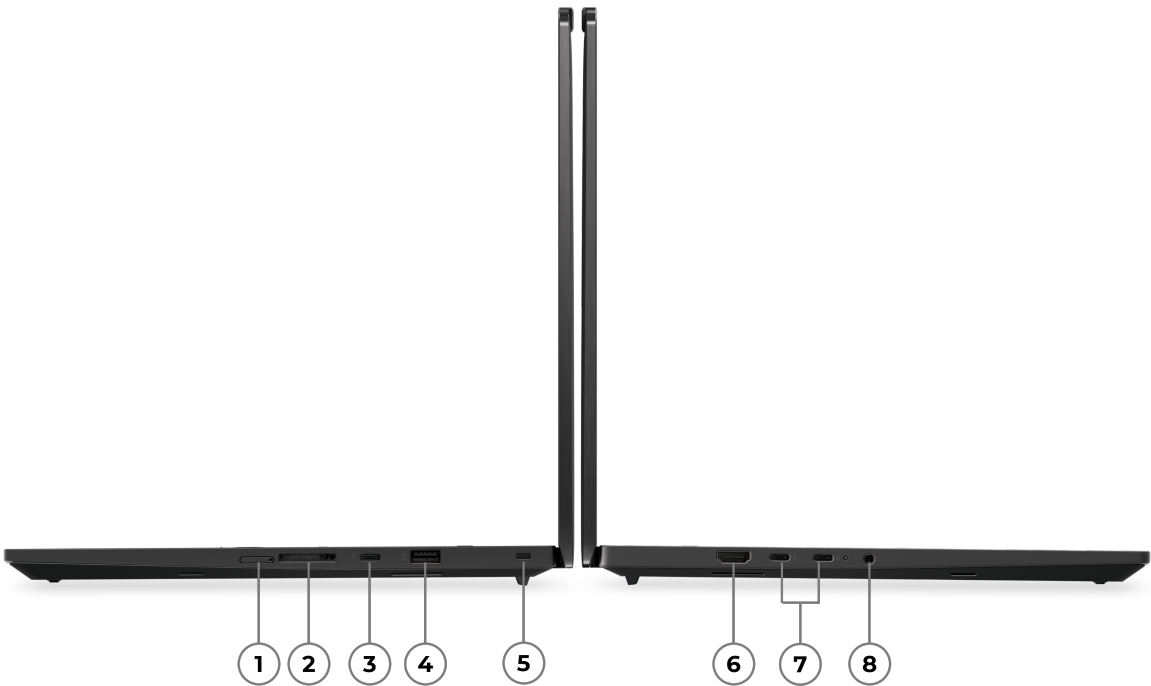


OVERVIEW



|                                  |                                              |
|----------------------------------|----------------------------------------------|
| 1. Nano-SIM card slot *          | 5. Kensington Nano Security Slot             |
| 2. SD Express 7.0 card reader    | 6. HDMI                                      |
| 3. Thunderbolt 4                 | 7. 2x Thunderbolt 5                          |
| 4. USB-A (USB 10Gbps), Always On | 8. Headphone / microphone combo jack (3.5mm) |

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

PERFORMANCE

Processor

Processor Family

Intel® H Series Core Ultra 7 / 9 / X7 / X9 Processor (Series 3); supports up to 16 cores; up to 5.1GHz

