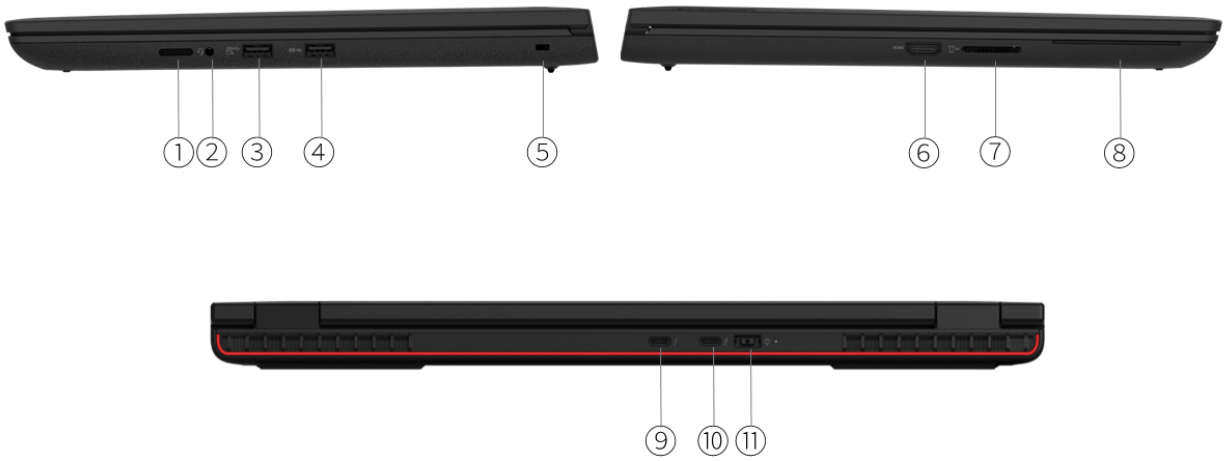
OVERVIEW



1. