

OVERVIEW



1. Smart card reader	6. Kensington Nano Security Slot
2. SD Express 7.0 card reader *	7. HDMI
3. Nano-SIM card slot	8. 2x Thunderbolt 4
4. USB-A (USB 5Gbps)	9. USB-A (USB 5Gbps), Always On
5. Ethernet (GbE RJ-45)	10. Headphone jack (3.5mm)

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

PERFORMANCE

Processor

Processor Family

AMD Ryzen™ AI PRO 400 Series Processor; supports up to 12 cores; up to 5.2GHz

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU	Overall TOPS
AMD Ryzen™ AI 5 PRO 440	6	12	2.0GHz	4.8GHz	6 MB L2 / 16 MB L3	AMD Radeon™ 840M	AMD Ryzen™ AI, up to 50 TOPS	Up to 59 TOPS
AMD Ryzen™ AI 7 PRO 450	8	16	2.0GHz	5.1GHz	8MB L2 / 16MB L3	AMD Radeon™ 860M	AMD Ryzen™ AI, up to 50 TOPS	Up to 66 TOPS
AMD Ryzen™ AI 9 HX PRO 470	12	24	2.0GHz	5.2GHz	12MB L2 / 24MB L3	AMD Radeon™ 890M	AMD Ryzen™ AI, up to 55 TOPS	Up to 86 TOPS

AI (Artificial Intelligence)

AI PC Category

- AI-Ready Workstations
- Copilot+ PC

NPU

- Integrated AMD Ryzen™ AI, up to 55 TOPS (Ryzen™ AI 9 HX PRO 470)
- Integrated AMD Ryzen™ AI, up to 50 TOPS (Ryzen™ AI 5 PRO 440 / AMD Ryzen™ AI 7 PRO 450)

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](#))
- No preload operating system

Graphics

Graphics

Graphics	Type	Memory	AI TOPS (Peak)
AMD Radeon™ 840M	Integrated	Up to 48GB dedicated graphics memory (96GB system memory required) ^[1]	-
AMD Radeon™ 860M	Integrated	Up to 48GB dedicated graphics memory (96GB system memory required) ^[2]	-
AMD Radeon™ 890M	Integrated	Up to 48GB dedicated graphics memory (96GB system memory required) ^[3]	-
NVIDIA® RTX PRO 500 Blackwell Generation 6GB GDDR7 Laptop GPU	Discrete	6GB GDDR7	294 TOPS (FP4 TOPS with Sparsity)
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)

Notes:

[1], [2], [3] The default dedicated graphics memory is 8GB, which can be set to 512MB, 1GB, 2GB, 4GB, 6GB, 8GB, 12GB, 16GB, 24GB, 32GB, or 48GB. The dedicated graphics memory setting must be less than or equal to 50% of the system memory.

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 external display:

- 2x 5120x3200@60Hz / 3840x2160@120Hz (Thunderbolt™ 4)
- 1x 3840x2160@60Hz (HDMI®)

Max resolution for single external display:

- Thunderbolt™ 4 supports up to 5120x3200@60Hz or 3840x2160@120Hz
- HDMI® supports up to 3840x2160@60Hz

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory

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

Memory Slots

One LPCAMM2 connector, dual-channel

Memory Type^[1]

LPDDR5X-8533, maximum transfer speeds of up to 7500 MT/s, 16GB / 32GB / 64GB /96GB memory modules are available

Notes:

[1] Installed memory is actually LPDDR5X-8533 but runs as LPDDR5X-7500 due to platform limitation.

Storage

Max Storage Support^[1]

Up to one 2TB M.2 2280 Gen 5 Performance SSD^[2]

Storage Slot^[3]

One M.2 2280 PCIe® 4.0 x4 slot

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 ^[4]	512GB / 1TB / 2TB	Opal 2.0

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2], [4] The system provides one M.2 PCIe® 4.0 x4 slot.
[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).

Removable Storage

Card Reader

- SD Express 7.0 card reader
- No card reader

Multi-Media

Audio Chip

SoundWire®, Realtek® ALC722-CG codec

Speakers

Stereo speakers, 2W x2, Dolby Atmos®

Microphone

Dual-microphone array, 360° far-field, Dolby Voice®

Camera**

- 5.0MP + IR discrete, with privacy shutter, fixed focus, temporal noise reduction
- 5.0MP + IR with Privacy Shutter, HDR and Computer Vision Human Presence Detection
- 5.0MP with privacy shutter, fixed focus, temporal noise reduction

Battery

Battery**

- 60Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr)
- 90Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr) with 140W AC adapter

Power Adapter

Power Adapter**[1]

- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 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	400nits	Anti-glare	16:10	800:1	45% NTSC	60Hz	89° / 89° / 89° / 89°	89% screen to body ratio, AICCP color calibration, DC dimming
16"	WUXGA (1920x1200)	Multi-touch	IPS	500nits	Anti-glare	16:10	1200:1	100% sRGB	30 - 60Hz VRR	89° / 89° / 89° / 89°	89% screen to body ratio, AICCP color calibration, UL Low Blue Light, UL Eyesafe® 2.0 Certified, DC dimming
16"	2.8K (2880x1800)	Non-touch	OLED	500nits	Anti-glare	16:10	100,000:1	100% DCI-P3	30 - 120Hz VRR	85° / 85° / 85° / 85°	89% screen to body ratio, X-Rite® Factory Color Calibration, DisplayHDR™ True Black 1000, Dolby Vision®, UL Low Blue Light, UL Eyesafe® 2.0 Certified

Touchscreen

- In-cell multi-touch, supports 10-point touch (selected WUXGA display)
- Non-touch

Screen-to-Body Ratio

89%

Color Calibration**

- AICCP color calibration (WUXGA display)
- X-Rite® factory color calibration (OLED display)

Input Device

Pen

No support

Keyboard

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

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]

357.9 x 247.9 x 11.45 / 18.15 (front / rear), 23.3 (maximum) mm
14.09 x 9.76 x 0.45 / 0.71 (front / rear), 0.92 (maximum) inches

Weight^[2]

Starting at 1.75 kg (3.86 lbs)

Case Color

Black

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.

CONNECTIVITY

Network

WLAN + Bluetooth®^[1]

MediaTek Wi-Fi® 7 MT7925, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4, AMD PRO Manageability

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

Gigabit Ethernet, Realtek® RTL8111EPV, 1x RJ-45, supports Wake-on-LAN and AMD PRO Manageability

NFC

- Near Field Communication
- No support

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.

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 Thunderbolt™ 4, with USB PD 3.1 and DisplayPort™ 2.1, 140W input / 15W output
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (GbE RJ-45)
- 1x Kensington® Nano Security Slot™

Optional Ports***

- 1x Nano-SIM card slot (WWAN support models)
- 1x SD Express 7.0 card reader (for models with NVIDIA® RTX PRO 2000 Blackwell Generation)
- 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.

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

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

- 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

BIOS Security

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

Other Security

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

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

Bundled Accessories^[1]

None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for ThinkPad® P16s 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 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]

50% recycled aluminium on top cover
85% PCC recycled plastic for keycaps
90% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the battery pack enclosure
90% PCC recycled plastic used in 100W/140W adapter
Plastic free packaging with 90% recycled and / or FSC certified content

Notes:

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

CERTIFICATIONS

Green Certifications^[1]

Green Certifications^[2]

- ENERGY STAR® 9.0
- EPEAT™ 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 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) UL 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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