Processor\*\*

| Processor Name     | Cores                                  | Threads | Base Frequency                                   | Max Frequency                                    | Cache                   | Processor Graphics                   | NPU           | Intel® vPro® Eligibility |
|--------------------|----------------------------------------|---------|--------------------------------------------------|--------------------------------------------------|-------------------------|--------------------------------------|---------------|--------------------------|
| Core Ultra 7 356H  | 16 (4 P-core + 8 E-core + 4 LP E-core) | 16      | P-core 1.9GHz / E-core 1.5GHz / LP E-core 1.5GHz | P-core 4.7GHz / E-core 3.5GHz / LP E-core 3.3GHz | 18MB Intel® Smart Cache | Intel® Graphics, up to 40 TOPS       | Up to 50 TOPS | -                        |
| Core Ultra 7 366H  | 16 (4 P-core + 8 E-core + 4 LP E-core) | 16      | P-core 2.0GHz / E-core 1.6GHz / LP E-core 1.6GHz | P-core 4.8GHz / E-core 3.6GHz / LP E-core 3.4GHz | 18MB Intel® Smart Cache | Intel® Graphics, up to 40 TOPS       | Up to 50 TOPS | Intel® vPro® Platform    |
| Core Ultra 9 386H  | 16 (4 P-core + 8 E-core + 4 LP E-core) | 16      | P-core 2.1GHz / E-core 1.6GHz / LP E-core 1.6GHz | P-core 4.9GHz / E-core 3.7GHz / LP E-core 3.5GHz | 18MB Intel® Smart Cache | Intel® Graphics, up to 40 TOPS       | Up to 50 TOPS | Intel® vPro® Platform    |
| Core Ultra X7 368H | 16 (4 P-core + 8 E-core + 4 LP E-core) | 16      | P-core 2.0GHz / E-core 1.6GHz / LP E-core 1.6GHz | P-core 5.0GHz / E-core 3.8GHz / LP E-core 3.6GHz | 18MB Intel® Smart Cache | Intel® Arc™ B390 GPU, up to 122 TOPS | Up to 50 TOPS | Intel® vPro® Platform    |
| Core Ultra X9 388H | 16 (4 P-core + 8 E-core + 4 LP E-core) | 16      | P-core 2.1GHz / E-core 1.6GHz / LP E-core 1.6GHz | P-core 5.1GHz / E-core 3.8GHz / LP E-core 3.7GHz | 18MB Intel® Smart Cache | Intel® Arc™ B390 GPU, up to 122 TOPS | Up to 50 TOPS | Intel® vPro® Platform    |

AI (Artificial Intelligence)

AI PC Category

- AI-Ready Workstations
- Copilot+ PC

NPU

Up to 50 TOPS

Operating System

Operating System

- Windows® 11 Pro
- Windows® 11 Home
- Fedora Linux
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 10.2 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](#))

Graphics

Graphics

| Graphics                                                       | Type       | Memory    | AI TOPS (Peak)                    |
|----------------------------------------------------------------|------------|-----------|-----------------------------------|
| Intel® Arc™ B390 GPU                                           | Integrated | Shared    | 122 TOPS (Int8)                   |
| NVIDIA® RTX PRO 1000 Blackwell Generation 8GB GDDR7 Laptop GPU | Discrete   | 8GB GDDR7 | 440 TOPS (FP4 TOPS with Sparsity) |
| NVIDIA® RTX PRO 2000 Blackwell Generation 8GB GDDR7 Laptop GPU | Discrete   | 8GB GDDR7 | 572 TOPS (FP4 TOPS with Sparsity) |

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ 5, Thunderbolt™ 4, and HDMI®).

Max resolution for multiple external display:

- 3x 5210x3200@60Hz (Thunderbolt™ 5 and Thunderbolt™ 4)
- 1x 3840x2160@60Hz (HDMI®)

Max resolution for single external display:

- Thunderbolt™ 4 supports up to 7680x4320@60Hz or 3840x2160@240Hz
- Thunderbolt™ 5 supports up to 7680x4320@60Hz or 3840x2160@240Hz
- HDMI® supports up to 7680x4320@60Hz or 3840x2160@240Hz

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory

Up to 96GB (1x 96GB LPCAMM2), upgradable

Memory Slots

One LPCAMM2 connector, dual-channel

Memory Type

LPDDR5X-8533, maximum transfer speeds of up to 8533 MT/s;  
16GB / 32GB / 64GB / 96GB memory modules are available

Storage

Max Storage Support<sup>[1]</sup>

Up to two M.2 2280 Gen 5 Performance SSD; up to 8TB, 4TB each<sup>[2]</sup>

Storage Slot<sup>[3]</sup>

Two M.2 slots

- One M.2 2280 PCIe® 5.0 x4 slot
- One M.2 2280 PCIe® 4.0 x4 slot<sup>[4]</sup>

Storage Type\*\*\*

| Disk Type    | Interface                                            | Offering                | Security |
|--------------|------------------------------------------------------|-------------------------|----------|
| M.2 2280 SSD | PCIe® NVMe®, PCIe® 4.0 x4                            | 512GB / 1TB             | Opal 2.0 |
| M.2 2280 SSD | PCIe® NVMe®, PCIe® 5.0 x4 Performance <sup>[5]</sup> | 512GB / 1TB / 2TB / 4TB | Opal 2.0 |

RAID

RAID 0/1 support

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.  
[2], [4] WWAN module occupies M.2 PCIe® 4.0 x4 slot, WWAN models support one M.2 SSD.  
[3] The actual data transfer rate of the following PCIe® interface also depends on the capabilities of the connected PCIe® device. The listed values represent theoretical maximums.  
PCIe® 3.0 (x2 / x4): 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps);  
PCIe® 4.0 (x2 / x4): 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps);  
PCIe® 5.0 (x2 / x4): 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps).  
[5] Gen 5 SSD on M.2 PCIe® 4.0 slot will run on PCIe® 4.0 protocols.

