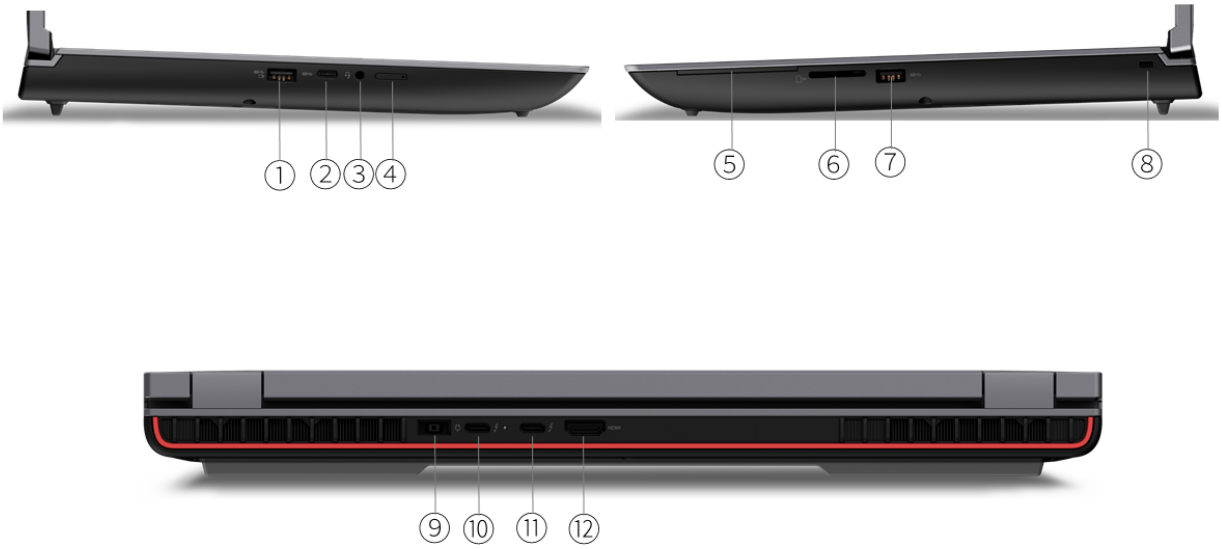
OVERVIEW



1. USB-A (USB 5Gbps), 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

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**

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
Core i7-14700HX	20 (8 P-core + 12 E-core)	28	P-core 2.1GHz / E-core 1.5GHz	P-core 5.5GHz / E-core 3.9GHz	33MB	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 9.3 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)[1]
- No preload operating system

Notes:

[1] Red Hat Enterprise Linux 9.2 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 1000 Ada Generation Laptop GPU	Discrete	6GB GDDR6	60W (non-boost); 80W (boost)	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager
NVIDIA® RTX 2000 Ada Generation Laptop GPU	Discrete	8GB GDDR6	60W (non-boost); 80W (boost)	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 (non-boost); 130W (boost)	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager
NVIDIA® RTX 4000 Ada	Discrete	12GB	115W (non-	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA /

Generation Laptop GPU		GDDR6 ECC	boost); 130W (boost)	TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager
NVIDIA® RTX 5000 Ada Generation Laptop GPU	Discrete	16GB GDDR6 ECC	115W (non-boost); 130W (boost)	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager
Intel® Arc™ Pro A30M Graphics	Discrete	4GB GDDR6	35W (non-boost)	DirectX® 12 Ultimate, Deep Link technologies
NVIDIA® RTX A1000 Laptop GPU	Discrete	6GB GDDR6	60W (non-boost); 80W (boost)	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™). 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 or 3840x2160@240Hz on NVIDIA® or Intel® Arc™ Pro A30M 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, maximum transfer speeds of up to 4000 MT/s
- DDR5-5600 non-ECC, maximum transfer speeds of up to 4000 MT/s

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 3600 MT/s.
Other configurations run at 4000 MT/s.

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

Rechargeable Li-ion 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 Trackpad, 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 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)
- 1x HDMI® 2.1, up to 4K/60Hz (models with integrated graphics)
- 1x HDMI® 2.1, up to 8K/60Hz or 4K/240Hz (models with discrete graphics)
- 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 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

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
- Supervisor password
- Self-healing BIOS

Other Security

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

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 (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[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).

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. 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 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 option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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