# OVERVIEW

| 1. Headphone / microphone combo jack (3.5mm) | 6. USB 3.2 Gen 1 |
| 2. USB 3.2 Gen 1 | 7. USB 3.2 Gen 1 (Always On) |
| 3. Ethernet (RJ-45) | 8. Power connector |
| 4. USB-C 3.2 Gen 2 | 9. Thunderbolt 4 |
| 5. HDMI 2.1 | 10. USB-C 3.2 Gen 2 (data transfer / DP 1.4 only) |
PERFORMANCE

Processor
Processor Family
12th Generation Intel® Core™ 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>Memory Support</th>
<th>Processor 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>DDR5-4800</td>
<td>Intel Iris® Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System
Operating System
- Windows® 11 Home 64
- No operating system

Graphics

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Type</th>
<th>Memory</th>
<th>Boost Clock</th>
<th>TGP</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVIDIA® GeForce® RTX™ 3050 Ti Laptop GPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>1695 MHz</td>
<td>95W</td>
<td>Advanced Optimus, Resizable BAR, Dynamic Boost 2.0, 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 7680x4320@60Hz
- USB-C supports up to 7680x4320@60Hz

Notes:
1. For Max resolution, DSC-enabled display is required

Chipset
Chipset
Intel SoC (System on Chip) platform

Memory
Max Memory
Up to 16GB DDR5-4800 offering

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. The system may support more memory as the technology develops.

Storage
Storage Support
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
- Two M.2 2280 PCIe® Gen 4x4 slots, support M.2 2242/2280 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 4.0 x4</td>
<td>512GB</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe, PCIe 4.0 x4</td>
<td>512GB / 1TB</td>
</tr>
</tbody>
</table>

### 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, Nahimic Audio
- **Microphone**
  - Dual array microphone
- **Camera**
  - 720p, with e-camera shutter, fixed focus

### Battery

- **Battery**
  - Integrated Li-Polymer 80Wh battery, supports Super Rapid Charge (charge up to 40% in 10min, 80% in 30min)
- **Max Battery Life**
  - MobileMark® 2018: 5.37 hr (discrete mode) or 7.08 hr (hybrid mode)

### Power Adapter

- **Power Adapter**
  - 230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

### 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</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.0”</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>178°</td>
</tr>
<tr>
<td>16.0”</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>500 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>178°</td>
</tr>
</tbody>
</table>

**Color Calibration**

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 and depends 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.
X-Rite® Pantone® factory color calibration

**Touchscreen**
Non-touch

Notes:
1. California Electronic Waste Recycling Fee
   In California, per state law, Lenovo charges an electronic waste recycling fee on this covered device at the time of sale of the product.
   For more information, go to https://www.calrecycle.ca.gov/Electronics/Consumer

**Input Device**

**Keyboard**
- Glacier white model: 6-row, multimedia Fn keys, numeric keypad, moon white keycap
- Storm grey model: 6-row, multimedia Fn keys, numeric keypad, black keycap

**Keyboard Backlight**
- Blue backlight
- 4-Zone RGB backlight

**Touchpad**

Butterless Mylar® surface multi-touch touchpad, 75 x 120 mm (2.95 x 4.72 inches)

**Mechanical**

**Dimensions (Wx Dx H)**
359.9 x 264.4 x 19.9 mm (14.17 x 10.41 x 0.78 inches)

**Weight**
2.49 kg (5.49 lbs)

**Case Color**
- Glacier white (top), dove grey (bottom)
- Storm grey (top), black (bottom)

**Surface Treatment**
- Glacier white model: Anodize electrophoresis deposition
- Storm grey model: Anodizing

**Case Material**
Aluminium (top), aluminium (bottom)

**System Lighting**
No system lighting

Notes:
1. The system dimensions and weight vary depending on configurations.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
Gigabit Ethernet, 1x RJ-45

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

**Ports**

**Standard Ports**
- 2x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C 3.2 Gen 2 (support data transfer and DisplayPort™ 1.4)
- 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 135W and DisplayPort 1.4)
- 1x Thunderbolt™ 4 / USB4™ 40Gbps (support data transfer and DisplayPort 1.4)
- 1x HDMI 2.1
1x Ethernet (RJ-45)
1x Headphone / microphone combo jack (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; USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s; Thunderbolt 3/4: 40 Gbit/s; FireWire 400: 400 Mbit/s; FireWire 800: 800 Mbit/s

SECURITY & PRIVACY

Security

Security Chip
Firmware TPM 2.0 integrated in chipset

Fingerprint Reader
No fingerprint reader

BIOS Security
• Administrator password
• Power-on password
• Hard disk password

Other Security
E-Camera shutter

SERVICE

Warranty

Base Warranty[1]
• 1-year depot service
• 1-year depot with 2-year system board service
• 2-year (1-yr battery) depot service

Notes:
1. More information of warranty policy, please access https://pcsupport.lenovo.com/warranty

ENVIRONMENTAL

Operating Environment

Temperature
At altitudes up to 2438 m (8,000 ft)
- Operating: 5°C to 35°C (41°F to 95°F)
- Storage: 5°C to 43°C (41°F to 109°F)

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)

CERTIFICATIONS

Green Certifications
Green Certifications
• ErP Lot 3
• RoHS compliant

Other Certifications
TÜV Rheinland® Low Blue Light (Hardware Solution)

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