 13.47 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.4 x 178.6 x 497.2 mm (21.24 x 7.03 x 19.57 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.4 x 46 x 322 mm (21.24 x 1.81 x 12.68 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
621 x 126 x 385 mm (24.45 x 4.96 x 15.16 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>4.7 kg (10.4 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.2 kg (7.0 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
6.7 kg (14.8 lbs)

Mounting
Supports VESA mount 100 x 100 mm

Stand
Supports -5° to +22° tilt, left & right 360° swivel, -90° to +90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- 1x Quick Setup Guide
• 4x Screws

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
• 1x HDMI® 2.1 TMDS
• 1x DisplayPort™ 1.2

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Supports 2560x1440@100Hz as specified in HDMI® 2.1

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™ (3 mm x 7 mm)

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• EU Energy Label (E-class)
• RoHS (2011/65/EU)
• TCO Certified 9.0
• TCO edge 2.0
• Volatile Organic Compound Certification

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications
Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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### OVERVIEW

<table>
<thead>
<tr>
<th>1.</th>
<th>Power connector</th>
<th>7.</th>
<th>USB 3.2 Gen 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>HDMI 1.4</td>
<td>8.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3.</td>
<td>DP 1.2</td>
<td>9.</td>
<td>Audio-out (3.5mm)</td>
</tr>
<tr>
<td>4.</td>
<td>USB-C 3.2 Gen 1</td>
<td>10.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>5.</td>
<td>DP out</td>
<td>11.</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
</tr>
<tr>
<td>6.</td>
<td>Ethernet (RJ-45)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![ThinkVision P24h-2L Diagram](attachment:image.png)
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
23.8 inches

Max View Area
WxH: 526.9 x 296.4 mm

Resolution
2560 x 1440

Aspect Ratio
16:9

Pixel Pitch
0.2058 x 0.2058 mm

Dot / Pixel Per Inch
123 dpi

Brightness
300 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
- 83% DCI-P3
- 99% BT.709
- 99% sRGB

Color Support
16.7 Million

Screen Surface Treatment
Anti-glare

Operating System

Operating System
- Windows® 11 Support
- Windows® 10 Support
- Windows® 7 Support

Multi-Media

Camera
- No bundled webcam (Support ThinkVision® MC 50 Monitor Webcam, sold separately)
- ThinkVision® MC 50 monitor webcam (Some models only)

Microphone
- Built-in dual microphone in MC 50 (Models with MC 50 only)
- No microphone
Speakers
- Integrated Speakers, 2x 1W
- Optional Soundbar support (PN: 0A36190)

Power Supply

Power Consumption
- Typical / Max: 23W / 132W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 18.1W
- Energy Star TEC: 57.4kWh

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
- Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
- Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional Tiny monitor clamp II (PN: 4XH0Z42451) and Tiny VESA mount II (PN: 4XF0N03161) are needed (sold separately).
For supporting Nano devices, additional Nano monitor clamp II (PN: 4XH0Z42451) and Nano VESA mount (PN: 4XF0V81630) are needed (sold separately).

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 21.4mm

Cable Management

Support

Case Color
Raven black

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.8 x 205 x 420 mm (21.25 x 8.07 x 16.54 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.8 x 205 x 570 mm (21.25 x 8.07 x 22.44 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.8 x 46.6 x 325.7 mm (21.25 x 1.83 x 12.82 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
149 x 620 x 423 mm (5.87 x 24.41 x 16.65 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.4 kg (14.1 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.1 kg (9.0 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
8.5 kg (18.74 lbs)
Mounting

Supports VESA mount 100mm

Stand

Supports -5° to +35° tilt, left & right 45 swivel, -90° to +90° pivot, up to 150mm lift

In the Box

- Monitor with Stand
- 1x DP Cable (1.8m) (US, Canada only)
- 1x USB-C® to USB-A Cable (1.8m) (for US, Canada only)
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Factory Calibration Report
- Quick Setup Guide

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet

Support 10M / 100M / 1000M

Ports

Rear Ports

- 1x USB-C® 3.2 Gen 1 (DP 1.2 Alt Mode and up to 75W PD), USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™1.2
- 1x DisplayPort™1.2 (Out)
- 1x Ethernet (RJ-45)
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™3/4: 40 Gbit/s.

[2] Up to 75 W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY

Security

Physical Locks

Kensington® Security Slot™

SERVICE
Warranty

Base Warranty

3-year limited warranty

CERTIFICATIONS

Green Certifications

ENERGY STAR® Certified
EPEAT™ Gold Registered
RoHS compliant
TCO Certified 8.0
TCO edge 2.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Eyesafe® Certified
TÜV Rheinland® Eye Comfort Certification
TÜV Rheinland® Low Blue Light (Hardware Solution)

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### OVERVIEW

| 1.  | Power connector | 7.  | Ethernet (RJ-45) |
| 2.  | Kensington Security Slot | 8.  | USB 3.2 Gen 1 |
| 3.  | HDMI 2.1 TMDS | 9.  | Audio-out (3.5mm) |
| 4.  | DisplayPort 1.4 | 10. | USB 3.2 Gen 1 |
| 5.  | USB-C 3.2 Gen 1 (DP 1.4 Alt Mode) | 11. | USB 3.2 Gen 1 |
| 6.  | DP out | 12. | USB 3.2 Gen 1 (BC 1.2) |
ThinkVision P24h-30

PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
23.8 inches

Max View Area
WxH: 526.8 x 296.3 mm

Resolution
2560 x 1440

Aspect Ratio
16:9

Pixel Pitch
0.205 x 0.205 mm

Dot / Pixel Per Inch
123 dpi

Brightness
300 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
- Color Area Ratio: 111% sRGB
- Coverage Ratio: 99% BT.709
- Coverage Ratio: 99% sRGB

Color Support
16.7 Million

Color Depth
8-bit (6-bit+FRC)

Screen Surface Treatment
Anti-glare

Operating System
Operating System
- Windows® 11 Support
- Windows® 10 Support

Multi-Media
Camera
No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)

Speakers
Optional Modular Soundbar support (MS30 Monitor Soundbar)
**Power Supply**

**Power Consumption**
- Typical / Max: 27W / 161W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 18W
- Energy Star TEC: 57kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Factory Calibration: Avg. Delta E<2
- HDR10 Compliance
- Natural Low Blue Light
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 18mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.5 x 199.7 x 348.8mm (21.24 x 7.86 x 13.73 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.5 x 199.7 x 503.8mm (21.24 x 7.86 x 19.83 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.5 x 46.5 x 323.7mm (21.24 x 1.83 x 12.74 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
620 x 160 x 420 mm (24.41 x 6.30 x 16.54 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.7 kg (12.6 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.8 kg (8.4 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
8.6 kg (19.00 lbs)

**Mounting**
Supports VESA mount 100mm
Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, -90° to +90° pivot, up to 155mm lift

In the Box
• Monitor with Stand
• 1x DP Cable (1.8m) (For NA, Brazil; No for EMEA, AP, LAS)
• 1x USB-C® to USB-A Cable (1.8m) (For NA, Brazil; No for EMEA, AP nor LAS)
• 1x USB-C® to USB-C® Cable (1.8m)
• 1x Power cable (1.8m)
• Factory Calibration Report
• Quick Setup Guide
• Warranty Booklet

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports

Rear Ports
• 1x USB-C® 3.2 Gen 1 (DP 1.4 Alt Mode and up to 100W PD), USB upstream
• 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
• 1x HDMI® 2.1 TMDS
• 1x DisplayPort™ 1.4
• 1x DisplayPort™ out
• 1x Ethernet (RJ-45)
• 1x Power Connector
• 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 100W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.
[3] Supports 2560x1440@60Hz as specified in HDMI® 2.1

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE
Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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### OVERVIEW

1. Power connector
2. HDMI 1.4
3. DP 1.2
4. DP out
5. USB-B 3.1 Gen 1
6. USB 3.1 Gen 1
7. USB 3.1 Gen 1
8. Audio-out (3.5mm)
9. USB 3.1 Gen 1
10. USB 3.1 Gen 1
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching
Backlight
WLED
Display Size
23.8 inches
Max View Area
WxH: 526.85 x 296.35 mm
Resolution
2560 x 1440
Aspect Ratio
16:9
Pixel Pitch
0.2058 x 0.2058 mm
Dot / Pixel Per Inch
123 dpi
Brightness
300 cd/m²
Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
Refresh Rate
60Hz
Color Gamut
• 84% DCI-P3
• 99% BT.709
• 99% sRGB
Color Support
16.7 Million
Screen Surface Treatment
Anti-glare

Operating System
Operating System
• Windows® 10 Support
• Windows® 7 Support

Power Supply
Power Consumption
• Typical / Max: 20W / 61W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 16.04W
• Energy Star TEC: 51.61kWh
• Internal Power Supply
Voltage Required
AC 100 to 240 V (47-63Hz)

Special Features

Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

Factory Calibration: Avg. Delta E<2

DESIGN

Mechanical
Bezel Width
• Side: 2mm
• Top / Bottom: 2mm / 21.4mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>205 x 420 x 539.8 mm (8.07 x 16.5 x 21.3 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>205 x 570 x 539.8 mm (8.07 x 22.4 x 21.3 inches)</td>
</tr>
<tr>
<td>Unpacked Head Only</td>
<td>44.6 x 325.7 x 539.8 mm (1.8 x 12.8 x 21.3 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
620 x 149 x 423 mm (24.4 x 5.9 x 16.7 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.18 kg (13.6 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.85 kg (7.89 lbs)</td>
</tr>
</tbody>
</table>

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +35° tilt, left & right 45 swivel, -90° to +90° pivot, up to 150mm lift

In the Box
• Monitor with Stand
• 1x DP Cable (1.8m)
• 1x USB-A to USB-B Cable (1.8m)
• 1x Power cable (1.8m)
• Factory Calibration Report
• Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY
Ports

Rear Ports
- 1x USB-B 3.1 Gen 1, USB upstream
- 4x USB 3.1 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x DisplayPort™ out
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Silver Registered[2]
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
TÜV Rheinland® Eye Comfort Certification
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### OVERVIEW

<table>
<thead>
<tr>
<th>Number</th>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power connector</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Kensington Security Slot</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>HDMI 2.1 TMDS</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>DisplayPort 1.4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>DP out</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>USB-B 3.2 Gen 1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>USB 3.2 Gen 1</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Audio-out (3.5mm)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>USB 3.2 Gen 1</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>DP out</td>
<td></td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching
Backlight
WLED
Display Size
23.8 inches
Max View Area
WxH: 526.8 x 296.3 mm
Resolution
2560 x 1440
Aspect Ratio
16:9
Pixel Pitch
0.205 x 0.205 mm
Dot / Pixel Per Inch
123 dpi
Brightness
300 cd/m²
Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
Refresh Rate
60Hz
Color Gamut
• Color Area Ratio: 110% sRGB
• Coverage Ratio: 99% BT.709
• Coverage Ratio: 99% sRGB
Color Support
16.7 Million
Color Depth
8-bit (6-bit+FRC)
Screen Surface Treatment
Anti-glare

Operating System
Operating System
• Windows® 11 Support
• Windows® 10 Support

Multi-Media
Camera
No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)
Speakers
Optional Modular Soundbar support (MS30 Monitor Soundbar)
Power Supply

Power Consumption
- Typical / Max: 25W / 65W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 16W
- Energy Star TEC: 49kWh
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Factory Calibration: Avg. Delta E<2
- HDR10 Compliance
- Natural Low Blue Light

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 18mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.5 x 199.7 x 348.8mm (21.24 x 7.86 x 13.73 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.5 x 199.7 x 503.8mm (21.24 x 7.86 x 19.83 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.5 x 46.5 x 323.7mm (21.24 x 1.83 x 12.74 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
620 x 160 x 420 mm (24.41 x 6.30 x 16.54 inches)

Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.7 kg (12.6 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.8 kg (8.4 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
8.3 kg (18.3 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

In the Box
Monitor with Stand
- 1x DP Cable (1.8m)
- 1x USB-A to USB-B Cable (1.8m)
- 1x Power cable (1.8m)
- Factory Calibration Report
- Quick Setup Guide
- Warranty Booklet

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x USB-B 3.2 Gen 1, USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x DisplayPort™ out
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.
[2] Supports 2560x1440@60Hz as specified in HDMI® 2.1

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
Notes:
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[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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### OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Menu button</td>
</tr>
<tr>
<td>2</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>3</td>
<td>AC Power-in</td>
</tr>
<tr>
<td>4</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>5</td>
<td>DP 1.4 (HBR2)</td>
</tr>
<tr>
<td>6</td>
<td>DP 1.4 out</td>
</tr>
<tr>
<td>7</td>
<td>VGA</td>
</tr>
<tr>
<td>8</td>
<td>USB-B (USB 5Gbps)</td>
</tr>
<tr>
<td>9</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>10</td>
<td>Audio line-out (3.5mm)</td>
</tr>
<tr>
<td>11</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>12</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
<tr>
<td>13</td>
<td>USB-A (USB 5Gbps)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
In-Plane Switching (IPS)

Backlight
WLED

Display Size
24.5 inches

Max View Area
WxH: 543.7 x 302.6 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.2802 x 0.2802 mm

Dot / Pixel Per Inch
89.9 dpi

Brightness
Typical: 250 cd/m²

Contrast Ratio
Contrast Ratio: 1300:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
48Hz - 100Hz

Color Gamut
• 83% DCI-P3
• 99% Rec.709
• 99% sRGB

Color Support
16.7 Million

Screen Surface Treatment
Anti-glare

Curvature
Flat Panel

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support

Multi-Media

Camera
Optional Modular Camera Support

Speakers
Optional Modular Soundbar support
Power Supply

Power Consumption
• Typical / Max: 12.5W / 52W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 11.9W
• Energy Star TEC: 38.2kWh
• Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Special Features
• Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
• Natural Low Blue Light

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

Bezel Width
• Side: 17.6mm
• Top / Bottom: 2mm / 2mm

Buttons
• Joystick
• Power button
• Source Key

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>557.3 x 199.7 x 356.8 mm (21.94 x 7.86 x 14.05 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>557.3 x 199.7 x 511.8 mm (21.94 x 7.86 x 20.15 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>557.3 x 49 x 328.5 mm (21.94 x 1.93 x 12.93 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
730 x 160 x 422 mm (28.74 x 6.30 x 16.61 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.4 kg (11.9 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.4 kg (7.5 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
8.4 kg (18.52 lbs)

Mounting
Supports VESA mount 100 x 100 mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, -90° to +90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m) (Available in US/Canada/Brazil/LAS/AP-Japan/AP-India/ASEAN/HK/Korea/Taiwan/India/AP-China CN/EMEA. Not available in AP-China CB.)
- 1x HDMI® cable (1.8m) (Available in US/Canada/Brazil/AP-China CB. Not available in LAS/AP-Japan/AP-India/ASEAN/HK/Korea/Taiwan/India/AP-China CN/EMEA.)
- 1x USB-B to USB-A Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 4x USB-A (USB 5Gbps / USB 3.2 Gen 1), 1x BC1.2, USB downstream
- 1x USB-B (USB 5Gbps / USB 3.2 Gen 1), USB upstream
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4 (HBR2)
- 1x DisplayPort™ 1.4 (Out)
- 1x VGA
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
  USB 2.0: 480 Mbit/s;
  USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
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  USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
  USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
  Thunderbolt™ 3/4: 40 Gbit/s.
[2] Supports 1920x1080@100 Hz as specified in HDMI® 2.1

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™ (2.5 mm x 6 mm and 3 mm x 7 mm)

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
ENERGY STAR® Certified
• EPEAT™ Gold Registered
• EU Energy Label (D-class)
• TCO Certified 9.0
• TCO edge 2.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Other Certifications
• Eyesafe® Certified 2.0
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light
• TÜV Rheinland® Low Blue Light (Hardware Solution)

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ThinkVision® S24e-03

CONEXIVIDADE
Sinal de vídeo
1 x VGA
1 x HDMI 1.4

Comprimento do cabo de vídeo
1,8 m

Sinal de áudio
1 x saída de áudio (3,5 mm)

MULTIMÍDIA
Suporte opcional para alto-falantes
Sim

RECURSOS ESPECIAIS
Tecnologia de sincronização
FreeSync™

Suporte a Thin Client (Tiny)
Sim (pelo suporte VESA PN: 4XF0N03161)

Antirreflexo
Sim

ENERGIA
Consumo de energia (min./max.)
24W / 31W

Modo de suspensão/desligamento
dA energia
< 0.3W

Modo de desligamento da energia
< 0.3W

Fonte de energia
Interna

Tensão necessária
CA 100 a 240 V (47/63 Hz)

MECÂNICO
Ângulo de inclinação (frontal/traseiro)
-5°/22°

Rotação vertical
Até 90°

Rotação horizontal
-160°/160°

Montagem VESA
Sim (100 mm), ocupado pelo stand com ajuste de altura

Trava Kensington™
Sim

Cor da moldura
Raven Black

Largura da moldura (lateral)
2.0 mm

Largura do painel (superior / inferior)
2.0/22 mm

DIMENSÃO
Tamanho embalado (L x A x P)
683 (L) x 183 (A) x 407 mm (P)

Tamanho desembalado c/ suporte posição mais baixa (L x A x P)
539,5 (L) x 410,8 (A) x 244,6 mm (P)

Tamanho desembalado c/ suporte posição mais alta (L x A x P)
539,5 (L) x 540,8 (A) x 244,6 mm (P)

Tamanho Desembalado sem suporte somente painel (L x A x P)
41,5 x 325,7 x 539,5 mm

Peso embalado
6,68 kg

Peso desembalado
5,2 kg

Peso (somente cabeça do monitor)
3,07 kg

O QUE VEM NA CAIXA
Folheto de informações
Monitor de tela plana
Cabo de alimentação
Cabos HDMI
Base
Suporte

CERTIFICAÇÕES
Classificação ENERGY STAR
7.1

CCC
Sim

EPEAT™
Silver

ULE
Gold

RoHS (EU 2002/95/EC)
Sim (2011/65/UE)

Certificação Windows
Windows 7, Windows 10

Certificação Low Blue Light
Sim

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## OVERVIEW

<table>
<thead>
<tr>
<th>1. Kensington Security Slot</th>
<th>4. VGA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Power connector</td>
<td>5. Audio line-out (3.5mm)</td>
</tr>
<tr>
<td>3. HDMI 1.4</td>
<td></td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel

3-side NearEdgeless, VA

Backlight

WLED

Display Size

23.8 inches

Max View Area

WxH: 527.04 x 296.46 mm

Resolution

1920 x 1080

Aspect Ratio

16:9

Pixel Pitch

0.2745 x 0.2745 mm

Dot / Pixel Per Inch

93 dpi

Brightness

250 cd/m²

Contrast Ratio

• Contrast Ratio: 3000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate

60Hz

Color Gamut

72% NTSC

Color Support

16.7 Million

Screen Surface Treatment

Anti-glare

Operating System

Operating System

• Windows® 10 Support
• Windows® 7 Support

Multi-Media

Speakers

Optional Soundbar support (PN: 0A36190)

Power Supply

Power Consumption

• Typical / Max: 17.5W / 23.5W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.5W
• Energy Star Power On: 12W
ThinkVision S24e-20

- Energy Star TEC: 36kWh
- Internal Power Supply

**Voltage Required**

AC 100 to 240 V (50-60Hz)

**Special Features**

AMD FreeSync™

AMD FreeSync™ technology only can work with AMD Radeon™ series graphics card.

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano

For supporting Tiny devices, additional Tiny VESA mount II (PN: 4XF0N03161) are needed (sold separately).

For supporting Nano devices, additional Nano VESA mount (PN: 4XF0V81630) are needed (sold separately).

**Bezel Width**
- Side: 2.5mm
- Top / Bottom: 2.5mm / 22.4mm

**Cable Management**

Support

**Case Color**

Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpacked Head Only</td>
<td>540.4 x 45.5 x 327.2 mm (21.28 x 1.79 x 12.88 inches)</td>
</tr>
<tr>
<td>Unpacked with Stand</td>
<td>540.4 x 173.1 x 434.5 mm (21.28 x 6.81 x 17.10 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

415 x 624 x 124 mm (16.34 x 24.57 x 4.88 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>3.82 kg (8.42 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.02 kg (6.66 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

5.42 kg (11.95 lbs)

**Mounting**

Supports VESA mount 100mm

**Stand**

supports -5° to +22° tilt

**In the Box**

- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**
Ports

Rear Ports
- 1x HDMI® 1.4
- 1x VGA
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.
[2] Supports 1920x1080@75Hz as specified in HDMI® 1.4

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

Other Certifications

TÜV Rheinland® Eye Comfort Certification

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Other Certifications
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# OVERVIEW

![Lenovo Monitor Diagram](image)

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</tr>
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<td>5.</td>
<td>Audio line-out (3.5mm)</td>
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</table>
PERFORMANCE

Panel
In-Plane Switching (IPS)
Backlight
WLED
Display Size
23.8 inches
Max View Area
WxH: 527 x 296.5 mm
Resolution
1920 x 1080
Aspect Ratio
16:9
Pixel Pitch
0.275 x 0.275 mm
Dot / Pixel Per Inch
93 dpi
Brightness
Typical: 250 cd/m²
Contrast Ratio
Contrast Ratio: 1300:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
Refresh Rate
100Hz
Color Gamut
99% sRGB
Color Support
16.7 Million
Color Depth
8-bit (6-bit+FRC)
Screen Surface Treatment
Anti-glare
Curvature
Flat Panel

Operating System
Operating System
• Windows® 11 Support
• Windows® 10 Support

Power Supply
Power Consumption
• Typical / Max: 13.5W / 20.5W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 12.9W
ThinkVision S24i-30

- Energy Star TEC: 40.5kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**
Natural Low Blue Light

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional mount kits are needed (sold separately).
For supporting Nano devices, additional mount kits are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 22mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)\(^1\)**

<table>
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<tr>
<th>Models</th>
<th>Dimensions</th>
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<tbody>
<tr>
<td>Lowest Position</td>
<td>539.4 x 183.0 x 434.0 mm (21.24 x 7.20 x 17.09 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.4 x 183.0 x 434.0 mm (21.24 x 7.20 x 17.09 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.4 x 43.0 x 326.2 mm (21.24 x 1.69 x 12.84 inches)</td>
</tr>
<tr>
<td>Width of Head (Slimmest Part)</td>
<td>6.9 mm (0.27 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
592 x 110 x 415 mm (23.31 x 4.33 x 16.34 inches)

**Weight\(^2\)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>3.8 kg (8.4 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.0 kg (6.6 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
5.7 kg (12.6 lbs)

**Mounting**
Supports VESA mount 100 x 100 mm

**Stand**
supports -5° to +22° tilt

**In the Box**
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

**Notes:**
\(^1\) The system dimensions may vary depending on configurations.
\(^2\) The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
CONNECTIVITY

Ports
Rear Ports
• 1x HDMI® 1.4
• 1x VGA
• 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
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USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Supports 1920x1080@100Hz as specified in HDMI® 1.4

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications
Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• EU Energy Label (E-class)
• RoHS (2011/65/EU)
• TCO Certified 9.0
• TCO edge 2.0
• Volatile Organic Compound Certification

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Other Certifications

Other Certifications
• Eyesafe® Certified 2.0
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Joystick
2. Source Key
3. Kensington Security Slot
4. Power connector
5. HDMI
6. VGA
7. Audio line-out (3.5mm)
PERFORMANCE

Panel
- 3-side NearEdgeless, VA
Backlight
- WLED

Display Size
- 24.5 inches

Max View Area
- WxH: 543.7 x 302.6 mm

Resolution
- 1920 x 1080

Aspect Ratio
- 16:9

Pixel Pitch
- 0.283 x 0.280 mm

Dot / Pixel Per Inch
- 90 dpi

Brightness
- 250 cd/m²

Contrast Ratio
- Contrast Ratio: 3000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
- Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate
- 75Hz

Color Gamut
- 99% sRGB

Color Support
- 16.7 Million

Color Depth
- 8-bit

Screen Surface Treatment
- Anti-glare

Operating System
- Operating System
  - Windows® 11 Support
  - Windows® 10 Support

Power Supply
- Power Consumption
  - Typical / Max: 17.5W / 24W
  - Sleep / Off mode: <0.5W
  - Switch-off Mode: <0.3W
  - Energy Star Power On: 14.3W
  - Energy Star TEC: 45kWh
  - Internal Power Supply
Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features
Special Features
Lenovo® ThinkColour 2.0 (Lenovo® Accessories and Display Manager) Support
Lenovo® ThinkColour 2.0 supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

DESIGN

Mechanical
ThinkCentre® M Series Support
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny / Nano devices, additional Tiny / Nano VESA Mount Kits (PN: 4XF0N03161) / (PN: 4XF0V81630) are needed (sold separately).

Bezel Width
• Side: 2mm
• Top / Bottom: 2mm / 22mm

Buttons
• Joystick
• Source Key

Cable Management
Support

Case Color
Storm grey

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>557.2 x 183 x 441.8 mm (21.94 x 7.2 x 17.39 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>557.2 x 183 x 441.8 mm (21.94 x 7.2 x 17.39 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>557.2 x 46.5 x 334.8 mm (21.94 x 1.83 x 13.18 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
648 x 135 x 414 mm (25.51 x 5.31 x 16.30 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>4.1 kg (9.0 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.2 kg (7.1 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
• EPS: 5.7 kg (12.6 lbs)
• Green Package: 6.4 kg (14.1 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +22° tilt

In the Box
• Monitor with Stand
• 1x HDMI® cable (1.8m)
• 1x Power cable (1.8m)
• 1x Screw
• Quick Setup Guide
• Warranty Booklet (On QSG)
Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x HDMI® 1.4
- 1x VGA
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® 8.0
- EPEAT™ Silver Registered
- RoHS (2011/65/EU)
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification

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Other Certifications

Other Certifications
• Eyesafe® Certified
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Low Blue Light (Hardware Solution)

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<thead>
<tr>
<th></th>
<th>Input/Output</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DisplayPort 1.2</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>HDMI 1.4</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>VGA</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>USB-B 3.0</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Audio-out (3.5mm)</td>
<td></td>
</tr>
</tbody>
</table>

![Lenovo ThinkVision T24d-10](image-url)
PERFORMANCE

Panel

In-Plane Switching (IPS)

Backlight

WLED

Display Size

24 inches

Max View Area

WxH: 518.4 x 324 mm

Resolution

1920 x 1200

Aspect Ratio

16:10

Pixel Pitch

0.27 x 0.27 mm

Dot / Pixel Per Inch

94 dpi

Brightness

300 cd/m²

Contrast Ratio

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

- Extreme Mode: 4 ms
- Normal Mode: 7 ms
- Off Mode: 15 ms

Refresh Rate

60Hz

Color Gamut

99% sRGB

Color Support

16.7 Million

Screen Surface Treatment

Anti-glare

Operating System

Operating System

- Windows® 10 Support
- Windows® 7 Support

Power Supply

Power Consumption

- Typical / Max: 22W / 64W
- Sleep / Off mode: <0.3W
- Switch-off Mode: <0.3W
- Internal Power Supply

Voltage Required

AC 100 to 240 V (50-60Hz)
**DESIGN**

**Mechanical**

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 22.7mm

**Cable Management**

**Support**

**Case Color**

Black

**Dimensions (WxHxD)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Only</td>
<td>533.2 x 42.3 x 355.1 mm (20.99 x 1.67 x 13.98 inches)</td>
</tr>
<tr>
<td>Unpacked with Stand</td>
<td>533.2 x 260.4 x 497.4 mm (20.99 x 10.25 x 19.58 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxHxD)**

160 x 655 x 422 mm (6.3 x 25.79 x 16.61 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.63 kg (12.41 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.98 kg (8.77 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

8.7 kg (19.18 lbs)

**Mounting**

Supports VESA mount 100mm

**Stand**

Supports -5° to +30° tilt, left & right 45 swivel, 90° pivot, up to 110mm lift

**In the Box**

- Monitor with Stand
- 1x DP Cable
- 1x HDMI® Cable (for US, Canada only)
- 1x VGA Cable
- Quick Setup Guide

**Notes:**

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**CONNECTIVITY**

**Ports**

**Rear Ports**

- 1x USB-B 3.0, USB upstream
- 4x USB 3.0 (1x BC), USB downstream
- 1x HDMI® 1.4[2]
- 1x DisplayPort™ 1.2
- 1x VGA
- 1x Power Connector
- 1x audio-out (3.5mm)

**Notes:**
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USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Supports 1920x1200@75Hz as specified in HDMI® 1.4

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified
- TCO edge 2.0

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Other Certifications
TÜV Rheinland® Eye Comfort Certification

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<td>4.</td>
<td>VGA</td>
</tr>
<tr>
<td>5.</td>
<td>USB-B 3.2 Gen 1</td>
</tr>
<tr>
<td>6.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>7.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>8.</td>
<td>Audio line-out (3.5mm)</td>
</tr>
<tr>
<td>9.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>10.</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
23.8 inches

Max View Area
WxH: 527.04 x 296.46 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.2745 x 0.2745 mm

Dot / Pixel Per Inch
93 dpi

Brightness
250 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
72% NTSC

Color Support
16.7 Million

Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows® 10 Support
• Windows® 7 Support

Multi-Media

Speakers
Optional Soundbar support (PN: 0A36190)

Power Supply

Power Consumption
• Typical / Max: 16W / 55W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 13W
Energy Star TEC: 46kWh

Voltage Required
AC 100 to 240 V (50-60Hz)

DESIGN

Mechanical

ThinkCentre® M Series Support

ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny / Nano devices, additional Tiny / Nano monitor clamp II (PN: 4XHOZ42451) and Tiny VESA mount II (PN: 4XF0N03161) are needed (sold separately).

Bezel Width
• Side: 2mm
• Top / Bottom: 2mm / 22.2mm

Cable Management

Support

Case Color

Raven black

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.8 x 205 x 409.3 mm (21.25 x 8.09 x 16.11 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.8 x 205 x 559.3 mm (21.25 x 8.09 x 22.02 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.8 x 44.1 x 326.5 mm (21.25 x 1.74 x 12.85 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)

618 x 422 x 160 mm (24.33 x 16.61 x 6.30 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.9 kg (13.01 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.65 kg (8.05 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight

8.4 kg (18.52 lbs)

Mounting

Supports VESA mount 100mm

Stand

Supports -5° to +35° tilt, left & right 45 swivel, -90° to +90° pivot, up to 150mm lift

In the Box

• Monitor with Stand
• 1x DP Cable (1.8m)
• 1x USB-A to USB-B Cable (1.8m)
• 1x Power cable (1.8m)
• Quick Setup Guide

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports[1]
Rear Ports

- 1x USB-B 3.2 Gen 1, USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x VGA
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks

Kensington® Security Slot™

SERVICE

Warranty

Base Warranty

3-year courier or carry-in service

CERTIFICATIONS

Green Certifications

Green Certifications

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications

- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification

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### OVERVIEW

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<td>USB 3.2 Gen 1</td>
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PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
23.8 inches

Max View Area
WxH: 527.0 x 296.5 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.275 x 0.275 mm

Dot / Pixel Per Inch
93 dpi

Brightness
250 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
• Color Area Ratio: 110% sRGB
• Coverage Ratio: 99% sRGB

Color Support
16.7 Million

Color Depth
6-bit (Hi+FRC)

Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support

Power Supply

Power Consumption
• Typical / Max: 14W / 51W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 12W
• Energy Star TEC: 38kWh
Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
- Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
- Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 17.1mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)\(^1\)

<table>
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<tr>
<th>Models</th>
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</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.8 x 199.7 x 349.8 mm (21.25 x 7.86 x 13.77 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.8 x 199.7 x 504.8 mm (21.25 x 7.86 x 19.87 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.8 x 49.0 x 321.4 mm (21.25 x 1.93 x 12.65 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
592 x 152 x 422 mm (23.31 x 5.98 x 16.61 inches)

Weight\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.4 kg (11.9 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.4 kg (7.5 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
7.8 kg (17.2 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x USB-A to USB-B Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide
- Warranty Booklet

Notes:
\(^1\) The system dimensions may vary depending on configurations.
The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports[1]

Rear Ports
• 1x USB-B 3.2 Gen 1, USB upstream
• 4x USB 3.2 Gen 1, USB downstream
• 1x HDMI® 1.4[2]
• 1x DisplayPort™ 1.2
• 1x VGA
• 1x Power Connector
• 1x audio-out (3.5mm)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] Supports 1920x1080@60Hz as specified in HDMI® 1.4

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered[2]
• RoHS compliant
• TCO Certified 9.0
• TCO edge 2.0
• Volatile Organic Compound Certification

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Other Certifications

- Eyesafe® Certified 2.0
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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# OVERVIEW

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<tr>
<td>1</td>
<td>Power connector</td>
</tr>
<tr>
<td>2</td>
<td>HDMI 1.4</td>
</tr>
<tr>
<td>3</td>
<td>DP 1.2</td>
</tr>
<tr>
<td>4</td>
<td>USB-C 3.2 Gen 1</td>
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<tr>
<td>5</td>
<td>DP out</td>
</tr>
<tr>
<td>6</td>
<td>Ethernet (RJ-45)</td>
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<tr>
<td>7</td>
<td>USB 3.2 Gen 1</td>
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<tr>
<td>8</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>9</td>
<td>Audio line-out (3.5mm)</td>
</tr>
<tr>
<td>10</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>11</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching
Backlight
WLED
Display Size
23.8 inches
Max View Area
WxH: 527.0 x 296.5 mm
Resolution
1920 x 1080
Aspect Ratio
16:9
Pixel Pitch
0.2745 x 0.2745 mm
Dot / Pixel Per Inch
93 dpi
Brightness
250 cd/m²
Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms
Refresh Rate
60Hz
Color Gamut
72% NTSC
Color Support
16.7 Million
Color Depth
8-bit (6-bit+FRC)
Screen Surface Treatment
Anti-glare

Operating System

Operating System
- Windows® 11 Support
- Windows® 10 Support
- Windows® 7 Support

Multi-Media

Camera
- Optional Modular Camera Support
- ThinkVision® MC 50 monitor webcam (Some models only)
Microphone
Built-in dual microphone in MC 50 (Models with MC 50 only)
**Power Supply**

**Power Consumption**
- Typical / Max: 22W / 140W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 15W
- Energy Star TEC: 49kWh

**Voltage Required**
AC 90 to 264 V (50-60Hz)

**Special Features**
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional Tiny monitor clamp II (PN: 4XH0Z42451) and Tiny VESA mount II (PN: 4XF0N03161) are needed (sold separately).
For supporting Nano devices, additional Nano monitor clamp II (PN: 4XH0Z42451) and Nano VESA mount (PN: 4XF0V81630) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 22mm

**Cable Management Support**

**Case Color**
Raven black

**Dimensions (WxDxH)**(1)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.8 x 204.9 x 417.1mm (21.25 x 8.09 x 16.42 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.8 x 204.9 x 567.1mm (21.25 x 8.09 x 22.33 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.8 x 44.4 x 325.9 mm (21.25 x 1.75 x 12.83 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
604 x 161 x 480 mm (23.78 x 6.34 x 18.89 inches)

**Weight**(2)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.1 kg (13.5 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.6 kg (8.0 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
8.9 kg (19.7 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +35° tilt, left & right 45 swivel, -90° to +90° pivot, up to 150mm lift

In the Box

- Monitor with Stand
- 1x DP Cable (1.8m) (for US, Canada only)
- 1x USB-C® to USB-A Cable (1.8m) (for US, Canada only)
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports

- 1x USB-C® 3.2 Gen 1 (DP 1.2 Alt Mode and to 90W PD), USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x DisplayPort™ out
- 1x Ethernet (RJ45)
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.
[3] Supports 1920x1080@60Hz as specified in HDMI® 1.4

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty
CERTIFICATIONS

Green Certifications

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Notes:
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Other Certifications

- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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PERFORMANCE

Panel

3-side NearEdgeless, In-Plane Switching

Backlight

WLED

Display Size

23.8 inches

Max View Area

WxH: 527.0 x 296.5 mm

Resolution

1920 x 1080

Aspect Ratio

16:9

Pixel Pitch

0.275 x 0.275 mm

Dot / Pixel Per Inch

93 dpi

Brightness

250 cd/m²

Contrast Ratio

• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate

60Hz

Color Gamut

72% NTSC

Color Support

16.7 Million

Color Depth

8-bit (6-bit+FRC)

Screen Surface Treatment

Anti-glare

Operating System

Operating System

• Windows® 11 Support
• Windows® 10 Support

Multi-Media

Camera

• Optional Modular Camera Support
• ThinkVision® MC 50 monitor webcam (Some models only)

Microphone

Built-in dual microphone in MC 50 (Models with MC 50 only)

Speakers
Integrated Speakers, 2x 1W

**Power Supply**

**Power Consumption**
- Typical / Max: 22W / 140W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 15W
- Energy Star TEC: 49kWh
- Internal Power Supply

**Voltage Required**
AC 90 to 264 V (50-60Hz)

**Special Features**

**Special Features**
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems). Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional Tiny monitor clamp II (PN: 4XH0Z42451) and Tiny VESA mount II (PN: 4XF0N03161) are needed (sold separately).
For supporting Nano devices, additional Nano monitor clamp II (PN: 4XH0Z42451) and Nano VESA mount (PN: 4XF0V81630) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 22mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
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<td>539.8 x 204.9 x 567.1mm (21.25 x 8.09 x 22.33 inches)</td>
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</table>

**Packaging Dimensions (WxDxH)**
604 x 161 x 480 mm (23.78 x 6.34 x 18.89 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.1 kg (13.45 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.6 kg (8.0 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
8.9 kg (19.62 lbs)

**Mounting**
Supports VESA mount 100mm
Stand
Supports -5° to +35° tilt, left & right 45 swivel, -90° to +90° pivot, up to 150mm lift

In the Box
- Monitor with Stand
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports
Rear Ports
- 1x USB-C® 3.2 Gen 1 (DP 1.2 Alt Mode and to 90W PD), USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x DisplayPort™ out
- 1x Ethernet (RJ-45)
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS
Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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<td>1</td>
<td>Joystick</td>
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<td>2</td>
<td>Source Key</td>
<td>9</td>
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<td>3</td>
<td>Kensington Security Slot</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Power connector</td>
<td>11</td>
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<tr>
<td>5</td>
<td>HDMI 2.1</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>DP 1.4</td>
<td>13</td>
</tr>
<tr>
<td>7</td>
<td>USB-C 3.2 Gen 1 (90W)</td>
<td>14</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
23.8 inches

Max View Area
WxH: 527.0 x 296.5 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.274 x 0.274 mm

Dot / Pixel Per Inch
93 dpi

Brightness
250 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
75Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Color Depth
8-bit (6-bit+FRC)

Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support

Multi-Media

Camera
2592 x 1944, 5.0-megapixel, IR + RGB camera

Microphone
Integrated microphone

Speakers
Integrated Speakers, 2x 5W
**Power Supply**

**Power Consumption**
- Typical / Max: 24.5W / 160W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 14.3W
- Energy Star TEC: 48.2kWh

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

**Special Features**
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light
- Smart Sensor (Ambient Light Sensor, Human Detection Sensor)
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**
- Side: 2.1mm
- Top / Bottom: 2.1mm / 41.4mm

**Cable Management**

Support

**Case Color**

Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.8 x 199.7 x 387.8 mm (21.25 x 7.86 x 15.27 inches)</td>
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<td>539.8 x 199.7 x 542.8 mm (21.25 x 7.86 x 21.37 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.8 x 53.9 x 363.3 mm (21.25 x 2.12 x 14.30 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
590 x 178 x 422 mm (23.23 x 7.01 x 16.61 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.5 kg (14.3 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.5 kg (9.9 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
8.6 kg (18.96 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift
In the Box
• Monitor with Stand
• 1x USB-C® to USB-C® Cable (1.8m)
• 1x Power cable (1.8m)
• Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports
[1]
Rear Ports
[2]
• 1x USB-C® 3.2 Gen 1 (DP 1.4 alt mode, up to 90W), USB upstream
• 4x USB 3.2 Gen 1, USB downstream
• 1x HDMI® 2.1
• 1x DisplayPort™ 1.4
• 1x DisplayPort™ out
• 1x Ethernet (RJ-45)
• 1x Power Connector
• 1x audio-combo (3.5mm, In/Out)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS
Green Certifications

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- Eyesafe® Certified 2.0
- Microsoft® Teams Certification
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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<td>2.</td>
<td>HDMI 1.4</td>
<td>7.</td>
<td>Audio line-out (3.5mm)</td>
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<td>3.</td>
<td>DP 1.2</td>
<td>8.</td>
<td>USB 3.2 Gen 1</td>
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<td>4.</td>
<td>1x USB-C 3.2 Gen 1 (DP 1.2 Alt Mode)</td>
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<td>USB 3.2 Gen 1 (BC 1.2)</td>
</tr>
<tr>
<td>5.</td>
<td>USB 3.2 Gen 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
23.8 inches

Max View Area
WxH: 527.04 x 296.46 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.2745 x 0.2745 mm

Dot / Pixel Per Inch
93 dpi

Brightness
300 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows® 10 Support
• Windows® 7 Support

Power Supply

Power Consumption
• Typical / Max: 25W / 150W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 17W
• Energy Star TEC: 56kWh
• Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)
**Special Features**

- **Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support**
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

- **Smart Power**
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device.

**DESIGN**

**Display**

- **Touchscreen**
  Supports 10-point touch

**Mechanical**

- **Bezel Width**
  - Side: 2mm
  - Top / Bottom: 2mm / 22.2mm

**Cable Management**

- **Support**

**Case Color**

- **Raven black**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>539.8 x 244.1 x 340.5 mm (21.25 x 9.61 x 13.41 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>539.8 x 244.1 x 430.5 mm (21.25 x 9.61 x 16.95 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>539.8 x 44.1 x 326.5 mm (21.25 x 1.74 x 12.85 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

421 x 622 x 172 mm (16.57 x 24.49 x 6.77 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>5.85 kg (12.90 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.79 kg (8.36 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

8.31 kg (18.32 lbs)

**Mounting**

- Supports VESA mount 100mm

**Stand**

- Supports -5° to +70° tilt, up to 90mm lift

**In the Box**

- Monitor with Stand
- 1x DP Cable (1.8m) (for US, Canada only)
- 1x USB-C® to USB-A Cable (1.8m) (for US, Canada only)
- 1x USB-C® to USB-C® Cable
- 1x Power cable (1.8m)
- Quick Setup Guide

**Notes:**

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight.
for each specific model.

**CONNECTIVITY**

**Ports**

Rear Ports

- 1x USB-C® 3.2 Gen 1 (DP 1.2 Alt Mode and to 90W PD), USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

[3] Supports 1920x1080@75Hz as specified in HDMI® 1.4

**SECURITY & PRIVACY**

**Security**

**Physical Locks**

Kensington® Security Slot™

**SERVICE**

**Warranty**

**Base Warranty**

3-year limited warranty

**CERTIFICATIONS**

**Green Certifications**

Green Certifications

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

Notes:

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ThinkVision T24t-20

- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

<p>| | |</p>
<table>
<thead>
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<tr>
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<tr>
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<tr>
<td>5</td>
<td>DP 1.2</td>
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<tr>
<td>6</td>
<td>HDMI 1.4</td>
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<td>VGA</td>
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<td>11</td>
<td>Audio-combo (3.5mm, In/Out)</td>
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<td>USB 2.0</td>
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<td>13</td>
<td>USB 3.2 Gen 1</td>
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**PERFORMANCE**

Panel

3-side Borderless In-Plane Switching

Backlight

WLED

Display Size

23.8 inches

Max View Area

WxH: 527.0 x 296.5 mm

Resolution

1920 x 1080

Aspect Ratio

16:9

Pixel Pitch

0.274 x 0.274 mm

Dot / Pixel Per Inch

93 dpi

Brightness

250 cd/m²

Contrast Ratio

• Contrast Ratio: 1000:1
  • Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

• Extreme Mode: 4 ms
  • Normal Mode: 6 ms

Refresh Rate

75Hz (HDMI® and DP only)

Color Gamut

99% sRGB

Color Support

16.7 Million

Color Depth

8-bit (6-bit+FRC)

Screen Surface Treatment

Anti-glare

Operating System

Operating System

• Windows® 11 Support
  • Windows® 10 Support

Multi-Media

Camera

1920 x 1080, 2.0-megapixel, IR + RGB camera

Microphone

Integrated microphone

Speakers

Integrated Speakers, 2x 3W
**Power Supply**

**Power Consumption**

- Typical / Max: 18W / 60W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 13W
- Energy Star TEC: 41.1kWh
- Internal Power Supply

**Voltage Required**

AC 100 to 240 V (50-60Hz)

**Special Features**

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**

- Side: 2.1mm
- Top / Bottom: 2.1mm / 41.4mm

**Cable Management**

Support

**Case Color**

Raven black

**Dimensions (WxDxH)**

<table>
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**Packaging Dimensions (WxDxH)**

590 x 178 x 422 mm (23.23 x 7.01 x 16.61 inches)

**Weight**

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<td>6.0 kg (13.2 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.0 kg (8.8 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

8.5 kg (18.74 lbs)

**Mounting**

Supports VESA mount 100mm

**Stand**

Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

**In the Box**

- Monitor with Stand
• 1x DP Cable (1.8m)(for EMEA / LA / AP)
• 1x HDMI® Cable (1.8m)(for NA)
• 1x USB-A to USB-B Cable (1.8m)
• 1x Power cable (1.8m)
• Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
• 1x USB 2.0
• 1x USB-B 3.2 Gen 1, USB upstream
• 3x USB 3.2 Gen 1, USB downstream
• 1x HDMI® 1.4
• 1x DisplayPort™ 1.2
• 1x VGA
• 1x Power Connector
• 1x audio-combo (3.5mm, In/Out)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
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USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• RoHS compliant
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• TCO edge 2.0
• Volatile Organic Compound Certification
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Other Certifications

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- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Control Buttons
2. Kensington Security Slot
3. AC Power-in
4. HDMI 2.1 TMDS
5. USB-C 3.2 Gen 1 (DP 1.4 Alt Mode)
6. DisplayPort 1.4
7. DisplayPort 1.4
8. Ethernet (RJ-45)
9. USB-C 3.2 Gen 1
10. USB 3.2 Gen 1
11. Audio-out (3.5mm)
12. USB 3.2 Gen 1
13. USB 3.2 Gen 1
14. USB 3.2 Gen 1
PERFORMANCE

Panel
In-Plane Switching (IPS)
Backlight
WLED
Display Size
27 inches
Max View Area
WxH: 596.7 x 335.7 mm
Resolution
3840 x 2160 (2D)
Aspect Ratio
16:9
Pixel Pitch
0.155 x 0.155 mm
Dot / Pixel Per Inch
163 dpi
Brightness
310 cd/m²
Contrast Ratio
- Contrast Ratio: 1200:1
- Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms
Refresh Rate
60Hz
Color Gamut
- 100% BT.709
- 100% sRGB
- 83% BT.2020
- 99% Adobe® RGB
- 99% DCI-P3
Color Support
16.7 Million
Color Depth
8-bit
Screen Surface Treatment
Anti-glare
Curvature
Flat Panel

Operating System
Operating System
- Windows® 11 Support
- Windows® 10 Support

Multi-Media
Camera
No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)

**Microphone**
No microphone

**Speakers**
Integrated Speakers, 2x 5W

**Power Supply**

**Power Consumption**
- Typical / Max: 43.8W / 246W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

**Special Features**
- HDR Compliance (HDR10 Decoding)
- Factory Calibration: Avg. Delta E<1 (for DCI-P3, Adobe® RGB and sRGB)
- 3D Explorer, available from Lenovo® Accessories and Display Manager (ThinkColour)
  Lenovo® Accessories and Display Manager supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems)[1]
- 3D Master (3D viewing App), Design Engine, 2D-to-3D Converter, Plugins, SDK
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**3D Features**

- 2D/3D Switchable
- 3D resolution: 1920 x 2160
- Environmental conditions: 0 lx - 1000 lx
- Eye tracking support
- Number of viewers: 1
- Optimal viewing angle: -20° to +20° horizontal, -20° to +20° vertical
- Optimal viewing distance: 60 - 100 cm
- Recommended 3D viewing distance: 70 - 90 cm
- Minimal PC Requirements:
  - CPU: i5 7400/3.00GHz
  - Graphic: NVIDIA® GeForce GTX 1050 (or AMD, Intel® graphics card with equivalent performance)
  - Operating system: Windows® 10 (64-bit)
  - Memory: 8GB DDR5
  - Storage: 50GB available space[2]

- Supported third-party software: Microsoft® 365, PTC Creo, Autodesk 3ds Max, Autodesk VRED, Autodesk Maya, Trimble SketchUp Pro, Blender, Lumiscaphe Patchwork 3D, Dassault Systems Deltagen, Unity, C++ & Unreal (via SDK)[3]

**Notes:**

[1] 3D Explorer must be installed on the PC connected to the monitor.
[2] RTX2080 and above; Graphic card driver newer than version 527.41
[3] Selected third-party products are listed. Compatibility is tested on limited versions/models only. Compatible product list is subject to change without notice. 3D monitor is developed to be compatible with and should be used with fully licensed specific versions of third-party software only. Lenovo® makes no representation or warranty, and assumes no responsibility with regard to, the selection, performance, or use of third-party products or services that are licensed/provided by third parties under their own terms and conditions and may be subject to license fees and/or other costs.

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
Bezel Width
- Side: 8mm
- Top / Bottom: 8mm / 44.3mm

Buttons
- Menu joystick
- Power button
- Source Key
- Volume down button
- Volume up button

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>614.8 x 222.7 x 413 mm (24.2 x 8.77 x 16.26 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>614.8 x 222.7 x 568 mm (24.2 x 8.77 x 22.36 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>614.8 x 72.3 x 390 mm (24.2 x 2.85 x 15.35 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
720 x 165 x 520 mm (28.35 x 6.5 x 20.47 inches)

Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>8.9 kg (19.6 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>6.6 kg (14.6 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
12.4 kg (27.3 lbs)

Mounting
Supports VESA mount 100 x 100 mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, -90° to +90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m)
- 1x HDMI® cable (1.8m)
- 1x USB-C® to USB-A Cable (1.8m)
- 1x USB-C® to USB-C® Gen 2 Cable (1.5m)
- 1x Power cable (1.8m)
- 1x Quick Setup Guide
- Factory Calibration Report
- Cleaning Cloth

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
Support 10M / 100M / 1000M
Ports

Rear Ports
- 1x USB-C® 3.2 Gen 1 (15W), USB downstream
- 1x USB-C® 3.2 Gen 1 (DP 1.4 Alt Mode and up to 100W PD), USB upstream
- 4x USB 3.2 Gen 1, USB downstream
- 2x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™ (2.5 mm x 6 mm and 3 mm x 7 mm)

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- EU Energy Label Exempt (G-class)
- RoHS (2011/65/EU)

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Other Certifications
TÜV Rheinland® Eye Comfort Certification

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<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power connector</td>
</tr>
<tr>
<td>2.</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>3.</td>
<td>HDMI 2.0</td>
</tr>
<tr>
<td>4.</td>
<td>HDMI 2.0</td>
</tr>
<tr>
<td>5.</td>
<td>HDMI 2.0</td>
</tr>
<tr>
<td>6.</td>
<td>DisplayPort 1.4</td>
</tr>
<tr>
<td>7.</td>
<td>DP out</td>
</tr>
<tr>
<td>8.</td>
<td>USB-C 3.2 Gen 1 (DP 1.4 Alt Mode)</td>
</tr>
<tr>
<td>9.</td>
<td>USB-B 3.2 Gen 1</td>
</tr>
<tr>
<td>10.</td>
<td>Audio-out (3.5mm)</td>
</tr>
<tr>
<td>11.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>12.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>13.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>14.</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel

Mini-LED Backlight with 1152 zones local dimming

Backlight

Mini-LED (with 1152 zones local dimming)

Display Size

27 inches

Max View Area

WxH: 596.74 x 335.66 mm

Resolution

3840 x 2160

Aspect Ratio

16:9

Pixel Pitch

0.1554 x 0.1554 mm

Dot / Pixel Per Inch

163 dpi

Brightness

• Peak: 1200 cd/m²
• Typical: 620 cd/m²

Contrast Ratio

• Contrast Ratio: 1M:1 (HDR)
• Contrast Ratio: 1100:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate

60Hz

Color Gamut

• 100% BT.709
• 100% sRGB
• 73% BT2020
• 99.5% DCI-P3

Color Support

1.07 Billion

Color Depth

10-bit (8-bit+FRC)

Screen Surface Treatment

Anti-glare

Operating System

Operating System

• Windows® 10 Support
• Windows® 7 Support

Multi-Media

Speakers

Optional Soundbar support (PN: 0A36190)
Power Supply

Power Consumption
- Typical / Max: 70W / 270W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W

Voltage Required
AC 100 to 240 V (47-63Hz)

Special Features

Special Features
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Processor LUT: 14 bit
- Factory Calibration: Avg. Delta E<1
- Picture In Picture (PIP) / Picture By Picture (PBP) Support
- HDR10 Compliance
- DisplayHDR™ 1000
- Dolby Vision®® Approved
- HLG
- Headphone Hood
- KVM Switch
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power
delivery to each device

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny / Nano devices, additional Tiny / Nano monitor clamp II (PN: 4XH0Z42451) and Tiny VESA mount II
(PN: 4XF0N03161) are needed (sold separately).

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 16mm

Cable Management

Case Color
Raven black

Dimensions (WxDxH)(3)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>613.1 x 234.1 x 458.8 mm (24.14 x 9.22 x 18.06 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>613.1 x 234.1 x 593.8 mm (24.14 x 9.22 x 23.38 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>613.1 x 53.7 x 359.7 mm (24.14 x 2.11 x 14.16 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
200 x 758 x 493 mm (7.87 x 29.84 x 19.41 inches)

Weight(2)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>10.8 kg (23.81 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>6.5 kg (14.44 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
13.5 kg (29.76 lbs)
Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +35° tilt, left & right 45 swivel, -90° to 90° pivot, up to 135mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m)
- 1x HDMI® cable (1.8m)
- 1x USB-A to USB-B Cable (1.8m)
- 1x USB-C® to USB-C® Cable (1.5m)
- 1x Power cable (1.8m)
- 1x Shading Hood
- Factory Calibration Report
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x USB-C® 3.2 Gen 2 (DP 1.4 Alt Mode and up to 100W PD), USB upstream
- 1x USB-B 3.2 Gen 1, USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 3x HDMI® 2.0
- 1x DisplayPort™ 1.4
- 1x DisplayPort™ 1.4 (Out)
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] Up to 100W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

RoHS compliant

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

TÜV Rheinland® Low Blue Light

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OVERVIEW

1. Power connector
2. HDMI 1.4
3. DisplayPort
4. Audio-out (3.5mm)
**PERFORMANCE**

**Panel**

3-side NearEdgeless, In-Plane Switching

**Backlight**

WLED

**Display Size**

27 inches

**Max View Area**

WxH: 596.7 x 335.7 mm

**Resolution**

2560 x 1440

**Aspect Ratio**

16:9

**Pixel Pitch**

0.233 x 0.233 mm

**Dot / Pixel Per Inch**

108 dpi

**Brightness**

350 cd/m²

**Contrast Ratio**

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

**View Angle (H / V)**

Horizontal: 178°, Vertical: 178°

**Response Time**

- Extreme Mode: 4 ms
- Normal Mode: 6 ms

**Refresh Rate**

75Hz

**Color Gamut**

99% sRGB

**Color Support**

16.7 Million

**Color Depth**

8-bit

**Screen Surface Treatment**

Anti-glare

**Operating System**

**Operating System**

- Windows® 10 Support
- Windows® 7 Support

**Multi-Media**

**Speakers**

Integrated Speakers, 2x 2W

**Power Supply**

**Power Consumption**

- Typical / Max: 30W / 40W
**ThinkVision E27q-20**

- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 20.7W
- Energy Star TEC: 64.95kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
For supporting Tiny devices, additional Sandwich Mounting Kit (PN: 4XH0N04098) are needed (sold separately)

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 22mm

**Cable Management**

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>613.6 x 220.0 x 419.0 mm (24.16 x 8.66 x 16.50 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>613.6 x 220.0 x 574.0 mm (24.16 x 8.66 x 22.60 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>613.6 x 46.2 x 367.6 mm (24.16 x 1.82 x 14.47 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
730 x 186 x 460 mm (28.74 x 7.32 x 18.11 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.6 kg (14.6 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.5 kg (9.8 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
9.1 kg (20.06 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +22° tilt, left & right 360° swivel, -90° to +90° pivot, up to 155mm lift

**In the Box**
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide
- Warranty Booklet

**Notes:**
[1] Tiny support model (62DF) only.
[2] The system dimensions may vary depending on configurations.
[3] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**
Ports

Rear Ports

- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x audio-out (3.5mm)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

  - USB 2.0: 480 Mbit/s;
  - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
  - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
  - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
  - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
  - Thunderbolt™ 3/4: 40 Gbit/s.

[2] Supports 2560x1440@75Hz as specified in HDMI® 1.4

SECURITY & PRIVACY

Security

Physical Locks

Kensington® Security Slot™

SERVICE

Warranty

Base Warranty

3-year limited warranty

CERTIFICATIONS

Green Certifications

- ENERGY STAR® Certified
- EPEAT™ Silver Registered
- EU Energy Label (F-class)
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Power connector 4. DisplayPort
2. HDMI 5. Audio-out (3.5mm)
3. HDMI

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power connector</td>
</tr>
<tr>
<td>2</td>
<td>HDMI</td>
</tr>
<tr>
<td>3</td>
<td>HDMI</td>
</tr>
<tr>
<td>4</td>
<td>DisplayPort</td>
</tr>
<tr>
<td>5</td>
<td>Audio-out (3.5mm)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel

3-side NearEdgeless, In-Plane Switching

Backlight

WLED

Display Size

28 inches

Max View Area

WxH: 620.9 × 341.3 mm

Resolution

3840 x 2160

Aspect Ratio

16:9

Pixel Pitch

0.16 x 0.16 mm

Dot / Pixel Per Inch

157 dpi

Brightness

300 cd/m²

Contrast Ratio

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

- Extreme Mode: 4 ms
- Normal Mode: 6 ms
- Off Mode: 14 ms

Refresh Rate

60Hz

Color Gamut

- 90% DCI-P3
- 99% sRGB

Color Support

1.07 Billion

Color Depth

10-bit

Screen Surface Treatment

Anti-glare

Operating System

Operating System

- Windows® 11 Support
- Windows® 10 Support
- Windows® 7 Support

Multi-Media

Speakers

Integrated Speakers, 2x 2W

Power Supply
Power Consumption
- Typical / Max: 30W / 50W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 25.25W
- Energy Star TEC: 78.48kWh
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features
- HDR10 Compliance
- Natural Low Blue Light

DESIGN

Mechanical
ThinkCentre® M Series Support
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional Tiny Sandwich Kit II (PN: 4XH0N04098) is needed (sold separately).
For supporting Nano devices, additional Nano VESA Mount (PN: 4XF0V81630) is needed (sold separately).

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 22.8mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>636.9 x 220.0 x 380.6 mm (25.07 x 8.66 x 14.98 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>636.9 x 220.0 x 580.6 mm (25.07 x 8.66 x 22.86 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>636.9 x 48.9 x 373.7 mm (25.07 x 1.93 x 14.71 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
744 x 170 x 489 mm (29.29 x 6.69 x 19.25 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.8 kg (15.0 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.6 kg (10.1 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
9.2 kg (20.28 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +22° tilt, left & right 360° swivel, -90° to +90° pivot, up to 200mm lift

In the Box
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide
Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports[1]
Rear Ports
• 2x HDMI® 2.0
• 1x DisplayPort™ 1.4
• 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Silver Registered[2]
• RoHS compliant
• TCO Certified 9.0
• TCO edge 2.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
• Eyesafe® Certified
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Power connector
2. HDMI
3. DisplayPort
4. Audio-out (3.5mm)
PERFORMANCE

Panel

3-side NearEdgeless, In-Plane Switching

Backlight

WLED

Display Size

29 inches

Max View Area

WxH: 672.8 x 283.8 mm

Resolution

2560 x 1080

Aspect Ratio

21:9

Pixel Pitch

0.2628 x 0.2628 mm

Dot / Pixel Per Inch

96 dpi

Brightness

300 cd/m²

Contrast Ratio

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate

90Hz

Color Gamut

99% sRGB

Color Support

16.7 Million

Color Depth

8-bit (Hi-FRC)

Screen Surface Treatment

Anti-glare

Operating System

Operating System

- Windows® 10 Support
- Windows® 7 Support

Multi-Media

Speakers

Integrated Speakers, 2x 3W, optional soundbar support

Power Supply

Power Consumption

- Typical / Max: 36W / 45W
Sleep / Off mode: <0.3W
Switch-off Mode: <0.3W
Energy Star Power On: 13W
Energy Star TEC: 40kWh
Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

AMD FreeSync™
AMD FreeSync™ technology only can work with AMD Radeon™ series graphics card.

DESIGN

Mechanical

Bezel Width
- Side: 1.8mm
- Top / Bottom: 1.8mm / 26.4mm

Cable Management

Case Color

Raven black

Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>688.4 x 220.0 x 331.1 mm (27.10 x 8.66 x 13.04 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>688.4 x 220.0 x 508.1 mm (27.10 x 8.66 x 20.00 inches)</td>
</tr>
<tr>
<td>Unpacked Head Only</td>
<td>688.4 x 47.5 x 320.0 mm (27.10 x 1.87 x 12.60 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)

796 x 155 x 395 mm (31.34 x 6.11 x 15.56 inches)

Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.6 kg (14.6 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.4 kg (9.7 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight

8.5 kg (18.74 lbs)

Mounting

Supports VESA mount 100mm

Stand

Supports -5° to +22° tilt, left & right 360° swivel, up to 155mm lift

In the Box

- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight.
for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered[2]
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

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- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)
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### OVERVIEW

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<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Power connector</td>
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</tr>
<tr>
<td>2</td>
<td>HDMI 1.4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>DP 1.2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>USB-C 3.1 Gen 1</td>
<td></td>
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<tr>
<td>5</td>
<td>DP out</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Ethernet (RJ-45)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>USB 3.1 Gen 1</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>USB 3.1 Gen 1</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Audio line-out (3.5mm)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>USB 3.1 Gen 1</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>USB 3.1 Gen 1 (BC)</td>
<td></td>
</tr>
</tbody>
</table>
**PERFORMANCE**

**Panel**

- 4-side NearEdgeless, In-Plane Switching

**Backlight**

- WLED

**Display Size**

- 27 inches

**Max View Area**

- WxH: 596.74 x 335.66 mm

**Resolution**

- 2560 x 1440

**Aspect Ratio**

- 16:9

**Pixel Pitch**

- 0.2331 x 0.2331 mm

**Dot / Pixel Per Inch**

- 109 dpi

**Brightness**

- 350 cd/m²

**Contrast Ratio**

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

**View Angle (H / V)**

- Horizontal: 178°, Vertical: 178°

**Response Time**

- Extreme Mode: 4 ms
- Normal Mode: 6 ms

**Refresh Rate**

- 60Hz

**Color Gamut**

- 85% DCI-P3
- 99% BT.709
- 99% sRGB

**Color Support**

- 16.7 Million

**Color Depth**

- 8-bit

**Screen Surface Treatment**

- Anti-glare

**Operating System**

**Operating System**

- Windows* 10 Support
- Windows* 7 Support

**Multi-Media**

**Speakers**

- Integrated Speakers, 2x 1W
- Optional Soundbar support (PN: 0A36190)

**Power Supply**
Power Consumption

- Typical / Max: 27W / 150W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 19W
- Energy Star TEC: 61kWh
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Processor LUT: 8 bit
- Factory Calibration: Avg. Delta E<2
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

DESIGN

Mechanical
Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 2mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)\(^{1}\)

| Models       | Dimensions                                      |
|--------------|------------------------------------------------|---------------------------------|
| Lowest Position | 613.8 x 208 x 441.5mm (27.17 x 8.19 x 17.38 inches) |
| Highest Position | 613.8 x 208 x 576.5 mm (27.17 x 8.19 x 22.70 inches) |
| Head Only       | 613.8 x 46.9 x 353.8 mm (27.17 x 1.85 x 13.92 inches) |

Packaging Dimensions (WxDxH)
722 x 182 x 463 mm (28.43 x 7.17 x 18.23 inches)

Weight\(^{2}\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>7.35 kg (16.17 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.87 kg (10.71 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
9.55 kg (21.01 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +35° tilt, left & right 45 swivel, -90° to 90° pivot, up to 135mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m) (NA only)
- 1x USB-C® to USB-A Cable (1.8m) (NA only)
- 1x USB-C® to USB-C® Cable (1.8m)
ThinkVision P27h-20

- 1x Power cable (1.8m)
- Factory Calibration Report
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports
Rear Ports
- 1x USB-C® 3.1 Gen 1 (DP 1.2 Alt Mode, up to 90W), USB upstream
- 4x USB 3.1 Gen 1 (1x BC), USB downstream
- 1x USB-C® 3.1 Gen 1.4
- 1x DisplayPort™ 1.2
- 1x DisplayPort™ out
- 1x Ethernet (RJ-45)
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

ThinkVision P27h-20 - April 2024
• ENERGY STAR® Certified
• EPEAT™ Silver Registered[2]
• RoHS compliant
• TCO Certified 8.0
• TCO edge 2.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
TÜV Rheinland® Eye Comfort Certification

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# OVERVIEW

<table>
<thead>
<tr>
<th>1. Power connector</th>
<th>7. USB 3.1 Gen 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. HDMI 1.4</td>
<td>8. USB 3.1 Gen 1</td>
</tr>
<tr>
<td>3. DP 1.2</td>
<td>9. Audio line-out (3.5mm)</td>
</tr>
<tr>
<td>4. USB-C 3.1 Gen 1</td>
<td>10. USB 3.1 Gen 1</td>
</tr>
<tr>
<td>5. DP out</td>
<td>11. USB 3.1 Gen 1 (BC)</td>
</tr>
<tr>
<td>6. Ethernet (RJ-45)</td>
<td></td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
Panel
3-side NearEdgeless, In-Plane Switching
Backlight
WLED
Display Size
27 inches
Max View Area
WxH: 596.74 x 335.66 mm
Resolution
2560 x 1440
Aspect Ratio
16:9
Pixel Pitch
0.2331 x 0.2331 mm
Dot / Pixel Per Inch
109 dpi
Brightness
350 cd/m²
Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
Refresh Rate
60Hz
Color Gamut
• 85% DCI-P3
• 99% BT.709
• 99% sRGB
Color Support
16.7 Million
Color Depth
8-bit
Screen Surface Treatment
Anti-glare

