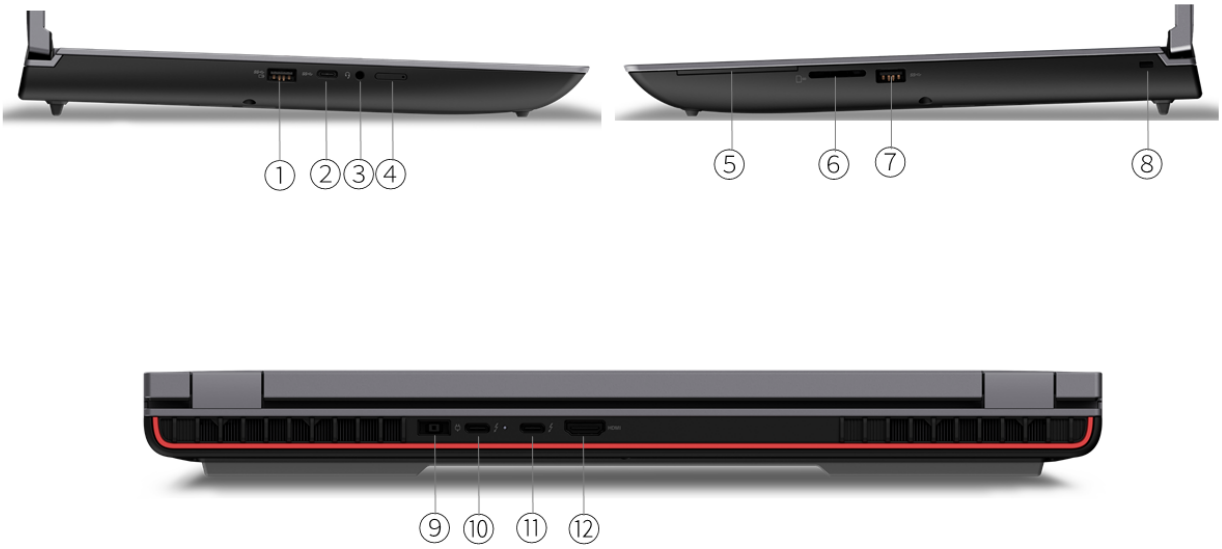
OVERVIEW



1. USB-A (USB 10Gbps), Always On	7. USB-A (USB 5Gbps)
2. USB-C (USB 10Gbps), data transfer only	8. Kensington Nano Security Slot
3. Headphone / microphone combo jack (3.5mm)	9. Power connector
4. Nano-SIM card slot *	10. Thunderbolt 4
5. Smart card reader *	11. Thunderbolt 4
6. SD Express 7.0 card reader	12. HDMI

Notes:

- Items with * are only available on selected models

PERFORMANCE

Processor

Processor Family

13th Generation HX series Intel® Core™ i5 / i7 / i9 processor, supports up to 24 cores, up to 5.6GHz

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core™ i5-13600HX	14 (6 P-core + 8 E-core)	20	P-core 2.6GHz / E-core 1.9GHz	P-core 4.8GHz / E-core 3.6GHz	24MB	Intel® UHD Graphics
Core™ i7-13700HX	16 (8 P-core + 8 E-core)	24	P-core 2.1GHz / E-core 1.5GHz	P-core 5.0GHz / E-core 3.7GHz	30MB	Intel® UHD Graphics
Core™ i7-13850HX	20 (8 P-core + 12 E-core)	28	P-core 2.1GHz / E-core 1.5GHz	P-core 5.3GHz / E-core 3.8GHz	30MB	Intel® UHD Graphics
Core™ i9-13950HX	24 (8 P-core + 16 E-core)	32	P-core 2.2GHz / E-core 1.6GHz	P-core 5.5GHz / E-core 4.0GHz	36MB	Intel® UHD Graphics
Core™ i9-13980HX	24 (8 P-core + 16 E-core)	32	P-core 2.2GHz / E-core 1.6GHz	P-core 5.6GHz / E-core 4.0GHz	36MB	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
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)[1]
- Ubuntu Linux LTS
- Ubuntu Linux with Data Science Preload
- No preload operating system

Notes:

[1] Red Hat Enterprise Linux 9.2 certification will be available after Aug 18, 2023.

Graphics

Graphics

Graphics	Type	Memory	TGP	Key Features
Intel® UHD Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12.1
NVIDIA® RTX 2000 Ada Generation Laptop GPU	Discrete	8GB GDDR6	60W	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager
NVIDIA® RTX 3500 Ada Generation Laptop GPU	Discrete	12GB GDDR6 ECC	115W	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager
NVIDIA® RTX 4000 Ada Generation Laptop GPU	Discrete	12GB GDDR6 ECC	115W	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager
NVIDIA® RTX 5000 Ada Generation Laptop GPU	Discrete	16GB GDDR6 ECC	115W	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager
NVIDIA® RTX A1000 Laptop GPU	Discrete	6GB GDDR6	60W	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager

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 integrated or Arc™ graphics models; 7680x4320@60Hz on NVIDIA® graphics

models
• Thunderbolt™ supports up to 5120x3200@60Hz

Chipset

Chipset

Intel® WM790 chipset

Memory

Max Memory

- Models with ECC memory: Up to 128GB (4x 32GB SO-DIMM DDR5-5600 ECC)
- Models with Non-ECC memory: Up to 192GB (4x 48GB SO-DIMM DDR5-5600 Non-ECC)

Memory Slots

Four DDR5 SO-DIMM slots, dual-channel capable

Memory Type[**][1]

- 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 at lower speed due to platform limitations:
4x 32GB / 4x 48GB configurations run at DDR5-3600.
Other configurations run at DDR5-4000.

Storage

Storage Support[1]

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

Disk Type	Interface	Offering	Security
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	256GB / 512GB / 1TB	Opal 2.0
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4 Performance	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.

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:

[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)	None	IPS[1]	300nits	Anti-glare	16:10	1200:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	Eyesafe® Certified 2.0, Low Blue Light, X-Rite® Factory Color Calibration, 83.4% screen to body ratio, DC dimming
16″	WUXGA (1920x1200)	None	IPS	400nits	Anti-glare	16:10	1200:1	100% sRGB	60Hz	89°/89°/89°/89°	83.9% screen to body ratio, TÜV Low Blue Light, DC dimming
16″	WQXGA (2560x1600)	None	IPS[2]	500nits	Anti-glare	16:10	1200:1	100% sRGB	165Hz	89° / 89° / 89° / 89°	Eyesafe® Certified 2.0, Low Blue Light, X-Rite® Factory Color Calibration, 83.4% screen to body ratio, DC dimming
16″	WQUXGA (3840x2400)	None	IPS[3]	800nits	Anti-glare	16:10	1500:1	100% DCI-P3	60Hz	85° / 85° / 85° / 85°	Eyesafe® Certified 2.0, TÜV Low Blue Light, DisplayHDR™ 400, Dolby® Vision™, X-Rite® Factory Color Calibration,

											83.4% screen to body ratio, DC dimming
16″	WQUXGA (3840x2400)	Multi-touch	OLED	SDR 400nits / HDR 500nits	Anti-reflection, anti-smudge	16:10	100,000:1	100% DCI-P3	60Hz	87.5° / 87.5° / 87.5° / 87.5°	Eyesafe® Certified 2.0, TÜV Low Blue Light, Dolby® Vision™, DisplayHDR™ True Black 500, X-Rite® Factory Color Calibration, 83.4% screen to body ratio

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 touchpad, 67.6 x 115 mm (2.66 x 4.53 inches)

Mechanical

Dimensions (WxDxH)[1]

364 x 266 x 30.23 mm (14.3 x 10.5 x 1.2 inches)

Weight[2]

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:

[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]
- 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.
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 see 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***

- 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

Monitor Cable

Monitor Cable

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to VGA Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- No monitor cable

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

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

Other Security

- (Optional) IR camera for Windows® Hello (facial recognition)
- (Optional) Ultrasonic Human Presence Detection for IR camera
- (Optional) Camera privacy shutter
- 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

ENVIRONMENTAL

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).

ACCESSORIES

Bundled Accessories

Bundled Accessories[1]

- Lenovo® USB-C® to Ethernet Adapter (2.5Gbps)
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® P16 Gen 2

CERTIFICATIONS

Green Certifications[1]

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.

[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 see 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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