Removable Storage

Card Reader

SD Express 7.0 card reader

Multi-Media

Audio Chip

SoundWire®, Cirrus Logic® CS42L43 codec

Speakers

Stereo speakers:

- WLAN model: Dual speakers 2W x2, Dolby Atmos®
- WWAN model: Quad speakers (2W x2 + 1W x2), Dolby Atmos®

Microphone

- Dual-microphone array, far-field, Dolby Voice®
- No microphone (for special bid model)

Camera\*\*

- 5.0MP + IR with Privacy Shutter, HDR and Computer Vision Human Presence Detection
- 5.0MP + IR with privacy shutter, fixed focus, temporal noise reduction
- 5.0MP + IR, with privacy shutter, fixed focus, Computer Vision Human Presence Detection on Image Signal Processor (ISP), temporal noise reduction
- No camera (for special bid model)

Battery

Battery

90Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr)

Power Adapter

Power Adapter<sup>[1]</sup>

- 140W USB-C® GaN (3-pin) AC adapter, supports PD 3.1, 100-240V, 50-60Hz
- No power adapter

Notes:

[1] AC adapter offerings depend on the country.

DESIGN

Display

Display\*\*

| Size | Resolution         | Touch             | Type        | Brightness                 | Surface                      | Aspect Ratio | Contrast Ratio | Color Gamut | Refresh Rate | Viewing Angle (L/R/U/D) | Key Features                                                                                                                                          |
|------|--------------------|-------------------|-------------|----------------------------|------------------------------|--------------|----------------|-------------|--------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16"  | WUXGA (1920x1200)  | Non-touch         | IPS         | 500nits                    | Anti-glare                   | 16:10        | 1200:1         | 100% sRGB   | 60Hz         | 89° / 89° / 89° / 89°   | 91.7% screen to body ratio, X-Rite® Factory Color Calibration, Low power, TÜV Low Blue Light, Eyesafe® 2.0 Certified, DC dimming                      |
| 16"  | WQUXGA (3840x2400) | Non-touch         | IPS         | 800nits                    | Anti-glare                   | 16:10        | 1500:1         | 100% DCI-P3 | 60Hz         | 85° / 85° / 85° / 85°   | 91.7% screen to body ratio, DisplayHDR™ 400, Dolby Vision®, Eyesafe® Certified 2.0, TÜV Low Blue Light, X-Rite® Factory Color Calibration, DC dimming |
| 16"  | 3.2K (3200x2000)   | Add-on Film Touch | Tandem OLED | SDR 600nits / HDR 1500nits | Anti-glare, anti-reflection, | 16:10        | 100,000:1      | 100% DCI-P3 | 40-120Hz VRR | 85° / 85° / 85° / 85°   | 90.9% screen to body ratio, DisplayHDR™ 600, Dolby                                                                                                    |

|  |  |  |  |        |             |  |  |  |  |  |                                                                                                                |
|--|--|--|--|--------|-------------|--|--|--|--|--|----------------------------------------------------------------------------------------------------------------|
|  |  |  |  | (peak) | anti-smudge |  |  |  |  |  | Vision®, Eyesafe® Certified 2.0, TÜV Rheinland® Low Blue Light, X-Rite® Factory Color Calibration, PWM dimming |
|--|--|--|--|--------|-------------|--|--|--|--|--|----------------------------------------------------------------------------------------------------------------|

Touchscreen

- Add-on Film Touch, supports 10-point touch (Tandem OLED models)
- Non-touch

Screen-to-Body Ratio\*\*

- 90.9% (Tandem OLED models)
- 91.7% (IPS models)

Color Calibration

X-Rite® factory color calibration

Input Device

Pen

- Lenovo® Yoga® Pen
- No pen bundled (purchase separately)
- No support (non-touch display doesn't support pen input)

Keyboard

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

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)<sup>[1]</sup>

354.4 × 241.2 × 9.87 / 15.8 (front / rear), 20.6 (maximum) mm  
13.95 × 9.50 × 0.39 / 0.62 (front / rear), 0.81 (maximum) inches