Operating System
Operating System
• Windows® 11 Support
• Windows® 10 Support
• Windows® 7 Support

Multi-Media
Speakers
• Integrated Speakers, 2x 1W
• Optional Soundbar support (PN: 0A36190)
**Power Supply**

**Power Consumption**
- Typical / Max: 27W / 150W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 14.9W
- Energy Star TEC: 48.7kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

- Processor LUT: 8 bit
- Factory Calibration: Avg. Delta E<2

**DESIGN**

**Mechanical**

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 23.9mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>614.0 x 208.0 x 425.9 mm (24.17 x 8.19 x 16.77 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>614.0 x 208.0 x 563.9 mm (24.17 x 8.19 x 22.20 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>614.0 x 47.7 x 369.1 mm (24.17 x 1.88 x 14.53 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
722 x 182 x 463 mm (28.43 x 7.17 x 18.23 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>7.43 kg (16.38 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.99 kg (11.00 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
9.51 kg (20.92 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +35° tilt, left & right 45 swivel, -90° to 90° pivot, up to 135mm lift

**In the Box**
- Monitor with Stand
- 1x DP Cable (1.8m) (NA, Brazil only)
- 1x USB-C® to USB-A Cable (1.8m) (NA, Brazil only)
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Factory Calibration Report
- Quick Setup Guide
Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo\textsuperscript{\textregistered} lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Network**

**Ethernet**

Support 10M / 100M / 1000M

**Ports**\(^{(1)}\)

**Rear Ports**\(^{(2)}\)

- 1x USB-C\textsuperscript{\textregistered} 3.2 Gen 1 (DP 1.2 Alt Mode and to 90W PD), USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI\textsuperscript{\textregistered} 1.4
- 1x DisplayPort™ 1.2
- 1x DisplayPort™ out
- 1x Ethernet (RJ-45)
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4\textsuperscript{\textregistered} 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4\textsuperscript{\textregistered} 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

[2] Up to 90W power delivery to compatible devices by USB-C\textsuperscript{\textregistered}. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

**SECURITY & PRIVACY**

**Security**

**Physical Locks**

Kensington\textsuperscript{\textregistered} Security Slot™

**SERVICE**

**Warranty**

**Base Warranty**

3-year limited warranty

**CERTIFICATIONS**

**Green Certifications**\(^{(3)}\)

**Green Certifications**

- ENERGY STAR\textsuperscript{\textregistered} Certified
- EPEAT\textsuperscript{TM} Gold Registered\(^{(3)}\)
- RoHS compliant
- TCO Certified 9.0
• TCO edge 2.0

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<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>2</td>
<td>Power connector</td>
</tr>
<tr>
<td>3</td>
<td>HDMI 2.1 TMDS</td>
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<tr>
<td>4</td>
<td>DP 1.4</td>
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<td>5</td>
<td>USB-C 3.2 Gen 1 (DP 1.4 Alt Mode)</td>
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<td>6</td>
<td>DP out</td>
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<td>7</td>
<td>USB-B 3.2 Gen 1</td>
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<td>8</td>
<td>Ethernet (RJ-45)</td>
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<td>13</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>14</td>
<td>USB-C 3.2 Gen 1 (15W)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
4-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
27 inches

Max View Area
WxH: 596.7 x 335.7 mm

Resolution
2560 x 1440

Aspect Ratio
16:9

Pixel Pitch
0.233 x 0.233 mm

Dot / Pixel Per Inch
109 dpi

Brightness
350 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
- 95% DCI-P3
- 99% BT.709
- 99% sRGB

Color Support
1.07 Billion

Color Depth
10-bit (8-bit+FRC)

Screen Surface Treatment
- Hard Coating (3H)
- Anti-glare

Operating System

Operating System
- Windows® 11 Support
- Windows® 10 Support

Multi-Media

Camera
- No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)
- ThinkVision® MC 60 monitor webcam (Some models only)

Speakers
Optional Modular Soundbar support (MS30 Monitor Soundbar)

**Power Supply**

**Power Consumption**
- Typical / Max: 22W / 180W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 19W
- Energy Star TEC: 63kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

**Special Features**
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Factory Calibration: Avg. Delta E<2
- Picture In Picture (PIP) / Picture By Picture (PBP) Support
- HDR10 Compliance
- KVM Switch
- Mirrored Power Button
  The monitor’s power button can be used to control the on/off and sleep modes of a compatible laptop when the two
  are connected via USB-C® port
- Natural Low Blue Light
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power
delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

**ThinkCentre® M Series Tiny Support**
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold
separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 2mm

**Cable Management**

**Support**

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>611.9 x 204.5 x 380.3 mm (24.09 x 8.05 x 14.97 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>611.9 x 204.5 x 535.3 mm (24.09 x 8.05 x 21.07 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>611.9 x 48.0 x 353.4 mm (24.09 x 1.89 x 13.91 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
690 x 525 x 148 mm (27.17 x 20.67 x 5.83 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>7.0 kg (15.4 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.9 kg (10.8 lbs)</td>
</tr>
</tbody>
</table>
Packaging Weight
10.3 kg (22.71 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, -90° to +90° pivot, up to 155mm lift

In the Box
• Monitor with Stand
• 1x DP Cable (1.8m) (for US, Canada, and Brazil only)
• 1x USB-B to USB-A Cable (1.8m)
• 1x USB-C® to USB-C® Cable (1m)
• 1x Power cable (1.8m)
• Factory Calibration Report
• Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
Support 10M / 100M / 1000M

Ports[1]

Rear Ports[2]
• 1x USB-C® 3.2 Gen 1 (15W), USB downstream
• 1x USB-C® 3.2 Gen 1 (DP 1.4 32.4 Gbps for 4 lanes Alt Mode and up to 100W PD), USB upstream
• 1x USB-B 3.2 Gen 1, USB upstream
• 4x USB 3.2 Gen 1 (1x BC), USB downstream
• 1x HDMI® 2.1 TMDS[3]
• 1x DisplayPort™ 1.4
• 1x DisplayPort™ out
• 1x Ethernet (RJ-45)
• 1x Power Connector
• 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 100W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.
[3] Supports 2560x1440@60Hz as specified in HDMI® 2.1

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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### OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Power connector</td>
</tr>
<tr>
<td>2</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>3</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>4</td>
<td>DP 1.4</td>
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<td>5</td>
<td>DP 1.4 out</td>
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<td>6</td>
<td>USB4 40Gbps</td>
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<td>7</td>
<td>USB-C 3.2 Gen 2</td>
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<td>8</td>
<td>Ethernet (RJ-45)</td>
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<tr>
<td>9</td>
<td>USB 3.2 Gen 2</td>
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<td>10</td>
<td>USB 3.2 Gen 2</td>
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<tr>
<td>11</td>
<td>Audio-out (3.5mm)</td>
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<td>12</td>
<td>USB-C 3.2 Gen 2</td>
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<td>13</td>
<td>USB 3.2 Gen 2</td>
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<tr>
<td>14</td>
<td>USB 3.2 Gen 2</td>
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</tbody>
</table>
PERFORMANCE

Panel
  3-side NearEdgeless, In-Plane Switching
Backlight
  Mini-LED
Display Size
  27 inches
Max View Area
  WxH: 596.7x335.6 mm
Resolution
  3840 x 2160
Aspect Ratio
  16:9
Pixel Pitch
  0.155 x 0.155 mm
Dot / Pixel Per Inch
  163 dpi
Brightness
  Peak: 1200 cd/m²
  Typical: 650 cd/m²
Contrast Ratio
  Contrast Ratio: 1000:1
  Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
  Horizontal: 178°, Vertical: 178°
Response Time
  • Extreme Mode: 4 ms
  • Normal Mode: 6 ms
Refresh Rate
  60Hz
Color Gamut
  • 100% BT.709
  • 100% sRGB
  • 81% BT.2020
  • 99% Adobe® RGB
  • 99% DCI-P3
Color Support
  1.07 Billion
Color Depth
  10-bit (8-bit+FRC)
Screen Surface Treatment
  Anti-glare
Curvature
  Flat Panel

Operating System

Operating System
  • Windows® 11 Support
  • Windows® 10 Support

Multi-Media
Camera
Optional Modular Camera Support

Microphone
No microphone

Speakers
Optional Modular Soundbar support

**Power Supply**

**Power Consumption**
- Typical / Max: 26W / 315W
- Sleep / Off mode: <0.5W / <0.3W
- Switch-off Mode: <0.3W
- Energy Star Power On: 26W
- Energy Star TEC: 82.6kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Factory Calibration: Avg. Delta E<1.5
- Picture In Picture (PIP) / Picture By Picture (PBP) Support
- HDR10 Compliance
  DisplayHDR™ 1000
- HLG
- KVM Switch
- Smart Sensor (Ambient Light Sensor, Human Detection Sensor)
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny / Nano devices, additional Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 27.1mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>613.5 x 220.4 x 397.8 mm (24.15 x 8.68 x 15.66 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>613.5 x 220.4 x 549.8 mm (24.15 x 8.68 x 21.65 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>613.5 x 76.4 x 372.9 mm (24.15 x 3.01 x 14.68 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
706 x 163 x 504 mm (27.8 x 6.41 x 19.84 inches)
### Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>8.8 kg (19.4 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>6.2 kg (13.7 lbs)</td>
</tr>
</tbody>
</table>

### Packaging Weight

12 kg (26.5 lbs)

### Mounting

Supports VESA mount 100 x 100 mm

### Stand

Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

### In the Box

- Monitor with Stand
- 1x DP Cable (1.8m) (for US, Canada only)
- 1x USB-C® to USB-A Gen 2 Cable (1m)
- 1x USB4® Cable (1m)
- 1x Power cable (1.8m)
- Factory Calibration Report
- Quick Setup Guide

### Notes:

1. The system dimensions may vary depending on configurations.
2. The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

### CONNECTIVITY

#### Network

**Ethernet**

Support 10M / 100M / 1000M

#### Ports

**Rear Ports**

- 1x USB-C® 3.2 Gen 2 (support data transfer, up to 15W PD), USB downstream
- 1x USB-C® 3.2 Gen 2, USB upstream
- 1x USB4® 40Gbps (support data transfer, DP 1.4 Alt Mode and up to 140W PD), USB upstream
- 4x USB 3.2 Gen 2 (1x BC 1.2), USB downstream
- 2x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x DisplayPort™ 1.4 (Out)
- 1x Ethernet (RJ-45)
- 1x audio-out (3.5mm)

**Notes:**

1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
   - USB 2.0: 480 Mbit/s;
   - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
   - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
   - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
   - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
   - Thunderbolt™ 3/4: 40 Gbit/s.
2. Supports 3840x2160@60Hz as specified in HDMI® 2.1.

### SECURITY & PRIVACY
Security
Physical Locks
Kensington® Security Slot™ (2.5 mm x 6 mm and 3 mm x 7 mm)

SERVICE
Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS
Green Certifications
Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• EU Energy Label (F-class)
• RoHS compliant
• Volatile Organic Compound Certification

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications
Other Certifications
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light

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# OVERVIEW

1. Kensington Security Slot
2. Power connector
3. HDMI 2.1 TMDS
4. DP 1.4
5. DP out
6. USB-B 3.2 Gen 1
7. USB 3.2 Gen 1
8. USB 3.2 Gen 1 (BC)
9. Audio line-out (3.5mm)
10. USB 3.2 Gen 1
11. USB 3.2 Gen 1

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**ThinkVision P27q-30**

**PSREF**

**Product Specifications**

**Reference**

1 of 6
**PERFORMANCE**

**Panel**
- 4-side NearEdgeless, In-Plane Switching

**Backlight**
- WLED

**Display Size**
- 27 inches

**Max View Area**
- WxH: 596.7 x 335.7 mm

**Resolution**
- 2560 x 1440

**Aspect Ratio**
- 16:9

**Pixel Pitch**
- 0.233 x 0.233 mm

**Dot / Pixel Per Inch**
- 109 dpi

**Brightness**
- 350 cd/m²

**Contrast Ratio**
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

**View Angle (H / V)**
- Horizontal: 178°, Vertical: 178°

**Response Time**
- Extreme Mode: 4 ms
- Normal Mode: 6 ms
- Off Mode: 14 ms

**Refresh Rate**
- 60Hz

**Color Gamut**
- 95% DCI-P3
- 99% BT.709
- 99% sRGB

**Color Support**
- 1.07 Billion

**Color Depth**
- 10-bit (8-bit+FRC)

**Screen Surface Treatment**
- Hard Coating (3H)
- Anti-glare

**Operating System**
- Windows® 11 Support
- Windows® 10 Support

**Multi-Media**
- No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)
- ThinkVision® MC 60 monitor webcam (Some models only)
ThinkVision P27q-30

Speakers
Optional Modular Soundbar support (MS30 Monitor Soundbar)

Power Supply

Power Consumption
- Typical / Max: 23W / 68W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 20W
- Energy Star TEC: 60kWh
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Special Features
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Factory Calibration: Avg. Delta E<2
- HDR10 Compliance
- Natural Low Blue Light
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 2mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)\(^3\)

<table>
<thead>
<tr>
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</tr>
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<tbody>
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<td>Head Only</td>
<td>611.9 x 48.0 x 353.4 mm (24.09 x 1.89 x 13.91 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
690 x 148 x 525 mm (21.17 x 5.83 x 20.67 inches)

Weight\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.8 kg (15.0 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.7 kg (10.4 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
10.0 kg (22.1 lbs)
Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, -90° to +90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m)
- 1x USB-A to USB-B Cable (1.8m)
- 1x Power cable (1.8m)
- Factory Calibration Report
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x USB-B 3.2 Gen 1, USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x DisplayPort™ out
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Supports 2560x1440@60Hz as specified in HDMI® 2.1

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS
Green Certifications

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified
- TCO edge

Notes:

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[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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**OVERVIEW**

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<thead>
<tr>
<th>Number</th>
<th>Port Type</th>
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<tbody>
<tr>
<td>1</td>
<td>Power connector</td>
</tr>
<tr>
<td>2</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>3</td>
<td>USB 3.2 Gen 1</td>
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<td>4</td>
<td>USB 3.2 Gen 1</td>
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<td>5</td>
<td>Ethernet (RJ-45)</td>
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<td>Thunderbolt 4 Out</td>
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<td>DP 1.2</td>
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<td>12</td>
<td>Audio-out (3.5mm)</td>
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<td>13</td>
<td>USB-C 3.2 Gen 1</td>
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<tr>
<td>14</td>
<td>USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching
Backlight
WLED
Display Size
27 inches
Max View Area
WxH: 596.7 x 335.6 mm
Resolution
3840 x 2160
Aspect Ratio
16:9
Pixel Pitch
0.1554 x 0.1554 mm
Dot / Pixel Per Inch
163 dpi
Brightness
• Peak: 450 cd/m²
• Typical: 400 cd/m²
Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 300000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
Refresh Rate
60Hz
Color Gamut
• 100% BT.709
• 100% sRGB
• 83.7% BT.2020
• 99.1% DCI-P3
• 99.5% Adobe® RGB
Color Support
1.07 Billion
Color Depth
10-bit (8-bit+FRC)
Screen Surface Treatment
Anti-glare
Operating System
Operating System
• Windows® 10 Support
• Windows® 7 Support
Multi-Media
Camera
• No bundled webcam (Support ThinkVision® MC 50 Monitor Webcam, sold separately)
• ThinkVision® MC 50 monitor webcam (Some models only)
  Speakers
  • Integrated Speakers, 2x 3W
  • Optional Soundbar support (PN: 0A36190)

**Power Supply**

**Power Consumption**
  • Typical / Max: 35W / 240W
  • Sleep / Off mode: <0.5W
  • Switch-off Mode: <0.3W
  • Energy Star Power On: 26W
  • Energy Star TEC: 97kWh
  • Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

Special Features
  • Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
    Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
    Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
  • Factory Calibration: Avg. Delta E<1
  • Shading Hood Support (To be ordered optionally with the monitor)
  • Smart Light
  • DisplayHDR™ 400
  • Headset Rack
  • KVM Switch
  • Smart Power
    The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional Tiny monitor clamp II (PN: 4XH0Z42451) and Tiny VESA mount II (PN: 4XFON03161) are needed (sold separately).
For supporting Nano devices, additional Nano monitor clamp II (PN: 4XH0Z42451) and Nano VESA mount (PN: 4XF0V81630) are needed (sold separately).

**Bezel Width**
  • Side: 2mm
  • Top / Bottom: 2mm / 23.6mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>613.8 x 219.9 x 421.4 mm (24.16 x 8.66 x 16.59 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>613.8 x 219.9 x 556.4mm (24.16 x 8.66 x 21.90 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>613.8 x 52.9 x 368.8 mm (24.16 x 2.08 x 14.52 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
732 x 187 x 510 mm (28.82 x 7.36 x 20.08 inches)

**Weight**
<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>8.0 kg (17.6 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>5.5 kg (12.13 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
12.8 kg (28.22 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +35° tilt, left & right 45 swivel, -90° to 90° pivot, up to 135mm lift

In the Box
• Monitor with Stand
• 1x DP Cable (1.8m) (for US, Canada only)
• 1x USB-C® to USB-A Cable (1.8m)
• 1x Power cable (1.8m)
• 1x Thunderbolt™ 4 cable (40Gbps)
• Factory Calibration Report
• Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
• 1x Thunderbolt™ 4 In
• 1x Thunderbolt™ 4 Out
• 1x USB-C® 3.2 Gen 1 (data transfer, up to 27W), USB downstream
• 1x USB-B 3.2 Gen 1, USB upstream
• 3x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
• 2x HDMI® 2.1 TMDS
• 1x DisplayPort™ 1.2
• 1x Ethernet (RJ-45)
• 1x Power Connector
• 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 27W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.
[3] Supports 3840x2160@60Hz as specified in HDMI® 2.1.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered[2]
• RoHS compliant
• TCO Certified 9.0
• TCO edge 2.0

Notes:
[1] The items listed under the "Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications
Other Certifications
TÜV Rheinland® Eye Comfort Certification

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OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Feature</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kensington Security Slot</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Power Connector</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>HDMI 1.4</td>
<td></td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching
Backlight
LED
Display Size
27 inches
Max View Area
WxH: 597.89 x 336.31 mm
Resolution
1920 x 1080
Aspect Ratio
16:9
Pixel Pitch
0.3114 x 0.3114 mm
Dot / Pixel Per Inch
82 dpi
Brightness
250 nits
Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3M:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
Refresh Rate
60Hz
Color Gamut
72% NTSC
Color Support
16.7 Million
Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows® 7 Support
• Windows 10 Support

Multi-Media

Speakers
Optional Soundbar support (PN: 0A36190)

Power Supply

Power Consumption
• Typical / Max: 18W / 24W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star TEC: 48Wh
• Energy Star TEC: 115kWh
• Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

**Special Features**
AMD FreeSync™
AMD FreeSync technology only can work with AMD Radeon™ series graphics card.

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre M Series Tiny, ThinkCentre M Series Nano
For supporting Tiny / Nano devices, additional Tiny / Nano VESA Mount Kits (PN: 4XF0N03161) / (PN: 4XF0V81630) are needed (sold separately).

**Bezel Width**
- Side: 2.5mm
- Top / Bottom: 2.5mm / 22.4mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (Wx Dx H)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Only</td>
<td>612.5 x 43.2 x 367.7 mm (24.11 x 1.70 x 14.48 inches)</td>
</tr>
<tr>
<td>Unpacked with Stand</td>
<td>612.5 x 182.5 x 475.8 mm (24.11 x 7.18 x 18.73 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (Wx Dx H)**
710 x 126 x 455 mm (27.95 x 4.96 x 17.91 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>4.6 kg (10.14 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.6 kg (7.94 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
6.42 kg (14.15 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +22° tilt

**In the Box**
- Monitor with Stand
- 1x Power cable (1.8m)
- 1x HDMI® cable (1.8m)
- Quick Setup Guide

**Notes:**
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.
Ports
Rear Ports
• 1x HDMI 1.4
• 1x VGA
• 1x audio-out (3.5mm)
• 1x Power Connector

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]
Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Silver Registered[2]
• TCO Certified 8.0
• TCO edge 2.0
• RoHS compliant

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration.
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Other Certifications
Other Certifications
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland Low Blue Light

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## OVERVIEW

1. Kensington Security Slot
2. Power connector
3. HDMI 1.4
4. HDMI 1.4
5. VGA
6. Audio-out (3.5mm)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>2</td>
<td>Power connector</td>
</tr>
<tr>
<td>3</td>
<td>HDMI 1.4</td>
</tr>
<tr>
<td>4</td>
<td>HDMI 1.4</td>
</tr>
<tr>
<td>5</td>
<td>VGA</td>
</tr>
<tr>
<td>6</td>
<td>Audio-out (3.5mm)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
In-Plane Switching (IPS)
Backlight
WLED
Display Size
27 inches
Max View Area
WxH: 597.9 x 336.3 mm
Resolution
1920 x 1080
Aspect Ratio
16:9
Pixel Pitch
0.311 x 0.311 mm
Dot / Pixel Per Inch
82 dpi
Brightness
Typical: 300 cd/m²
Contrast Ratio
Contrast Ratio: 1300:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
Refresh Rate
100Hz
Color Gamut
99% sRGB
Color Support
16.7 Million
Color Depth
8-bit (6-bit+FRC)
Screen Surface Treatment
Anti-glare
Curvature
Flat Panel

Operating System
Operating System
• Windows® 11 Support
• Windows® 10 Support

Power Supply
Power Consumption
• Typical / Max: 19.5W / 36W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 15.7W
ThinkVision S27i-30

- Energy Star TEC: 49.1kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

- Natural Low Blue Light
- Microsoft® Teams Certified

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional mount kits are needed (sold separately).
For supporting Nano devices, additional mount kits are needed (sold separately).

**Bezel Width**
- Side: 2.3mm
- Top / Bottom: 2.3mm / 21.0mm

**Cable Management**
Support

**Case Color**
Storm grey

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>612.3 x 184.9 x 475.0 mm (24.11 x 7.28 x 18.70 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>612.3 x 184.9 x 475.0 mm (24.11 x 7.28 x 18.70 inches)</td>
</tr>
<tr>
<td>Width of Head (Slimmest Part)</td>
<td>6.9 mm (0.27 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>612.3 x 43.5 x 368.0 mm (24.11 x 1.71 x 14.49 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
720 x 125 x 452 mm (28.35 x 4.92 x 17.8 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>4.5 kg (9.9 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>3.6 kg (7.9 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
6.9 kg (15.2 lbs)

**Mounting**
Supports VESA mount 100 x 100 mm

**Stand**
supports -5° to +22° tilt

**In the Box**
- Monitor with Stand
- 1x HDMI® cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

**Notes:**
- [1] The system dimensions may vary depending on configurations.
- [2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight.
for each specific model.

**CONNECTIVITY**

**Ports**

Rear Ports
- 2x HDMI® 1.4
- 1x VGA
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

[2] Supports 1920x1080@100Hz as specified in HDMI® 1.4

**SECURITY & PRIVACY**

**Security**

**Physical Locks**
Kensington® Security Slot™

**SERVICE**

**Warranty**

**Base Warranty**
3-year limited warranty

**CERTIFICATIONS**

**Green Certifications**

**Green Certifications**
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- EU Energy Label (E-class)
- RoHS (2011/65/EU)
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

**Other Certifications**

**Other Certifications**
- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Power connector</td>
</tr>
<tr>
<td>2.</td>
<td>HDMI 1.4</td>
</tr>
<tr>
<td>3.</td>
<td>DP 1.2</td>
</tr>
<tr>
<td>4.</td>
<td>USB-C 3.1 Gen 1 (DP 1.2 Alt Mode)</td>
</tr>
<tr>
<td>5.</td>
<td>USB 3.1 Gen 1</td>
</tr>
<tr>
<td>6.</td>
<td>USB 3.1 Gen 1</td>
</tr>
<tr>
<td>7.</td>
<td>Audio-out (3.5mm)</td>
</tr>
<tr>
<td>8.</td>
<td>USB 3.1 Gen 1</td>
</tr>
<tr>
<td>9.</td>
<td>USB 3.1 Gen 1 (BC 1.2)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel

3-side NearEdgeless, In-Plane Switching

Backlight

WLED

Display Size

27 inches

Max View Area

WxH: 596.74 x 335.66 mm

Resolution

2560 x 1440

Aspect Ratio

16:9

Pixel Pitch

0.2331 x 0.2331 mm

Dot / Pixel Per Inch

109 dpi

Brightness

350 cd/m²

Contrast Ratio

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate

60Hz

Color Gamut

99% sRGB

Color Support

16.7 Million

Screen Surface Treatment

Anti-glare

Operating System

Operating System

- Windows® 10 Support
- Windows® 7 Support

Power Supply

Power Consumption

- Typical / Max: 23W / 122W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 18.1W
- Energy Star TEC: 57.6kWh

Voltage Required

AC 100 to 240 V (50-60Hz)
Special Features

Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

Smart Power
The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device.

DESIGN

Mechanical
Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 23.87mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>208 x 614 x 564.4 mm (8.19 x 24.17 x 22.22 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>208 x 614 x 564.4 mm (8.19 x 24.17 x 22.22 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>46.7 x 614.0 x 369.1 mm (1.84 x 24.17 x 14.53 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
480 x 694 x 163 mm (18.90 x 27.32 x 6.42 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>7.6 kg (16.76 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>5.09 kg (11.22 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
9.75 kg (21.5 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +35° tilt, left & right 45 swivel, -90° to 90° pivot, up to 135mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m) (NA only)
- 1x USB-C® to USB-A Cable (1.8m) (NA only)
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY
Ports

Rear Ports
- 1x USB-C® 3.1 Gen 1 (DP 1.2 Alt Mode and up to 75W PD), USB upstream
- 4x USB 3.1 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
   - USB 2.0: 480 Mbit/s;
   - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
   - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
   - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
   - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
   - Thunderbolt™ 3/4: 40 Gbit/s.
2. Up to 75W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications
Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Silver Registered
- RoHS (2002/95/EC)
- TCO Certified 8.0
- TCO edge 2.0

Notes:
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Other Certifications
Other Certifications
- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)
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<td>Power connector</td>
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<td>3</td>
<td>DisplayPort 1.4</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>USB-C 3.2 Gen 1 (DP 1.4 Alt Mode)</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>DP out</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>Ethernet (RJ-45)</td>
<td></td>
</tr>
</tbody>
</table>

![Image of ThinkVision T27h-30 rear view](image-url)
**PERFORMANCE**

**Panel**
- 3-side NearEdgeless, In-Plane Switching

**Backlight**
- WLED

**Display Size**
- 27 inches

**Max View Area**
- WxH: 596.7 x 335.7 mm

**Resolution**
- 2560 x 1440

**Aspect Ratio**
- 16:9

**Pixel Pitch**
- 0.233 x 0.233 mm

**Dot / Pixel Per Inch**
- 109 dpi

**Brightness**
- 350 cd/m²

**Contrast Ratio**
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

**View Angle (H / V)**
- Horizontal: 178°, Vertical: 178°

**Response Time**
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

**Refresh Rate**
- 60Hz

**Color Gamut**
- 99% sRGB

**Color Support**
- 16.7 Million

**Color Depth**
- 8-bit

**Screen Surface Treatment**
- Anti-glare

**Operating System**
- Operating System
  - Windows® 11 Support
  - Windows® 10 Support

**Multi-Media**
- Camera
  - No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)
  - ThinkVision® MC 60 monitor webcam (Some models only)

- Speakers
  - Optional Modular Soundbar support (MS30 Monitor Soundbar)
ThinkVision T27h-30

Power Supply

Power Consumption

• Typical / Max: 26W / 148W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 23W
• Energy Star TEC: 71kWh

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Special Features

• Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
• Natural Low Blue Light
• Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

Bezel Width
• Side: 2mm
• Top / Bottom: 2mm / 18mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>613.6 x 204.5 x 390.4 mm (24.16 x 8.05 x 15.37 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>613.6 x 204.5 x 545.4 mm (24.16 x 8.05 x 21.47 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>613.6 x 50.0 x 363.5 mm (24.16 x 1.97 x 14.31 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)

690 x 148 x 525 mm (21.17 x 5.83 x 20.67 inches)

Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.9 kg (15.2 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.8 kg (10.6 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight

10.1 kg (22.27 lbs)

Mounting

Supports VESA mount 100mm

Stand

Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift
In the Box

- Monitor with Stand
- 1x DP Cable (1.8m) (for US, Canada, and Brazil only)
- 1x USB-C® to USB-A Cable (1.8m) (for US, Canada, and Brazil only)
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
Support 10M / 100M / 1000M

Ports

Rear Ports

- 1x USB-C® 3.2 Gen 1 (DP 1.4 Alt Mode and up to 90W PD), USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x DisplayPort™ out
- 1x Ethernet (RJ-45)
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.
[3] Supports 2560x1440@60Hz as specified in HDMI® 2.1

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
3-year limited warranty
CERTIFICATIONS

Green Certifications

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS (2011/65/EU)
- TCO Certified 9.0
- TCO edge 2.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
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<td>HDMI 1.4</td>
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<td>3.</td>
<td>DP 1.2</td>
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<td>4.</td>
<td>USB-C 3.2 Gen 1</td>
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<td>USB 3.2 Gen 1</td>
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<td>USB 3.2 Gen 1</td>
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<td>10.</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
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<td>11.</td>
<td>Audio Combo (3.5mm)</td>
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</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
27 inches

Max View Area
WxH: 596.74 x 335.66 mm

Resolution
2560 x 1440

Aspect Ratio
16:9

Pixel Pitch
0.2331 x 0.2331 mm

Dot / Pixel Per Inch
109 dpi

Brightness
350 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Color Depth
8-bit

Screen Surface Treatment
Anti-glare

Operating System
Operating System
• Windows® 10 Support
• Windows® 7 Support

Multi-Media
Camera
FHD 1080p + IR camera

Microphone
Integrated microphone

Speakers
Integrated Speakers, 2x 3W
**Power Supply**

**Power Consumption**
- Typical / Max: 25W / 148W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 20.59W
- Energy Star TEC: 66.74kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional Tiny monitor clamp II (PN: 4XH0Z42451) and Tiny VESA mount II (PN: 4XF0N03161) are needed (sold separately).
For supporting Nano devices, additional Nano monitor clamp II (PN: 4XH0Z42451) and Nano VESA mount (PN: 4XF0V81630) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 50.07mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>613.6 x 208 x 473.6 mm (24.16 x 8.19 x 18.65 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>613.6 x 208 x 608.6 mm (24.16 x 8.19 x 23.96 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>613.6 x 45.5 x 412.6 mm (24.16 x 1.79 x 16.24 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
860 x 159 x 515 mm (33.86 x 6.26 x 20.28 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>7.35 kg (16.20 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.85 kg (10.69 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
10.55 kg (23.26 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +35° tilt, left & right 45 swivel, -90° to 90° pivot, up to 135mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m) (NA only)
- 1x USB-C® to USB-A Cable (1.8m) (NA only)
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

 CONNECTIVITY

Ports[1]
Rear Ports[2]
- 1x USB-C® 3.2 Gen 1 (DP 1.2 Alt Mode and to 90W PD), USB upstream
- 4x USB 3.2 Gen 1, USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x DisplayPort™ out
- 1x Ethernet (RJ-45)
- 1x Power Connector
- 1x audio-combo (3.5mm, In/Out)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]
Green Certifications

• ENERGY STAR® Certified
• EPEAT™ Gold Registered\(^2\)
• EU Energy Label (F-class)
• RoHS compliant
• TCO Certified 8.0
• TCO edge 2.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications

• Eyesafe® Certified
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Low Blue Light

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OVERVIEW

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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Joystick</td>
</tr>
<tr>
<td>2.</td>
<td>Source Key</td>
</tr>
<tr>
<td>3.</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>4.</td>
<td>Power connector</td>
</tr>
<tr>
<td>5.</td>
<td>HDMI 2.1</td>
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<td>6.</td>
<td>DP 1.4</td>
</tr>
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<td>7.</td>
<td>USB-C 3.2 Gen 1 (90W)</td>
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<td>8.</td>
<td>DP out</td>
</tr>
<tr>
<td>9.</td>
<td>Ethernet (RJ-45)</td>
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<tr>
<td>10.</td>
<td>USB 3.2 Gen 1</td>
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<tr>
<td>11.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>12.</td>
<td>Audio-combo (3.5mm, In/Out)</td>
</tr>
<tr>
<td>13.</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>14.</td>
<td>USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side Borderless In-Plane Switching

Backlight
WLED

Display Size
27 inches

Max View Area
WxH: 596.7 x 335.7 mm

Resolution
2560 x 1440

Aspect Ratio
16:9

Pixel Pitch
0.233 x 0.233 mm

Dot / Pixel Per Inch
109 dpi

Brightness
300 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate
75Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Color Depth
8-bit

Screen Surface Treatment
Anti-glare

Operating System

Operating System
- Windows® 11 Support
- Windows® 10 Support

Multi-Media

Camera
2592 x 1944, 5.0-megapixel, IR + RGB camera

Microphone
Integrated microphone

Speakers
Integrated Speakers, 2x 5W
**Power Supply**

**Power Consumption**
- Typical / Max: 30W / 168.5W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star TEC: 69.5kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light
- Smart Sensor (Ambient Light Sensor, Human Detection Sensor)
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**
- Side: 2.1mm
- Top / Bottom: 2.1mm / 41.4mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>613.8 x 204.7 x 429.5mm (24.17 x 8.06 x 16.91 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>613.8 x 204.7 x 584.6 mm (24.17 x 8.06 x 23.02 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>613.8 x 53.9 x 404.8mm (24.17 x 2.12 x 15.94 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
720 x 160 x 510 mm (28.35 x 6.30 x 20.08 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>7.9 kg (17.4 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>5.7 kg (12.6 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
10.9 kg (24.0 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +23.5° tilt, left & right 45 swivel, -90° to 90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
- Ethernet
  Support 10M / 100M / 1000M

Ports
- Rear Ports
  - 1x USB-C® 3.2 Gen 1 (DP 1.4 alt mode, up to 90W), USB upstream
  - 4x USB 3.2 Gen 1, USB downstream
  - 1x HDMI® 2.1
  - 1x DisplayPort™ 1.4
  - 1x DisplayPort™ out
  - 1x Ethernet (RJ-45)
  - 1x Power Connector
  - 1x audio-combo (3.5mm, In/Out)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
  - USB 2.0: 480 Mbit/s;
  - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
  - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
  - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
  - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
  - Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY

Security
- Physical Locks
  - Kensington® Security Slot™

SERVICE

Warranty
- Base Warranty
  - 3-year limited warranty

CERTIFICATIONS
Green Certifications

• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• RoHS compliant
• TCO Certified 9.0
• TCO edge 2.0
• Volatile Organic Compound Certification

Notes:

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Other Certifications

• Eyesafe® Certified 2.0
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light (Hardware Solution)

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</tr>
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<td>Audio-out (3.5mm)</td>
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<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>12</td>
<td>USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
27 inches

Max View Area
WxH: 597.9 x 336.3 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.3114 x 0.3114 mm

Dot / Pixel Per Inch
82 dpi

Brightness
300 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms
- Off Mode: 14 ms

Refresh Rate
60Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Color Depth
8-bit (6-bit+FRC)

Screen Surface Treatment
Anti-glare

Operating System

Operating System
- Windows® 11 Support
- Windows® 10 Support

Multi-Media

Camera
- No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)
- ThinkVision® MC 60 monitor webcam (Some models only)

Speakers
Optional Modular Soundbar support (MS30 Monitor Soundbar)
**Power Supply**

**Power Consumption**
- Typical / Max: 24W / 65W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 15W
- Energy Star TEC: 50kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 17.6mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>611.9 x 204.5 x 389.3 mm (24.09 x 8.05 x 15.33 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>611.9 x 204.5 x 544.3 mm (24.09 x 8.05 x 21.43 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>611.9 x 50.0 x 362.5 mm (24.08 x 1.97 x 14.27 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

690 x 148 x 525 mm (21.17 x 5.83 x 20.67 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>6.9 kg (15.2 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.9 kg (10.8 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
10.1 kg (22.27 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

**In the Box**
- Monitor with Stand
1x DP Cable (1.8m) (No for Brazil)
1x HDMI® Cable (1.8m) (Brazil only)
1x USB-A to USB-B Cable (1.8m)
1x Power cable (1.8m)
Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports
- 1x USB-B 3.2 Gen 1, USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.2
- 1x VGA
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Supports 1920x1080@60Hz as specified in HDMI® 2.1

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• RoHS compliant
• TCO Certified 9.0
• TCO edge
Notes:
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Other Certifications

- Eyesafe® Certified
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Joystick
2. Source Key
3. Power connector
4. HDMI 1.4
5. DP 1.2
6. VGA
7. USB-B 3.2 Gen 1
8. USB 3.2 Gen 1
9. Audio-out (3.5mm)
10. USB 3.2 Gen 1
11. USB 3.2 Gen 1
12. USB 3.2 Gen 1
ThinkVision T27i-37

PERFORMANCE

Panel

3-side NearEdgeless, In-Plane Switching

Backlight

WLED

Display Size

27 inches

Max View Area

WxH: 597.9 x 336.3 mm

Resolution

1920 x 1080

Aspect Ratio

16:9

Pixel Pitch

0.3114 x 0.3114 mm

Dot / Pixel Per Inch

82 dpi

Brightness

300 cd/m²

Contrast Ratio

• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

• Extreme Mode: 4 ms
• Normal Mode: 6 ms
• Off Mode: 14 ms

Refresh Rate

60Hz

Color Gamut

99% sRGB

Color Support

16.7 Million

Color Depth

8-bit (6-bit+FRC)

Screen Surface Treatment

Anti-glare

Operating System

Operating System

• Windows® 11 Support
• Windows® 10 Support

Multi-Media

Camera

No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)

Speakers

Optional Modular Soundbar support (MS30 Monitor Soundbar)
**Power Supply**

**Power Consumption**
- Typical / Max: 24W / 65W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 15W
- Energy Star TEC: 50kWh

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

**Special Features**
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  - Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  - Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light

**DESIGN**

**Mechanical**

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 17.6mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
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**Packaging Dimensions (WxDxH)**
690 x 148 x 525 mm (21.17 x 5.83 x 20.67 inches)

**Weight**

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<td>Monitor Head Only</td>
<td>4.9 kg (10.8 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
10.1 kg (22.27 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

**In the Box**
- Monitor with Stand
- 1x DP Cable (1.8m)
- 1x USB-A to USB-B Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:
The system dimensions may vary depending on configurations.

The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports

Rear Ports

- 1x USB-B 3.2 Gen 1, USB upstream
- 4x USB 3.2 Gen 1 (1x BC), USB downstream
- 1x HDMI® 1.4
- 1x DisplayPort™ 1.2
- 1x VGA
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:

The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks

Kensington® Security Slot™

SERVICE

Warranty

Base Warranty

3-year limited warranty

CERTIFICATIONS

Green Certifications

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- TCO Certified
- TCO edge

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## OVERVIEW

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<tbody>
<tr>
<td>1</td>
<td>Joystick</td>
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<tr>
<td>2</td>
<td>Source Key</td>
</tr>
<tr>
<td>3</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>4</td>
<td>Power connector</td>
</tr>
<tr>
<td>5</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>6</td>
<td>DP 1.4</td>
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<tr>
<td>7</td>
<td>USB-C 3.2 Gen 1 (DP 1.4 Alt Mode)</td>
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<tr>
<td>8</td>
<td>Ethernet (RJ-45)</td>
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<tr>
<td>9</td>
<td>USB 3.2 Gen 1</td>
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<tr>
<td>10</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
</tr>
<tr>
<td>11</td>
<td>Audio-out (3.5mm)</td>
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<tr>
<td>12</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>13</td>
<td>USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching
Backlight
WLED
Display Size
27 inches
Max View Area
WxH: 596.7 x 335.7 mm
Resolution
3840 x 2160
Aspect Ratio
16:9
Pixel Pitch
0.155 x 0.155 mm
Dot / Pixel Per Inch
163 dpi
Brightness
350 cd/m²
Contrast Ratio
• Contrast Ratio: 1300:1
• Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms
Refresh Rate
60Hz
Color Gamut
• Color Area Ratio: 112% sRGB
• Coverage Ratio: 99% sRGB
Color Support
1.07 Billion
Color Depth
10-bit (8-bit+A-FRC)
Screen Surface Treatment
Anti-glare
Curvature
Flat Panel

Operating System
Operating System
• Windows® 11 Support
• Windows® 10 Support

Multi-Media
Camera
• No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)
• ThinkVision® MC 60 monitor webcam (Some models only)
Speakers
Optional Modular Soundbar support (MS30 Monitor Soundbar)

Power Supply

Power Consumption

- Typical / Max: 35W / 165W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 29W
- Energy Star TEC: 91kWh
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Smart Power
The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 18mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)(1)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
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</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>613.6 x 204.5 x 390.4 mm (24.16 x 8.05 x 15.37 inches)</td>
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<td>Highest Position</td>
<td>613.6 x 204.5 x 545.4 mm (24.16 x 8.05 x 21.47 inches)</td>
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<td>Head Only</td>
<td>613.6 x 50.0 x 363.5 mm (24.16 x 1.97 x 14.31 inches)</td>
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</tbody>
</table>

Packaging Dimensions (WxDxH)
690 x 148 x 525 mm (21.17 x 5.83 x 20.67 inches)

Weight(2)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>7.3 kg (16.2 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>5.3 kg (11.7 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
10.4 kg (22.9 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

In the Box
Monitor with Stand
• 1x DP Cable (1.8m) (NA, Brazil only)
• 1x USB-C® to USB-A Cable (1.8m) (NA, Brazil only)
• 1x USB-C® to USB-C® Cable (1m)
• 1x Power cable (1.8m)

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports

Rear Ports
• 1x USB-C® 3.2 Gen 1 (DP 1.4 32.4 Gbps for 4 lanes Alt Mode, up to 90W), USB upstream
• 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
• 1x HDMI® 2.1 TMDS
• 1x DisplayPort™ 1.4
• 1x Ethernet (RJ-45)
• 1x Power Connector
• 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.
[3] Supports 3840x2160@60Hz as specified in HDMI® 2.1.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS
**Green Certifications**

- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS (2011/65/EU)
- TCO Certified 9.0
- TCO edge 2.0

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[2] EPEAT™ is registered where applicable, please visit [epeat.net](http://epeat.net) for registration status by country.