Weight<sup>[2]</sup>

Starting at 1.77 kg (3.90 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

WLAN + Bluetooth®\*\*<sup>[1]</sup>

- Intel® Wi-Fi® 7 BE211, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4 (Bluetooth® 6.0 hardware ready)

- Intel® Wi-Fi® 7 BE211, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4 (Bluetooth® 6.0 hardware ready), Intel® vPro® technology support<sup>[2]</sup>

**WWAN\*\***

- Wireless WAN upgradable to 5G (with antenna ready)
- Snapdragon® X61, 5G Sub-6 GHz, with embedded eSIM functionality
- No support

**SIM Card**

No physical SIM card included

**Ethernet**

No onboard Ethernet, supports optional Lenovo® USB-C® to Ethernet Adapter (2.5Gbps)

**NFC**

- Near Field Communication
- No support

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**Notes:**

[1] Wi-Fi® operation (including Wi-Fi® 6, Wi-Fi® 6E, Wi-Fi® 7, etc.) is subject to the regulatory requirements of each country. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] Intel® vPro® platform requires the hardware and software necessary to deliver the manageability use cases, security features, system performance, and stability that define the platform. For detailed vPro® support information, please refer to the System Management section.

**Ports<sup>[1]</sup>****Standard Ports**

- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 2x Thunderbolt™ 5, with USB PD 3.1 and DisplayPort™ 2.1, 140W input / 15W output
- 1x Thunderbolt™ 4, with DisplayPort™ 2.1 and USB PD 3.1, 140W input / 15W output
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD Express 7.0 card reader
- 1x Kensington® Nano Security Slot™

**Optional Ports\*\*\***

- 1x 2.5GbE RJ-45, via Lenovo® USB-C® to Ethernet Adapter (2.5Gbps)
- 1x Nano-SIM card slot (WWAN support models)

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**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.

Thunderbolt™ 5: 80 Gbit/s (bidirectional), up to 120 Gbit/s in bandwidth boost mode for video-intensive applications.

**Docking****Docking**

Various docking solutions supported via Thunderbolt™ or USB-C®.

For more compatible docking solutions, please visit [Docking for ThinkPad® P1 Gen 9](#)

**SECURITY & PRIVACY****Security****Security Chip\*\***

- Firmware TPM 2.0 integrated in SoC
- Discrete TPM 2.0, TCG 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
- Supervisor password
- Self-healing BIOS
- More BIOS security features, please visit [BIOS Simulator](#)

**Other Security**

- (Optional) Computer Vision-based Human Presence Detection
- Bottom cover tamper detection
- (Optional) Camera privacy shutter
- (Optional) IR camera for Windows® Hello (facial recognition)

## MANAGEABILITY

### System Management

**System Management<sup>[1]</sup>**

- Intel® vPro® Enterprise
- Non-vPro®

Notes:

[1] Intel® vPro® platform require an eligible Intel® processor, a supported operating system, Intel® LAN and/or WLAN silicon, firmware enhancements, and other hardware and software necessary to deliver the manageability use cases, security features, system performance, and stability that define the platform. See [Intel® vPro® Platform](#) for details.

## 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\*\*\*<sup>[1]</sup>**

- 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 9](#).

## OPERATING REQUIREMENTS

## Operating Environment

### Temperature<sup>[1]</sup>

- 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<sup>[1]</sup>

90% Recycled Magnesium Aluminum C cover  
75% Recycled Aluminum A cover  
55% Recycled Aluminum D cover  
90% PCC recycled plastic used in speaker enclosure  
90% PCC recycled plastic used in the battery pack enclosure  
50% PCC plastic D cover (Attached Internal Components)  
90% PCC plastic 140W AC Adapter  
46% Total PCC plastic  
Plastic free packaging with 90% recycled and / or FSC certified content

Notes:

[1] PCC: Post Consumer Content, recycled materials from customers.

## CERTIFICATIONS

### Green Certifications<sup>[1]</sup>

#### Green Certifications<sup>[2]</sup>

- ENERGY STAR® 9.0
- EPEAT 2.0 Gold Registered
- RoHS compliant
- TCO Certified, generation 10

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 optional and only available on the models with preloaded OS. Please visit [epeat.net](https://epeat.net) and [energystar.gov](https://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 option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
- Feature with \*\*\* means that one or more options listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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