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**Other Certifications**

- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Flicker Free
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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## OVERVIEW

1. Power connector
2. HDMI 1.4
3. DP 1.2
4. USB-B 3.1 Gen 1
5. USB 3.1 Gen 1
6. USB 3.1 Gen 1
7. Audio-out (3.5mm)
8. USB 3.1 Gen 1
9. USB 3.1 Gen 1 (BC)
**PERFORMANCE**

**Panel**

3-side NearEdgeless, In-Plane Switching

**Backlight**

WLED

**Display Size**

27 inches

**Max View Area**

WxH: 596.74 x 335.66 mm

**Resolution**

2560 x 1440

**Aspect Ratio**

16:9

**Pixel Pitch**

0.2331 x 0.2331 mm

**Dot / Pixel Per Inch**

109 dpi

**Brightness**

350 cd/m²

**Contrast Ratio**

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

**View Angle (H / V)**

Horizontal: 178°, Vertical: 178°

**Response Time**

- Extreme Mode: 4 ms
- Normal Mode: 6 ms

**Refresh Rate**

60Hz

**Color Gamut**

Coverage Ratio: 99% sRGB

**Color Support**

16.7 Million

**Screen Surface Treatment**

Anti-glare

**Operating System**

**Operating System**

- Windows® 10 Support
- Windows® 7 Support

**Power Supply**

**Power Consumption**

- Typical / Max: 23W / 65W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 17.4W
- Energy Star TEC: 54.4kWh
- Internal Power Supply

**Voltage Required**

AC 100 to 240 V (50-60Hz)
DESIGN

Mechanical

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 23.87mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)[1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>208 x 614 x 429.4 mm (8.19 x 24.17 x 16.9 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>208 x 614 x 564.4mm (8.19 x 24.17 x 22.22 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>46.7 x 614 x 369.1 mm (1.84 x 24.17 x 14.53 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
480 x 694 x 163 mm (18.9 x 27.32 x 6.42 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>7.44 kg (16.4 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>4.93 kg (10.87 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
9.59 kg (21.14 lbs)

Mounting
Supports VESA mount 100mm

Stand
Supports -5° to +35° tilt, left & right 45 swivel, -90° to 90° pivot, up to 135mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m)
- 1x USB-A to USB-B Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Ports[1]

Rear Ports
- 1x USB-B 3.1 Gen 1, USB upstream
- 4x USB 3.1 Gen 1 (1x BC), USB downstream
- 1x HDMI® 1.4[2]
- 1x DisplayPort™ 1.2
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

Supports 2560x1440@60Hz as specified in HDMI® 1.4

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

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Other Certifications

Other Certifications
TÜV Rheinland® Eye Comfort Certification

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<td>DP 1.2</td>
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<tr>
<td>4</td>
<td>USB-C 3.2 Gen 1 (DP 1.2 Alt Mode)</td>
</tr>
<tr>
<td>5</td>
<td>USB-B 3.2 Gen 1</td>
</tr>
<tr>
<td>6</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>7</td>
<td>Ethernet (RJ-45)</td>
</tr>
<tr>
<td>8</td>
<td>Audio-out (3.5mm)</td>
</tr>
<tr>
<td>9</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>10</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
31.5 inches

Max View Area
WxH: 697.31 x 392.23 mm

Resolution
3840 x 2160

Aspect Ratio
16:9

Pixel Pitch
0.1816 x 0.1816 mm

Dot / Pixel Per Inch
140 dpi

Brightness
350 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
- 90% DCI-P3
- 99% BT.709
- 99% sRGB

Color Support
1.07 Billion

Color Depth
10-bit

Screen Surface Treatment
Anti-glare

Operating System

Operating System
- Windows® 10 Support
- Windows® 7 Support

Multi-Media

Camera
- Optional Modular Camera Support
- ThinkVision® MC 50 monitor webcam (Some models only)

Speakers
Optional Soundbar support (PN: 0A36190)

**Power Supply**

**Power Consumption**
- Typical / Max: 36W / 186W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 27W
- Energy Star TEC: 84kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

**Special Features**
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Processor LUT: 14 bit
- Factory Calibration: Avg. Delta E<2
- KVM Switch

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**

ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional Tiny monitor clamp II (PN: 4XH0Z42451) and Tiny VESA mount II (PN: 4XFO03161) are needed (sold separately).
For supporting Nano devices, additional Nano monitor clamp II (PN: 4XH0Z42451) and Nano VESA mount (PN: 4XFOV81630) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 24.1mm

**Cable Management**

Support

**Case Color**

Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>714.6 x 235.0 x 469.4 mm (28.13 x 9.25 x 18.48 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>714.6 x 235.0 x 604.4 mm (28.13 x 9.25 x 23.79 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>51.0 x 714.6 x 426.0 mm (2.01 x 28.13 x 16.77 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

845 x 528 x 190 mm (32.27 x 20.79 x 7.48 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>10.21 kg (22.51 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>6.96 kg (15.34 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**

13.3 kg (29.32 lbs)

**Mounting**

Supports VESA mount 100mm
Stand
Supports -5° to +35° tilt, left & right 45 swivel, -90° to 90° pivot, up to 135mm lift

In the Box
• Monitor with Stand
• 1x DP Cable (1.8m) (for US, Canada only)
• 1x USB-A to USB-B Cable (1.8m)
• 1x USB-C® to USB-C® Cable (1.8m)
• 1x Power cable (1.8m)
• Factory Calibration Report
• Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports[1]

Rear Ports[2]
• 1x USB-C® 3.2 Gen 1 (DP 1.2 Alt Mode and to 90W PD), USB upstream
• 1x USB-B 3.2 Gen 1, USB upstream
• 3x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
• 1x HDMI® 2.0
• 1x DisplayPort™ 1.2
• 1x Ethernet (RJ-45)
• 1x Power Connector
• 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered[2]
• RoHS compliant
• TCO Certified 8.0
• TCO edge 2.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
TÜV Rheinland® Eye Comfort Certification

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• The specifications on this page may not be available in all regions, and may be changed or updated without notice.
OVERVIEW

1. Kensington Security Slot
2. Power connector
3. USB 3.2 Gen 1
4. USB 3.2 Gen 1
5. Ethernet (RJ-45)
6. Thunderbolt 4 Out
7. Thunderbolt 4 In
8. USB-B 3.2 Gen 1
9. HDMI 2.1 TMDS
10. DP 1.4
11. USB 3.2 Gen 1 (BC 1.2)
12. Audio-out (3.5mm)
13. USB 3.2 Gen 1
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
WLED

Display Size
31.5 inches

Max View Area
WxH: 697.3 x 392.2 mm

Resolution
3840 x 2160

Aspect Ratio
16:9

Pixel Pitch
0.182 x 0.182 mm

Dot / Pixel Per Inch
140 dpi

Brightness
350 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
• 100% sRGB
• 95% DCI-P3

Color Support
1.07 Billion

Color Depth
10-bit (8-bit+FRC)

Screen Surface Treatment
Anti-glare

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support

Multi-Media

Camera
• Optional Modular Camera Support
• ThinkVision® MC 60 monitor webcam (Some models only)

Speakers
Optional Modular Soundbar support (MS30 Monitor Soundbar)
**Power Supply**

**Power Consumption**
- Typical / Max: 29.5W / 193.7W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 32.9W
- Energy Star TEC: 114.9kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  - Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  - Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Factory Calibration: Avg. Delta E<2
- Picture In Picture (PiP) / Picture By Picture (PBP) Support
- KVM Switch
- Natural Low Blue Light
- Smart Power
  - The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 18.6mm

**Cable Management Support**

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>714.2 x 234.6 x 444.5 mm (28.12 x 9.24 x 17.50 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>714.2 x 234.6 x 599.5 mm (28.12 x 9.24 x 23.60 inches)</td>
</tr>
<tr>
<td>Unpacked Head Only</td>
<td>714.2 x 59.5 x 420.9 mm (28.12 x 2.34 x 16.57 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
950 x 148 x 525 mm (37.40 x 5.83 x 20.67 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>10.1 kg (22.2 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>7.2 kg (15.8 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
14.4 kg (31.7 lbs)

**Mounting**
Supports VESA mount 100mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, -90° to +90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m) (NA only)
- 1x USB-A to USB-B Cable (1.8m)
- 1x Power cable (1.8m)
- 1x Thunderbolt™ 4 cable (40Gbps)
- Factory Calibration Report
- Quick Setup Guide
- Warranty Booklet

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports
- Rear Ports
  - 1x Thunderbolt™ 4 In (Up to 100W), USB upstream
  - 1x Thunderbolt™ 4 Out (Up to 27W), USB downstream
  - 1x USB-B 3.2 Gen 1, USB upstream
  - 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
  - 1x HDMI® 2.1 TMDS
  - 1x DisplayPort™ 1.4
  - 1x Ethernet (RJ-45)
  - 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
  - USB 2.0: 480 Mbit/s;
  - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
  - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
  - USB4* 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
  - USB4* 40Gbps (USB 40Gbps): 40 Gbit/s;
  - Thunderbolt™ 3/4: 40 Gbit/s.
[2] Listed are maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.
[3] Supports 3840x2160@60Hz as specified in HDMI® 2.1.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE
Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

ENERGY STAR® Certified
EPEAT™ Gold Registered
RoHS compliant
TCO Certified 9.0
TCO edge 2.0
Volatile Organic Compound Certification

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Eyesafe® Certified 2.0
TÜV Rheinland® Eye Comfort Certification
TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Power connector
2. HDMI 2.1 TMDS
3. HDMI 2.1 TMDS
4. DP 1.4
5. DP 1.4 out
6. USB4 40Gbps
7. USB-C 3.2 Gen 2
8. Ethernet (RJ-45)
9. USB 3.2 Gen 2
10. USB 3.2 Gen 2
11. Audio-out (3.5mm)
12. USB-C 3.2 Gen 2
13. USB 3.2 Gen 2
14. USB 3.2 Gen 2
PERFORMANCE

Panel
3-side NearEdgeless, In-Plane Switching

Backlight
Mini-LED

Display Size
31.5 inches

Max View Area
WxH: 697.3 x 392.2 mm

Resolution
3840 x 2160

Aspect Ratio
16:9

Pixel Pitch
0.182 x 0.182 mm

Dot / Pixel Per Inch
140 dpi

Brightness
• Peak: 1200 cd/m²
• Typical: 650 cd/m²

Contrast Ratio
• Contrast Ratio: 1000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
• 100% BT.709
• 100% sRGB
• 81% BT.2020
• 98% DCI-P3
• 99% Adobe® RGB

Color Support
1.07 Billion

Color Depth
10-bit (8-bit+FRC)

Screen Surface Treatment
Anti-glare

Curvature
Flat Panel

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support

Multi-Media
Camera
Optional Modular Camera Support

Speakers
Optional Modular Soundbar support

Power Supply

Power Consumption
- Typical / Max: 32W / 305W
- Sleep / Off mode: <0.5W / <0.3W
- Switch-off Mode: <0.3W
- Energy Star Power On: 32.3W
- Energy Star TEC: 101.9kWh
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Special Features
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Factory Calibration: Avg. Delta E<1.5
- Picture In Picture (PIP) / Picture By Picture (PBP) Support
- HDR10 Compliance
- DisplayHDR™ 1000
- HLG
- KVM Switch
- Smart Sensor (Ambient Light Sensor, Human Detection Sensor)
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

DESIGN

Mechanical
ThinkCentre® M Series Support
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny / Nano devices, additional Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

Bezel Width
- Side: 2mm
- Top / Bottom: 2mm / 29mm

Case Color
Raven black

Dimensions (WxDxH)[x]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>714.2 x 234.9 x 456.6 mm (28.12 x 9.25 x 17.98 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>714.2 x 234.9 x 609 mm (28.12 x 9.25 x 23.98 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>714.2 x 78.9 x 430.9 mm (28.12 x 3.11 x 16.96 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
908 x 163 x 518 mm (35.75 x 6.42 x 20.39 inches)

Weight[x]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>10.5 kg (23.1 lbs)</td>
</tr>
</tbody>
</table>
ThinkVision P32pz-30

Monitor Head Only 7.6 kg (16.8 lbs)

Packaging Weight
14.6 kg (32.2 lbs)

Mounting
Supports VESA mount 100 x 100 mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m) (for US, Canada only)
- 1x USB-C® to USB-A Gen 2 Cable (1m)
- 1x USB4® Cable (1m)
- 1x Power cable (1.8m)
- Factory Calibration Report
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
Support 10M / 100M / 1000M

Ports

Rear Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer, up to 15W PD), USB downstream
- 1x USB-C® 3.2 Gen 2, USB upstream
- 1x USB4® 40Gbps (support data transfer, DP 1.4 Alt Mode and up to 140W PD), USB upstream
- 4x USB 3.2 Gen 2 (1x BC 1.2), USB downstream
- 2x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x DisplayPort™ 1.4 (Out)
- 1x Ethernet (RJ-45)
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s.
[2] Supports 3840x2160@60Hz as specified in HDMI® 2.1.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™ (2.5 mm x 6 mm and 3 mm x 7 mm)
SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• EU Energy Label (G-class)
• RoHS compliant
• Volatile Organic Compound Certification

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Other Certifications
• TÜV Rheinland® Eye Comfort Certification
• TUV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light

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# OVERVIEW

<table>
<thead>
<tr>
<th>1. Kensington Security Slot</th>
<th>8. DP out</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. HDMI 2.0</td>
<td>10. USB 3.2 Gen 1</td>
</tr>
<tr>
<td>4. HDMI 2.0</td>
<td>11. USB 3.2 Gen 1</td>
</tr>
<tr>
<td>5. DP 1.2</td>
<td>12. Audio-out (3.5mm)</td>
</tr>
<tr>
<td>6. 1x USB-C 3.2 Gen 1 (DP 1.2 Alt Mode)</td>
<td>13. USB-C 3.2 Gen 1</td>
</tr>
<tr>
<td>7. USB-B 3.2 Gen 1</td>
<td>14. USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel

Panel

3-side NearEdgeless, In-Plane Switching

Backlight

WLED

Display Size

34.14 inches

Max View Area

WxH: 799.8 x 334.8 mm

Resolution

3440 x 1440

Aspect Ratio

21:9

Pixel Pitch

0.2325 x 0.2325 mm

Dot / Pixel Per Inch

109 dpi

Brightness

300 cd/m²

Contrast Ratio

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate

60Hz

Color Gamut

99% sRGB

Color Support

1.07 Billion

Color Depth

10-bit (8-bit+FRC)

Screen Surface Treatment

Anti-glare

Curvature

3800R

Operating System

Operating System

- Windows® 11 Support
- Windows® 10 Support

Multi-Media

Camera

- No bundled webcam (Support ThinkVision® MC 50 Monitor Webcam, sold separately)
- ThinkVision® MC 50 monitor webcam (Some models only)

Microphone
Built-in dual microphone in MC 50 (Models with MC 50 only)
No microphone

Speakers
Integrated Speakers, 2x 3W

Power Supply

Power Consumption
- Typical / Max: 36W / 230W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 30W
- Energy Star TEC: 93kWh
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Factory Calibration: Avg. Delta E<2
- Picture In Picture (PIP) / Picture By Picture (PBP) Support
- HDR Compliance
- DaisyChain Support (DP out)
- KVM Switch
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

DESIGN

Mechanical

ThinkCentre® M Series Support
ThinkCentre® M Series Tiny, ThinkCentre® M Series Nano
For supporting Tiny devices, additional Tiny Monitor Clamp II (PN: 4XH0Z42451) are needed (sold separately).
For supporting Nano devices, additional Nano Monitor Clamp II (PN: 4XH0Z42451) are needed (sold separately).

Bezel Width
- Side: 9.5mm
- Top / Bottom: 9.5mm / 28.4mm

Cable Management

Support

Case Color

Raven black

Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>817.3 x 245.0 x 469.3 mm (32.18 x 9.65 x 18.48 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>817.3 x 245.0 x 621.4 mm (32.18 x 9.65 x 24.46 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>817.3 x 76.8 x 372.7 mm (32.18 x 3.02 x 14.67 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
937 x 220 x 475 mm (36.89 x 8.66 x 18.70 inches)

Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>10.8 kg (23.81 lbs)</td>
</tr>
</tbody>
</table>
ThinkVision P34w-20

- Monitor Head Only 7.4 kg (16.31 lbs)
- Packaging Weight 15.5 kg (34.17 lbs)
- Mounting Supports VESA mount 100mm
- Stand Supports -5° to +35° tilt, left & right 45 swivel, up to 150mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m) (NA only)
- 1x USB-B to USB-A Cable (1.8m) (NA only)
- 1x USB-C® to USB-A Cable (1.8m) (NA only)
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Factory Calibration Report
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
- Ethernet Support 10M / 100M / 1000M

Ports
- Rear Ports
  - 1x USB-C® 3.2 Gen 1 (DP 1.2 Alt Mode and up to 100W PD), USB upstream
  - 1x USB-C® 3.2 Gen 1, USB downstream
  - 1x USB-B 3.2 Gen 1, USB upstream
  - 3x USB 3.2 Gen 1, USB downstream
  - 2x HDMI® 2.0
  - 1x DisplayPort™ 1.2
  - 1x DisplayPort™ out
  - 1x Ethernet (RJ-45)
  - 1x Power Connector
  - 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
  - USB 2.0: 480 Mbit/s
  - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s
  - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s
  - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s
  - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s
  - Thunderbolt™ 3/4: 40 Gbit/s
[2] Up to 100W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY
Security

Physical Locks

Kensington® Security Slot™

SERVICE

Warranty

Base Warranty

3-year limited warranty

CERTIFICATIONS

Green Certifications

ENERGY STAR® Certified
EPEAT™ Gold Registered
EU Energy Label (F-class)
RoHS compliant
TCO Certified 9.0

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Eyesafe® Certified
TÜV Rheinland® Eye Comfort Certification
TÜV Rheinland® Flicker Free
TÜV Rheinland® Low Blue Light
TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Power connector
2. USB-C 3.2 Gen 1
3. USB 3.2 Gen 1
4. Audio-out (3.5mm)
5. HDMI 2.0
6. DP 1.4
7. Thunderbolt 4
8. Thunderbolt 4
9. USB-B 3.2 Gen 1
10. 3x USB 3.2 Gen 1
11. Ethernet (RJ-45)
**PERFORMANCE**

**Panel**

3-side NearEdgeless, In-Plane Switching

**Backlight**

WLED

**Display Size**

39.7 inches

**Max View Area**

WxH: 929.3 x 392 mm

**Resolution**

5120 x 2160

**Aspect Ratio**

21:9

**Pixel Pitch**

0.1815 x 0.1815 mm

**Dot / Pixel Per Inch**

140 dpi

**Brightness**

300 cd/m²

**Contrast Ratio**

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

**View Angle (H / V)**

Horizontal: 178°, Vertical: 178°

**Response Time**

- Extreme Mode: 4 ms
- Normal Mode: 6 ms

**Refresh Rate**

75Hz (Thunderbolt™ and DisplayPort™ only)

**Color Gamut**

- 98% DCI-P3
- 99% sRGB

**Color Support**

1.07 Billion

**Color Depth**

10-bit

**Screen Surface Treatment**

Anti-glare

**Curvature**

2500R

**Operating System**

**Operating System**

- Windows® 11 Support
- Windows® 10 Support

**Multi-Media**

**Camera**

- No bundled webcam (Support ThinkVision® MC 50 Monitor Webcam, sold separately)
- ThinkVision® MC 50 monitor webcam (Some models only)
**Microphone**
- Built-in dual microphone in MC 50 (Models with MC 50 only)
- No microphone

**Power Supply**

**Power Consumption**
- Typical / Max: 66W / 250W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 53W
- Energy Star TEC: 168kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

**Special Features**
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  - Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  - Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Factory Calibration: Avg. Delta E<2
- Picture In Picture (PIP) / Picture By Picture (PBP) Support
- HDR10 Compliance
- KVM Switch
- Smart Power
  - The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 23mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>947.6 x 279.4 x 511.2mm (37.30 x 11.00 x 20.12 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>947.6 x 279.4 x 641.2 mm (37.30 x 11.00 x 25.24 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>947.6 x 100.8 x 428.7mm (37.30 x 3.96 x 16.88 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
1085 x 275 x 526 mm (42.71 x 10.82 x 20.70 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>14.6 kg (32.19 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>9.9 kg (21.83 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
20 kg (44.09 lbs)

**Mounting**
Supports VESA mount 100 x 100 mm & 200 x 100 mm
Stand
Supports -5° to +22° tilt, left & right 45 swivel, up to 130mm lift

In the Box
• Monitor with Stand
• 1x Power cable (1.8m)
• 1x Thunderbolt™ 4 cable (40Gbps)
• Factory Calibration Report
• Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports
• Rear Ports
  • 2x Thunderbolt™ 4
  • 1x USB-C® 3.2 Gen 1 (27W), USB downstream
  • 1x USB-B 3.2 Gen 1, USB upstream
  • 4x USB 3.2 Gen 1, USB downstream
  • 1x HDMI® 2.0
  • 1x DisplayPort™ 1.4
  • 1x Ethernet (RJ-45)
  • 1x Power Connector
  • 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS
Green Certifications

• ENERGY STAR® Certified
• EPEAT™ Gold Registered
• RoHS compliant
• TCO Certified 9.0

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

• Eyesafe® Certified
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light
• TÜV Rheinland® Low Blue Light (Hardware Solution)

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### OVERVIEW

<table>
<thead>
<tr>
<th>1. USB-C 3.2 Gen 1</th>
<th>7. Thunderbolt 4 Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. USB 3.2 Gen 1</td>
<td>8. Thunderbolt 4 In</td>
</tr>
<tr>
<td>3. Audio line-out (3.5mm)</td>
<td>9. USB-B 3.2 Gen 1</td>
</tr>
<tr>
<td>4. USB 3.2 Gen 1</td>
<td>10. HDMI 2.1</td>
</tr>
<tr>
<td>5. USB 3.2 Gen 1</td>
<td>11. HDMI 2.1</td>
</tr>
<tr>
<td>6. Ethernet (RJ-45)</td>
<td>12. DP 1.4</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
- 3-side Borderless In-Plane Switching

Backlight
- WLED

Display Size
- 49 inches

Max View Area
- WxH: 1198.1 x 337.0 mm

Resolution
- 5120 x 1440

Aspect Ratio
- 32:9

Pixel Pitch
- 0.234 x 0.234 mm

Dot / Pixel Per Inch
- 109 dpi

Brightness
- 350 cd/m²

Contrast Ratio
- Contrast Ratio: 2000:1
- Dynamic Contrast Ratio: 3M:1

View Angle (H / V)
- Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate
- 60Hz

Color Gamut
- 98% DCI-P3

Color Support
- 1.07 Billion

Color Depth
- 10-bit (8-bit+FRC)

Screen Surface Treatment
- Anti-glare

Curvature
- 3800R

Operating System

Operating System
- Windows® 11 Support
- Windows® 10 Support

Multi-Media

Camera
- Optional Modular Camera Support
- ThinkVision® MC 60 monitor webcam (Some models only)

Speakers
Integrated Speakers, 2x 5W
Optional Modular Soundbar support (MS30 Monitor Soundbar)

Power Supply
Power Consumption
- Typical / Max: 58W / 265W
- Sleep / Off mode: 0.5W
- Switch-off Mode: 0.3W
- Energy Star Power On: 54W
- Energy Star TEC: 167kWh
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features
Special Features
- Factory Calibration: Avg. Delta E<2
- Picture In Picture (PIP) / Picture By Picture (PBP) Support
- True Split
- KVM Switch
- Natural Low Blue Light
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device
- Lenovo® ThinkColour (Lenovo® Display Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Display Accessories and Display Manager is formerly Lenovo® Display Control Center.

DESIGN
Mechanical
ThinkCentre® M Series Support
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

Bezel Width
- Side: 2.1mm
- Top / Bottom: 2.1mm / 19.7mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)\(^1\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>1215.1 x 253.9 x 421.3 mm (47.84 x 9.99 x 16.59 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>1215.1 x 253.9 x 576.3 mm (47.84 x 9.99 x 22.69 inches)</td>
</tr>
<tr>
<td>Unpacked Head Only</td>
<td>1215.1 x 110.4 x 370.1 mm (47.84 x 4.35 x 14.57 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
1310 x 282 x 525 mm (51.57 x 11.10 x 20.67 inches)

Weight\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>15.8 kg (34.8 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>11.1 kg (24.5 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
23.3 kg (51.4 lbs)

Mounting
Supports VESA mount 100 x 100 mm & 200 x 100 mm

Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, up to 155mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m) (NA, LA only)
- 1x USB-A to USB-B Cable (1.8m)
- 1x Power cable (1.8m)
- 1x Thunderbolt™ 4 cable (40Gbps)
- Factory Calibration Report
- Quick Setup Guide

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports[1]
Rear Ports
- 1x Thunderbolt™ 4 In (Up to 100W), USB upstream
- 1x Thunderbolt™ 4 Out (Up to 27W), USB downstream
- 1x USB-C® 3.2 Gen 1 (15W), USB downstream
- 1x USB-B 3.2 Gen 1, USB upstream
- 4x USB 3.2 Gen 1, USB downstream
- 2x HDMI® 2.1
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE
Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

ENERGY STAR® Certified
EPEAT™ Gold Registered
RoHS compliant
TCO Certified 9.0
TCO edge 2.0
Volatile Organic Compound Certification

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration.

Other Certifications

Eyesafe® Certified 2.0
TÜV Rheinland® Eye Comfort Certification
TÜV Rheinland® Low Blue Light (Hardware Solution)

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## OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Power connector</td>
<td>7. USB 3.2 Gen 1</td>
</tr>
<tr>
<td>3. HDMI 2.1 TMDS</td>
<td>8. Audio-out (3.5mm)</td>
</tr>
<tr>
<td>4. DP 1.4 (HBR2)</td>
<td>9. USB 3.2 Gen 1</td>
</tr>
<tr>
<td>5. USB-C 3.2 Gen 1 (DP 1.4 Alt Mode)</td>
<td>10. USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel

3-side NearEdgeless, In-Plane Switching

Backlight

WLED

Display Size

31.5 inches

Max View Area

WxH: 698.1 x 392.7 mm

Resolution

2560 x 1440

Aspect Ratio

16:9

Pixel Pitch

0.273 x 0.273 mm

Dot / Pixel Per Inch

93 dpi

Brightness

350 cd/m²

Contrast Ratio

- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate

60Hz

Color Gamut

- Color Area Ratio: 130% sRGB
- Coverage Ratio: 99% sRGB

Color Support

1.07 Billion

Color Depth

10-bit (8-bit+FRC)

Screen Surface Treatment

Anti-glare

Operating System

Operating System

- Windows® 11 Support
- Windows® 10 Support

Multi-Media

Camera

- No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)
- ThinkVision® MC 60 monitor webcam (Some models only)

Speakers

Optional Modular Soundbar support (MS30 Monitor Soundbar)
**Power Supply**

**Power Consumption**
- Typical / Max: 32W / 153W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 26W
- Energy Star TEC: 82.6kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**
- Side: 2mm
- Top / Bottom: 2mm / 18.6mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>714.2 x 234.9 x 444.5 mm (28.12 x 9.25 x 17.50 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>714.2 x 234.9 x 599.5 mm (28.12 x 9.25 x 23.60 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>714.2 x 59.5 x 420.9 mm (28.12 x 2.34 x 16.57 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
950 x 525 x 148 mm (37.40 x 20.67 x 5.83 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>9.9 kg (21.83 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>7.2 kg (15.9 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
14.0 kg (30.9 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift
In the Box

- Monitor with Stand
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide
- Warranty Booklet

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports

Rear Ports
- 1x USB-C® 3.2 Gen 1 (DP 1.4 Alt Mode and up to 90W PD), USB upstream
- 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4 (HBR2)
- 1x Ethernet (RJ-45)
- 1x Power Connector
- 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

[3] Supports 2560x1440@60Hz as specified in HDMI® 2.1

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS
Green Certifications

ENERGY STAR® Certified
EPEAT™ Gold Registered
RoHS (2011/65/EU)
TCO Certified 9.0
TCO edge 2.0
Volatile Organic Compound Certification

Notes:
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TÜV Rheinland® Eye Comfort Certification
TÜV Rheinland® Low Blue Light (Hardware Solution)

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## OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kensington Security Slot</td>
</tr>
<tr>
<td>2</td>
<td>Power connector</td>
</tr>
<tr>
<td>3</td>
<td>HDMI 2.1 TMDS</td>
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<tr>
<td>4</td>
<td>DP 1.4 (HBR2)</td>
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<tr>
<td>5</td>
<td>USB-C 3.2 Gen 1 (DP 1.4 Alt Mode)</td>
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<td>6</td>
<td>USB-B 3.2 Gen 1</td>
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<td>7</td>
<td>Ethernet (RJ-45)</td>
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<tr>
<td>8</td>
<td>USB 3.2 Gen 1</td>
</tr>
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<td>9</td>
<td>Audio-out (3.5mm)</td>
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<tr>
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<td>USB 3.2 Gen 1</td>
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<td>11</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
</tr>
<tr>
<td>12</td>
<td>USB 3.2 Gen 1 (BC 1.2)</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
- 3-side NearEdgeless, In-Plane Switching

Backlight
- WLED

Display Size
- 31.5 inches

Max View Area
- WxH: 697.3 x 392.2 mm

Resolution
- 3840 x 2160

Aspect Ratio
- 16:9

Pixel Pitch
- 0.182 x 0.182 mm

Dot / Pixel Per Inch
- 140 dpi

Brightness
- 350 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
- Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate
- 60Hz

Color Gamut
- 100% sRGB
- 95% DCI-P3

Color Support
- 1.07 Billion

Color Depth
- 10-bit (8-bit+FRC)

Screen Surface Treatment
- Anti-glare

Operating System

Camera
- No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)
- ThinkVision® MC 60 monitor webcam (Some models only)

Speakers
- Optional Modular Soundbar support (MS30 Monitor Soundbar)
Power Supply
Power Consumption
• Typical / Max: 32W / 161W
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 32W
• Energy Star TEC: 99kWh
• Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Special Features
• Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
• Picture In Picture (PIP) / Picture By Picture (PBP) Support
• KVM Switch
• Natural Low Blue Light
• Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

DESIGN

Mechanical
ThinkCentre® M Series Support

ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

Bezel Width
• Side: 2mm
• Top / Bottom: 2mm / 18.6mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>714.2 x 234.9 x 444.5 mm (28.12 x 9.25 x 17.50 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>714.2 x 234.9 x 599.5 mm (28.12 x 9.25 x 23.60 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>714.2 x 59.5 x 420.9 mm (28.12 x 2.34 x 16.57 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
950 x 525 x 148 mm (37.40 x 20.67 x 5.83 inches)

Weight

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>10.0 kg (22.0 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>7.2 kg (15.9 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
14.0 kg (30.86 lbs)

Mounting
Supports VESA mount 100mm
Stand
Supports -5° to +23.5° tilt, left & right 45 swivel, 90° pivot, up to 155mm lift

In the Box
• Monitor with Stand
• 1x USB-C® to USB-C® Cable (1.8m)
• 1x Power cable (1.8m)
• Quick Setup Guide
• Warranty Booklet

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports
[1] Rear Ports
[2]
• 1x USB-C® 3.2 Gen 1 (DP 1.4 Alt Mode and up to 90W PD), USB upstream
• 1x USB-B 3.2 Gen 1, USB upstream
• 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
• 1x HDMI® 2.1 TMDS
• 1x DisplayPort™ 1.4 (HBR2)
• 1x Ethernet (RJ-45)
• 1x Power Connector
• 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 90W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.
[3] Supports 3840x2160@60Hz as specified in HDMI® 2.1.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
CERTIFICATIONS

**Green Certifications**[1]

- ENERGY STAR® Certified
- EPEAT™ Gold Registered[2]
- RoHS compliant
- TCO Certified 9.0
- TCO edge 2.0
- Volatile Organic Compound Certification

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit [https://compliance.lenovo.com](https://compliance.lenovo.com).

[2] EPEAT™ is registered where applicable, please visit [epeat.net](https://epeat.net) for registration status by country.

**Other Certifications**

- Eyesafe® Certified 2.0
- TÜV Rheinland® Eye Comfort Certification
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Power connector
2. HDMI 2.0
3. DP 1.2
4. USB-C 3.1 Gen 1 (DP 1.2 Alt Mode)
5. USB 3.1 Gen 1
6. USB 3.1 Gen 1
7. Audio-out (3.5mm)
8. USB 3.1 Gen 1
9. USB 3.1 Gen 1 (BC)
PERFORMANCE

Panel
3-side NearEdgeless, VA

Backlight
WLED

Display Size
34 inches

Max View Area
WxH: 797.2 x 333.7 mm

Resolution
3440 x 1440

Aspect Ratio
21:9

Pixel Pitch
0.2317 x 0.2317 mm

Dot / Pixel Per Inch
109 dpi

Brightness
350 cd/m²

Contrast Ratio
- Contrast Ratio: 3000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 4 ms
- Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Screen Surface Treatment
Anti-glare

Curvature
1500R

Operating System
Operating System
- Windows® 10 Support
- Windows® 7 Support

Power Supply
Power Consumption
- Typical / Max: 46W / 140W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.5W
- Energy Star Power On: 34W
- Energy Star TEC: 107 kWh
- Internal Power Supply
**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

**Smart Power**
The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device.

**DESIGN**

**Mechanical**

**Bezel Width**
- Side: 2.2mm
- Top / Bottom: 2.2mm / 27.8mm

**Cable Management**

**Support**

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>808.6 x 245.0 x 462.4 mm (31.84 x 9.65 x 18.21 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>808.6 x 245.0 x 597.4 mm (31.84 x 9.65 x 23.52 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>808.6 x 106.1 x 372.6 mm (31.84 x 4.18 x 14.67 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
980 x 523 x 250 mm (38.58 x 20.59 x 9.84 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>9.91 kg (21.85 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>6.91 kg (15.23 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
13.85 kg (30.53 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +35° tilt, left & right 45 swivel, up to 135mm lift

**In the Box**
- Monitor with Stand
- 1x DP Cable (1.8m) (NA only)
- 1x USB-C® to USB-A Cable (1.8m) (NA only)
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide

**Notes:**
- [1] The system dimensions may vary depending on configurations.
- [2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**
**Ports**

**Rear Ports**
- 1x USB-C® 3.1 Gen 1 (DP 1.2 Alt Mode and up to 75W PD), USB upstream
- 4x USB 3.1 Gen 1 (1x BC), USB downstream
- 1x HDMI® 2.0
- 1x DisplayPort™ 1.2
- 1x Power Connector
- 1x audio-out (3.5mm)

---

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

[2] Up to 75W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

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**SECURITY & PRIVACY**

**Security**

**Physical Locks**
Kensington® Security Slot™

**SERVICE**

**Warranty**

**Base Warranty**
3-year limited warranty

**CERTIFICATIONS**

**Green Certifications**

**Green Certifications**
- ENERGY STAR® Certified
- EPEAT™ Silver Registered
- RoHS compliant
- TCO Certified 8.0
- TCO edge 2.0

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**Other Certifications**

**Other Certifications**
TÜV Rheinland® Eye Comfort Certification
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## OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power connector</td>
</tr>
<tr>
<td>2</td>
<td>HDMI 2.1 TMDS</td>
</tr>
<tr>
<td>3</td>
<td>DP 1.4 (HBR2)</td>
</tr>
<tr>
<td>4</td>
<td>USB-C 3.2 Gen 1 (DP 1.4 Alt Mode)</td>
</tr>
<tr>
<td>5</td>
<td>Ethernet (RJ-45)</td>
</tr>
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<td>6</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>7</td>
<td>Audio-out (3.5mm)</td>
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<td>8</td>
<td>USB 3.2 Gen 1</td>
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<tr>
<td>9</td>
<td>USB 3.2 Gen 1</td>
</tr>
<tr>
<td>10</td>
<td>USB 3.2 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
3-side NearEdgeless, VA

Backlight
WLED

Display Size
34 inches

Max View Area
WxH: 792.2 x 333.7 mm

Resolution
3440 x 1440

Aspect Ratio
21:9

Pixel Pitch
0.232 x 0.232 mm

Dot / Pixel Per Inch
110 dpi

Brightness
350 cd/m²

Contrast Ratio
• Contrast Ratio: 3000:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
• Extreme Mode: 4 ms
• Normal Mode: 6 ms

Refresh Rate
60Hz

Color Gamut
99% sRGB

Color Support
16.7 Million

Color Depth
8-bit

Screen Surface Treatment
Anti-glare

Curvature
1500R

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support

Multi-Media

Camera
• No bundled webcam (Support ThinkVision® MC 60 Monitor Webcam, sold separately)
• ThinkVision® MC 60 monitor webcam (Some models only)

Speakers
Optional Modular Soundbar support (MS30 Monitor Soundbar)

**Power Supply**

**Power Consumption**
- Typical / Max: 31W / 130W
- Sleep / Off mode: <0.5W
- Switch-off Mode: <0.3W
- Energy Star Power On: 30W
- Energy Star TEC: 93kWh
- Internal Power Supply

**Voltage Required**
AC 100 to 240 V (50-60Hz)

**Special Features**

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light
- Smart Power
  The Smart Power function intelligently detects overall power consumption and dynamically manages the power delivery to each device

**DESIGN**

**Mechanical**

**ThinkCentre® M Series Support**
ThinkCentre® M Series Tiny Support
For supporting Tiny devices, additional Tiny Clamp Bracket Mounting Kit III (PN: 4XF1K72399) are needed (sold separately).

**Bezel Width**
- Side: 2.1mm
- Top / Bottom: 2.1mm / 22.8mm

**Cable Management**
Support

**Case Color**
Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>808.4 x 231.6 x 414.3 mm (31.83 x 9.12 x 16.31 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>808.4 x 231.6 x 569.3 mm (31.83 x 9.12 x 22.41 inches)</td>
</tr>
<tr>
<td>Head Only</td>
<td>808.4 x 110.1 x 367.5 mm (31.83 x 4.33 x 14.47 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
1070 x 525 x 187 mm (42.13 x 20.67 x 7.36 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>9.5 kg (20.94 lbs)</td>
</tr>
<tr>
<td>Monitor Head Only</td>
<td>7.0 kg (15.43 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
14.8 kg (32.63 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +23.5° tilt, left & right 45 swivel, up to 155mm lift

In the Box
- Monitor with Stand
- 1x DP Cable (1.8m) (PRC Workstations only)
- 1x USB-C® to USB-C® Cable (1.8m)
- 1x Power cable (1.8m)
- Quick Setup Guide
- Warranty Booklet

Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M

Ports
- Rear Ports
  - 1x USB-C® 3.2 Gen 1 (DP 1.4 Alt Mode and up to 75W PD), USB upstream
  - 4x USB 3.2 Gen 1 (1x BC 1.2), USB downstream
  - 1x HDMI® 2.1 TMDS
  - 1x DisplayPort™ 1.4 (HBR2)
  - 1x Ethernet (RJ-45)
  - 1x Power Connector
  - 1x audio-out (3.5mm)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
  - USB 2.0: 480 Mbit/s;
  - USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
  - USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
  - USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
  - USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
  - Thunderbolt™ 3/4: 40 Gbit/s.
[2] Up to 75W power delivery to compatible devices by USB-C®. Listed as maximum capacity of power delivery. Actual capacity of power delivery may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.
[3] Supports 3440x1440@60Hz as specified in HDMI® 2.1

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty
CERTIFICATIONS

Green Certifications

ENERGY STAR® Certified
EPEAT™ Gold Registered
RoHS compliant
TCO Certified 9.0
TCO edge 2.0
Volatile Organic Compound Certification

Notes:
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[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Eyesafe® Certified 2.0
TÜV Rheinland® Eye Comfort Certification
TÜV Rheinland® Low Blue Light (Hardware Solution)

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## OVERVIEW

<table>
<thead>
<tr>
<th>1. USB-B Touch</th>
<th>12. LAN Out (RJ45 Out)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. HDMI 2.0</td>
<td>13. USB 2.0</td>
</tr>
<tr>
<td>3. USB 3.0</td>
<td>14. AV In</td>
</tr>
<tr>
<td>4. USB-C 3.0</td>
<td>15. PC Audio</td>
</tr>
<tr>
<td>5. TF Card Slot</td>
<td>16. USB-C 3.0</td>
</tr>
<tr>
<td>6. Line-in (3.5mm)</td>
<td>17. 2x USB 3.0</td>
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<tr>
<td>7. SPDIF Out</td>
<td>18. DP</td>
</tr>
<tr>
<td>8. Line-out (3.5mm)</td>
<td>19. 3x HDMI 2.0</td>
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<td>9. HDMI 2.0 Out</td>
<td>20. USB-B Touch</td>
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<tr>
<td>10. Serial (RS232)</td>
<td>21. VGA</td>
</tr>
<tr>
<td>11. LAN In (RJ45 In)</td>
<td>22. USB 2.0</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel

Panel
In-Plane Switching (IPS)

Backlight
DLED

Display Size
65 inches

Max View Area
WxH: 1428.5 x 803.5 mm

Resolution
3840 x 2160

Aspect Ratio
16:9

Pixel Pitch
0.3720 x 0.3720 mm

Dot / Pixel Per Inch
67 dpi

Brightness
400 cd/m²

Contrast Ratio
- Contrast Ratio: 1200:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
8 ms

Refresh Rate
60Hz

Color Gamut
- 85% NTSC
- 99% sRGB

Color Support
1.07 Billion

Color Depth
10-bit

Screen Surface Treatment
Anti-glare

Smart System

Smart System
- Operating System: Android™ 9.0
- Quad Core™: ARM Cortex A73
- GPU: ARM Mali-G52 MC2
- Storage: 64 GB
- Memory: 4 GB

Operating System

Operating System
Android™ 9.0

Multi-Media
Camera
- Detachable 4K 8MP Camera, Support Voice Tracking AI Feature (Model 62F2KATCWW only)
- No camera

Microphone
8x microphone array

Speakers
Integrated Speakers, 2x 15W

Power Supply
Power Consumption
- Typical / Max: 199W / 251W
- Sleep / Off mode: 35W
- Switch-off Mode: ≤0.5W
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features
Special Features
- HDR10 Compliance
- 1x Human Detection Sensor
- 1x Ambient Light Sensor

DESIGN

Display
Touchscreen
Infrared touch technology, supports 20-point touch, 1.0 mm touch accuracy, 3.2 mm touch glass, 8 Mohs glass hardness

Mechanical
Bezel Width
Side: 28.84mm

Case Color
Raven black

Dimensions (WxDxH)\(^1\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor Only</td>
<td>1527.5 x 87.8 x 952.0 mm (60.14 x 3.42 x 37.48 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
1660 x 220 x 1045 mm (64.74 x 8.58 x 40.76 inches)

Weight\(^2\)

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor Only</td>
<td>40.5 kg (89.29 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
52.5 kg (115.74 lbs)

Mounting
Supports VESA mount 600 x 400 mm

In the Box
- 1x HDMI® cable
- 1x USB-A to USB-B Cable
- 1x Power cable
- 2x Stylus
- Detachable Camera (Model 62F2KATCWW only)
- Display with Wall Mount Bracket
Notes:
[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network
Ethernet
Support 10M / 100M / 1000M
WLAN + Bluetooth®
802.11ac 2x2 Wi-Fi® + Bluetooth® 5.0, MIMO (both 2.4GHz and 5GHz bands)

Ports
Front Ports
• 1x USB-C® 3.0
• 1x USB 3.0
• 1x USB-B Touch
• 1x HDMI® 2.0
Top Ports
1x USB 2.0
Bottom Ports
• 1x AV in
• 1x HDMI® 2.0 out
• 1x LAN in (RJ45 in)
• 1x LAN out (RJ45 out)
• 1x PC Audio
• 1x SPDIF out
• 1x TF Card slot
• 1x USB 2.0
• 1x line-in (3.5mm)
• 1x line-out (3.5mm)
• 1x serial (RS232)
Left Ports
• 1x USB-C® 3.0
• 1x USB-B Touch
• 2x USB 3.0
• 3x HDMI® 2.0
• 1x DP
• 1x VGA
Right Ports
1x Power Connector

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications
RoHS compliant

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

TÜV Rheinland® Flicker Free
TÜV Rheinland® Low Blue Light

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OVERVIEW

1. USB-B Touch
2. HDMI 2.0
3. USB 3.0
4. USB-C 3.0
5. TF Card Slot
6. Line-in (3.5mm)
7. SPDIF Out
8. Line-out (3.5mm)
9. HDMI 2.0 Out
10. Serial (RS232)
11. LAN In (RJ45 In)
12. LAN Out (RJ45 Out)
13. USB 2.0
14. AV In
15. PC Audio
16. USB-C 3.0
17. 2x USB 3.0
18. DP
19. 3x HDMI 2.0
20. USB-B Touch
21. VGA
22. USB 2.0
PERFORMANCE

Panel
In-Plane Switching (IPS)
Backlight
DLED

Display Size
75 inches

Max View Area
WxH: 1649.7 x 927.9 mm

Resolution
3840 x 2160

Aspect Ratio
16:9

Pixel Pitch
0.4296 x 0.4296 mm

Dot / Pixel Per Inch
58 dpi

Brightness
400 cd/m²

Contrast Ratio
- Contrast Ratio: 1200:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
8 ms

Refresh Rate
60Hz

Color Gamut
- 85% NTSC
- 99% sRGB

Color Support
1.07 Billion

Color Depth
10-bit

Screen Surface Treatment
Anti-glare

Smart System
Smart System
- Operating System: Android™ 9.0
- Quad Core™: ARM Cortex A73
- GPU: ARM Mali-G52 MC2
- Storage: 64 GB
- Memory: 4 GB

Operating System
Operating System
Android™ 9.0

Multi-Media
Camera
Detachable 4K 8MP Camera, Support Voice Tracking AI Feature

Microphone
8x microphone array

Speakers
Integrated Speakers, 2x 15W

Power Supply

Power Consumption
• Typical / Max: 247W / 309W
• Sleep / Off mode: 36W
• Switch-off Mode: ≤0.5W
• Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

Special Features
• HDR10 Compliance
• 1x Human Detection Sensor
• 1x Ambient Light Sensor

DESIGN

Display

Touchscreen
Infrared touch technology, supports 20-point touch, 1.0 mm touch accuracy, 3.2 mm touch glass, 8 Mohs glass hardness

Mechanical

Bezel Width
Side: 28.84mm

Case Color
Raven black

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor Only</td>
<td>1736.7 x 87.1 x 1066.2 mm (68.37 x 3.40 x 41.98 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
1900 x 225 x 1160 mm (74.1 x 8.78 x 45.67 inches)

Weight[2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor Only</td>
<td>53.0 kg (116.84 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
67 kg (147.71 lbs)

Mounting
Supports VESA mount 600 x 400 mm

In the Box
• 1x HDMI® cable
• 1x USB-A to USB-B Cable
• 1x Power cable
• 2x Stylus
• Detachable Camera
• Display with Wall Mount Bracket
• Quick Setup Guide
Remote Control with Battery
• Warranty Booklet
• Wireless Projection Dongle

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet
Support 10M / 100M / 1000M

WLAN + Bluetooth®
802.11ac 2x2 Wi-Fi® + Bluetooth® 5.0, MIMO (both 2.4GHz and 5GHz bands)

Ports

Front Ports
• 1x USB-C® 3.0
• 1x USB 3.0
• 1x USB-B Touch
• 1x HDMI® 2.0

Top Ports
1x USB 2.0

Bottom Ports
• 1x AV In
• 1x HDMI® 2.0 out
• 1x LAN in (RJ45 in)
• 1x LAN out (RJ45 out)
• 1x PC Audio
• 1x SPDIF out
• 1x TF Card slot
• 1x USB 2.0
• 1x line-in (3.5mm)
• 1x line-out (3.5mm)
• 1x serial (RS232)

Left Ports
• 1x USB-C® 3.0
• 1x USB-B Touch
• 2x USB 3.0
• 3x HDMI® 2.0
• 1x DP
• 1x VGA

Right Ports
1x Power Connector

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]
Green Certifications
RoHS compliant

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Other Certifications
• TÜV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light

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## OVERVIEW

<p>| | |</p>
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<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>USB-B Touch</td>
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<tr>
<td>2</td>
<td>HDMI 2.0</td>
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<tr>
<td>3</td>
<td>USB 3.0</td>
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<tr>
<td>4</td>
<td>USB-C 3.0</td>
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<tr>
<td>5</td>
<td>TF Card Slot</td>
</tr>
<tr>
<td>6</td>
<td>Line-in (3.5mm)</td>
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<tr>
<td>7</td>
<td>SPDIF Out</td>
</tr>
<tr>
<td>8</td>
<td>Line-out (3.5mm)</td>
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<tr>
<td>9</td>
<td>HDMI 2.0 Out</td>
</tr>
<tr>
<td>10</td>
<td>Serial (RS232)</td>
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<td>11</td>
<td>LAN In (RJ45 In)</td>
</tr>
<tr>
<td>12</td>
<td>LAN Out (RJ45 Out)</td>
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<tr>
<td>13</td>
<td>USB 2.0</td>
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<td>14</td>
<td>AV In</td>
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<td>15</td>
<td>PC Audio</td>
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<td>16</td>
<td>USB-C 3.0</td>
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<tr>
<td>17</td>
<td>2x USB 3.0</td>
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<tr>
<td>18</td>
<td>DP</td>
</tr>
<tr>
<td>19</td>
<td>3x HDMI 2.0</td>
</tr>
<tr>
<td>20</td>
<td>USB-B Touch</td>
</tr>
<tr>
<td>21</td>
<td>VGA</td>
</tr>
<tr>
<td>22</td>
<td>USB 2.0</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
Vertical Alignment (VA)
Backlight
DLED
Display Size
86 inches
Max View Area
WxH: 1895.0 x 1066.0 mm
Resolution
3840 x 2160
Aspect Ratio
16:9
Pixel Pitch
0.4935 x 0.4935 mm
Dot / Pixel Per Inch
51 dpi
Brightness
400 cd/m²
Contrast Ratio
- Contrast Ratio: 4000:1
- Dynamic Contrast Ratio: 3000000:1
View Angle (H / V)
Horizontal: 178°, Vertical: 178°
Response Time
6.5 ms
Refresh Rate
60Hz
Color Gamut
- 85% NTSC
- 99% sRGB
Color Support
1.07 Billion
Color Depth
10-bit
Screen Surface Treatment
Anti-glare

Smart System
Smart System
- Operating System: Android™ 9.0
- Quad Core™: ARM Cortex A73
- GPU: ARM Mali-G52 MC2
- Storage: 64 GB
- Memory: 4 GB

Operating System
Operating System
Android™ 9.0

Multi-Media
Camera
Detachable 4K 8MP Camera, Support Voice Tracking AI Feature

Microphone
8x microphone array

Speakers
Integrated Speakers, 2x 15W

Power Supply
Power Consumption
- Typical / Max: 350W / 410 W
- Sleep / Off mode: 43W
- Switch-off Mode: ≤0.5W
- Internal Power Supply

Voltage Required
AC 100 to 240 V (50-60Hz)

Special Features

DESIGN

Display
Touchscreen
Infrared touch technology, supports 20-point touch, 1.0 mm touch accuracy, 3.2 mm touch glass, 7 Mohs glass hardness

Mechanical
Bezel Width
Side: 28.3mm

Case Color
Raven black

Dimensions (WxDxH) [1]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor Only</td>
<td>1982.0 x 92.0 x 1209.2 mm (78.0 x 3.6 x 47.61 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)
2119 x 275 x 1353 mm (83.4 x 10.8 x 53.3 inches)

Weight [2]

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor Only</td>
<td>68 kg (150 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight
Monitor with W20 Dongle and iLFD Detachable Camera: 88 kg (194 lbs)

Mounting
Supports VESA mount 800 x 400 mm

In the Box
- 1x HDMI® cable
- 1x USB-A to USB-B Cable
- 1x Power cable
- 2x Stylus
- Detachable Camera
- Display with Wall Mount Bracket
- Quick Setup Guide
ThinkVision T86

- Remote Control with Battery
- Warranty Booklet
- Wireless Projection Dongle

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Ethernet

Support 10M / 100M / 1000M

WLAN + Bluetooth®

802.11ac 2x2 Wi-Fi® + Bluetooth® 5.0, MIMO (both 2.4GHz and 5GHz bands)

Ports

Front Ports
- 1x USB-C® 3.0
- 1x USB 3.0
- 1x USB-B Touch
- 1x HDMI® 2.0

Top Ports
- 1x USB 2.0

Bottom Ports
- 1x AV In
- 1x HDMI® 2.0 out
- 1x LAN in (RJ45 in)
- 1x LAN out (RJ45 out)
- 1x PC Audio
- 1x SPDIF out
- 1x TF Card slot
- 1x USB 2.0
- 1x line-in (3.5mm)
- 1x line-out (3.5mm)
- 1x serial (RS232)

Left Ports
- 1x USB-C® 3.0
- 1x USB-B Touch
- 2x USB 3.0
- 3x HDMI® 2.0
- 1x DP
- 1x VGA

Right Ports
- 1x Power Connector

Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications[1]

Green Certifications
RoHS compliant

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Other Certifications
• TÜV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light

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### OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cable lock slot</td>
</tr>
<tr>
<td>2</td>
<td>1x USB-C 3.1 Gen 1</td>
</tr>
<tr>
<td>3</td>
<td>1x USB-C 3.1 Gen 1</td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel

In-Plane Switching (IPS)

Backlight

WLED

Display Size

14 inches

Max View Area

WxH: 309.31 x 173.99 mm

Resolution

1920 x 1080

Aspect Ratio

16:9

Pixel Pitch

0.1611 x 0.1611 mm

Dot / Pixel Per Inch

157 dpi

Brightness

300 cd/m²

Contrast Ratio

• Contrast Ratio: 700:1
  • Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

6ms with OD

Refresh Rate

60Hz

Color Gamut

72% NTSC

Color Support

16.7 Million

Color Depth

8-bit (6-bit+FRC)

Screen Surface Treatment

Anti-glare

Operating System

Operating System

• Windows® 10 Support
  • Windows® 7 Support

Power Supply

Power Consumption

• Typical / Max: 6W / 7.5W (Without USB-C® output)
  • Sleep / Off mode: <0.3W
  • Switch-off Mode: <0.3W
  • Energy Star Power On: 4.88W
  • Energy Star TEC: 15.53kWh
  • External Power Supply (no adapter bundle)

Voltage Required
**ThinkVision M14**

DC 5 to 20 V

**Special Features**

Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support

Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems). Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

**DESIGN**

**Mechanical**

Bezel Width

- Side: 5.48mm
- Top / Bottom: 5.47mm / 23.87mm

**Cable Management**

Support

**Case Color**

Raven black

**Dimensions (Wx Dx H)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>323.37 x 96.54 x 209.03 mm (12.73 x 3.8 x 8.23 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>323.37 x 96.54 x 220.03 mm (12.73 x 3.8 x 8.66 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**

402 x 276 x 61mm (15.83 x 10.87 x 2.40 inches)

**Weight**

0.598 kg (1.31 lbs)

**Packaging Weight**

1.67 kg (3.68 lbs)

**Mounting**

Supports VESA mount 100mm, 2 screw holes

**Stand**

Supports -5° to +90° tilt

**In the Box**

- Monitor with Stand
- 1x USB-C® to USB-C® Cable (1m)
- 1x Pair of clips
- 1x QSG
- 1x ThinkVision® M14 sleeve

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Ports**

**Rear Ports**

2x USB-C® 3.1 Gen 1 (DP 1.2 Alt Mode, one USB upstream, one USB downstream and USB 2.0 data transfer)

**Notes:**

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the
host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Silver Registered
• RoHS compliant

Notes:
[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
• Image Quality Capability ISO 9241-307
• TÜV Rheinland® Eye Comfort Certification
• TÜV Rheinland® Low Blue Light

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OVERVIEW

1. Cable lock slot
2. 1x USB-C 3.1 Gen 1
3. 1x USB-C 3.1 Gen 1
PERFORMANCE

Panel

In-Plane Switching (IPS)

Backlight

WLED

Display Size

14 inches

Max View Area

WxH: 301.5 x 188.5 mm

Resolution

2240 x 1400

Aspect Ratio

16:10

Pixel Pitch

0.135 x 0.135 mm

Dot / Pixel Per Inch

189 dpi

Brightness

• Peak: 375 cd/m²
• Typical: 300 cd/m²

Contrast Ratio

• Contrast Ratio: 1500:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

• Extreme Mode: 6 ms
• Normal Mode: 8 ms

Refresh Rate

60Hz

Color Gamut

• Color Area Ratio: 105% sRGB
• Coverage Ratio: 100% sRGB

Color Support

16.7 Million

Color Depth

8-bit

Screen Surface Treatment

Anti-glare

Operating System

Operating System

• Windows® 11 Support
• Windows® 10 Support

Power Supply

Power Consumption

• Typical / Max: 6W / 7.5W (Without USB-C® output)
• Sleep / Off mode: <0.5W
• Switch-off Mode: <0.3W
• Energy Star Power On: 6.85W
ThinkVision M14d

- Energy Star TEC: 22.71kWh
- External Power Supply (no adapter bundle)

**Voltage Required**
5V / 9V / 15V DC 3A or 20V DC 5A Max

**Special Features**

- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Natural Low Blue Light

**DESIGN**

**Mechanical**

- **Bezel Width**
  - Side: 4.9mm
  - Top / Bottom: 4.9mm / 18.9mm
- **Case Color**
  Raven black

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>314.4 x 106.4 x 216.5mm (12.38 x 4.19 x 8.52 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>314.4 x 106.4 x 227.5 mm (12.38 x 4.19 x 8.96 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (WxDxH)**
384 x 277 x 76 mm (15.12 x 10.91 x 2.99 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>0.6 kg (1.3 lbs)</td>
</tr>
</tbody>
</table>

**Packaging Weight**
1.8 kg (4.0 lbs)

**Mounting**
Supports VESA mount 100mm

**Stand**
Supports -5° to +95° tilt, up to 11mm lift

**In the Box**
- Monitor with Stand
- 1x USB-C® to USB-C® Cable (1m)
- Quick Setup Guide

**Notes:**

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Ports**

- **Rear Ports**
  2x USB-C® 3.1 Gen 1 (DP 1.2 Alt Mode, USB 2.0 data transfer)
Notes:

[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications

• ENERGY STAR® Certified
• EPEAT™ Silver Registered
• RoHS compliant
• Volatile Organic Compound Certification

Notes:

[1] The items listed under the “Green Certifications” section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications

• Eyesafe® Certified
• TÜV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light
• TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cable lock slot</td>
<td>3. 1x USB-C 3.2 Gen 1 (DP 1.2 Alt Mode)</td>
</tr>
<tr>
<td>2. 1x USB-C 3.2 Gen 1 (DP 1.2 Alt Mode)</td>
<td></td>
</tr>
</tbody>
</table>
PERFORMANCE

Panel
- In-Plane Switching (IPS)

Backlight
- WLED

Display Size
- 14 inches

Max View Area
- WxH: 309.31 x 173.09 mm

Resolution
- 1920 x 1080

Aspect Ratio
- 16:9

Pixel Pitch
- 0.1611 x 0.1611 mm

Dot / Pixel Per Inch
- 157 dpi

Brightness
- 300 cd/m²

Contrast Ratio
- Contrast Ratio: 700:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
- Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 6 ms
- Normal Mode: 8 ms

Refresh Rate
- 60Hz

Color Gamut
- 72% NTSC

Color Support
- 16.7 Million

Color Depth
- 8-bit (6-bit+FRC)

Operating System

Operating System
- Windows® 10 Support
- Windows® 7 Support

Power Supply

Power Consumption
- Typical / Max: 8W / 9.5W
- Sleep / Off mode: <0.3W
- Switch-off Mode: <0.3W
- Energy Star Power On: 7.22W
- Energy Star TEC: 25.5kWh
- External Power Supply (no adapter bundle)

Voltage Required
- DC 5 / 9 / 15 / 20 V
Special Features

Special Features
- Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support
  Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.
- Support active pen

DESIGN

Display
Touchscreen
Supports 10-point touch

Mechanical

Bezel Width
- Side: 5.43mm
- Top / Bottom: 5.42mm / 30.38mm

Cable Management
Support

Case Color
Raven black

Dimensions (WxDxH)\(^1\)  
<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>323.4 x 14.0 x 214.3 mm (12.73 x 0.55 x 8.44 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>323.4 x 14.0 x 226.5 mm (12.73 x 0.55 x 8.92 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)  
267 x 377 x 68 mm (105.12 x 148.43 x 26.77 inches)

Weight\(^2\)  
<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>0.698 kg (1.54 lbs)</td>
</tr>
</tbody>
</table>

Packaging Weight  
1.87 kg (4.12 lbs)

Mounting
Supports VESA mount 100mm, 2 screw holes

Stand
Supports -5° to +90° tilt, 90° pivot, up to 11mm lift

In the Box
- M14t Monitor
- 1x USB-C® to USB-C® Cable (1m)
- (Optional) Active Pen with battery for selected regions and countries only
- 1x L-shaped dongle
- 1x Pair of clips
- 1x sleeve
- Quick Setup Guide

Notes:
\(^1\) The system dimensions may vary depending on configurations.
\(^2\) The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY
Ports

Rear Ports
2x USB-C® 3.2 Gen 1 (support data transfer, DP 1.2 Alt Mode, up to 65W power delivery)

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Silver Registered[2]
• RoHS compliant

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.
[2] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

Other Certifications

Other Certifications
TÜV Rheinland® Low Blue Light

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OVERVIEW

1. USB-C (Hi-Speed USB), with PD 2.0 & DP 1.2
2. Brightness/Contrast adjust button
3. Main menu button
4. Power button
5. Kensington Security Slot
6. USB-C (Hi-Speed USB), with PD 2.0 & DP 1.2
PERFORMANCE

Panel

Panel
In-Plane Switching (IPS)

Backlight

WLED

Display Size

14 inches

Max View Area

WxH: 301.6 x 188.5 mm

Resolution

2240 x 1400

Aspect Ratio

16:10

Pixel Pitch

0.1346 x 0.1346 mm

Dot / Pixel Per Inch

189 dpi

Brightness

• Panel: 300 cd/m²
• Set: 270 cd/m²

Contrast Ratio

• Contrast Ratio: 1500:1
• Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)

Horizontal: 178°, Vertical: 178°

Response Time

• Extreme Mode: 6 ms
• Normal Mode: 8 ms

Refresh Rate

60Hz

Color Gamut

• Coverage Ratio: 100% sRGB (CIE 1931)
• Color Area Ratio: 100% sRGB

Color Support

16.7 Million

Color Depth

8-bit

Operating System

Operating System
• Windows® 11 Support
• Windows® 10 Support

Power Supply

Power Consumption
• Typical / Max: 8W / 9.5W
• Sleep / Off mode: <0.3W
• Switch-off Mode: <0.3W
• Energy Star Power On: 6.8W
• Energy Star TEC: 23.6kWh

Voltage Required
ThinkVision M14t Gen 2

DC 5 to 20 V

Special Features

- Natural Low Blue Light
- Lenovo® Accessories and Display Manager
  Lenovo® Accessories and Display Manager supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems).
  Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

DESIGN

Display

Touchscreen

Supports 10-point touch

Mechanical

Bezel Width

- Thickness of Head: 4.6mm (Minimum)
- Side: 6.1mm
- Top / Bottom: 6.1mm / 27.5mm

Cable Management

Support

Case Color

Raven black

Dimensions (WxDxH)[3]

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>314.8 x 96.7 x 224.3 mm (12.39 x 3.81 x 8.83 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>314.8 x 96.4 x 235.3 mm (12.39 x 3.8 x 9.26 inches)</td>
</tr>
</tbody>
</table>

Packaging Dimensions (WxDxH)

384 x 76 x 277 mm (15.12 x 2.99 x 10.91 inches)

Weight[2]

0.7 kg (1.5 lbs)

Packaging Weight

1.9 kg (4.2 lbs)

Mounting

Supports VESA mount 100mm, 2 holes

Stand

Supports 0° to +90° tilt, -90° to +90° pivot, 11mm lift

In the Box

- Monitor with Stand
- 1x USB-C® to USB-C® Cable (1m, 5Gbps)
- 2x Clips
- 1x Touch Pen
- 1x L-Shape Dongle
- 1x Protect Bag
- Quick Setup Guide

Notes:

[1] The system dimensions may vary depending on configurations.
[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY
Ports

Left Ports
1x USB-C® (Hi-Speed USB / USB 2.0), with USB PD 2.0 and DisplayPort™ 1.2, up to 65w PD

Right Ports
1x USB-C® (Hi-Speed USB / USB 2.0), with USB PD 2.0 and DisplayPort™ 1.2, up to 65w PD

Notes:
[1] The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2], [3] Listed as maximum capacity of power delivery. Actual capacity may vary depending upon devices connected or monitor configuration, and may decline with downstream USB ports connected or higher brightness setting.

SECURITY & PRIVACY

Security

Physical Locks
Kensington® Security Slot™ (2.5 mm x 6 mm)

SERVICE

Warranty

Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
- ENERGY STAR® Certified
- EPEAT™ Gold Registered
- EU Energy Label (C-class)
- RoHS (2011/65/EU)
- Volatile Organic Compound Certification

Notes:
[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit https://compliance.lenovo.com.

Other Certifications

Other Certifications
- Eyesafe® Certified 2.0
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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OVERVIEW

1. Cable lock slot
2. 1x USB-C 3.1 Gen 1
3. 1x USB-C 3.1 Gen 1
PERFORMANCE

Panel
In-Plane Switching (IPS)

Backlight
WLED

Display Size
15.6 inches

Max View Area
WxH: 344.2 x 193.6 mm

Resolution
1920 x 1080

Aspect Ratio
16:9

Pixel Pitch
0.179 x 0.179 mm

Dot / Pixel Per Inch
141 dpi

Brightness
250 cd/m²

Contrast Ratio
- Contrast Ratio: 1000:1
- Dynamic Contrast Ratio: 3000000:1

View Angle (H / V)
Horizontal: 178°, Vertical: 178°

Response Time
- Extreme Mode: 6 ms
- Normal Mode: 14 ms

Refresh Rate
60Hz

Color Gamut
45% NTSC

Color Support
16.7 Million

Screen Surface Treatment
Anti-glare

Operating System

Operating System
- Windows® 10 Support
- Windows® 7 Support

Power Supply

Power Consumption
- Typical / Max: 8W / 9.5W
- Sleep / Off mode: <0.3W
- Switch-off Mode: <0.3W
- Energy Star Power On: 5W
- Energy Star TEC: 19kWh
- External Power Supply (no adapter bundle)

Voltage Required
DC 5 / 9 / 15 / 20 V
**Special Features**

**Lenovo® ThinkColour (Lenovo® Accessories and Display Manager) Support**

Lenovo® ThinkColour supports Windows® 10 & 11, Mac OS, and Windows® On Arm (functions vary across systems). Lenovo® Accessories and Display Manager is formerly Lenovo® Display Control Center.

**DESIGN**

**Mechanical**

**Bezel Width**
- Side: 7.3mm
- Top / Bottom: 7.3mm / 31.9mm

**Cable Management**

**Support**

**Case Color**

Raven black

**Dimensions (Wx Dx H)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Position</td>
<td>108.4 x 235.5 x 360.0 mm (4.27 x 9.27 x 14.17 inches)</td>
</tr>
<tr>
<td>Highest Position</td>
<td>108.4 x 245.5 x 360.0 mm (4.27 x 9.67 x 14.17 inches)</td>
</tr>
</tbody>
</table>

**Packaging Dimensions (Wx Dx H)**

279.9 x 407.9 x 75.9 mm (11.02 x 16.06 x 2.99 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor With Stand</td>
<td>0.9 kg (1.9 lbs)</td>
</tr>
</tbody>
</table>

**Weight**

1.7 kg (3.75 lbs)

**Mounting**

Supports VESA mount 100mm, 2 screw holes

**Stand**

Supports 0° to +90° tilt, up to 10mm lift

**In the Box**

- M15 Monitor
- 1x USB-C® to USB-C® Cable (1m)
- 1x Pair of clips
- 1x sleeve
- Quick Setup Guide

**Notes:**

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

**CONNECTIVITY**

**Ports**

**Rear Ports**

2x USB-C® 3.2 Gen 1 (DP 1.2 Alt Mode, one USB upstream, one USB downstream and USB 2.0 data transfer)

**Notes:**
The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.
USB 2.0: 480 Mbit/s;
USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.

SECURITY & PRIVACY

Security
Physical Locks
Kensington® Security Slot™

SERVICE

Warranty
Base Warranty
3-year limited warranty

CERTIFICATIONS

Green Certifications

Green Certifications
• ENERGY STAR® Certified
• EPEAT™ Silver Registered
• RoHS compliant

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Other Certifications

Other Certifications
• TÜV Rheinland® Flicker Free
• TÜV Rheinland® Low Blue Light

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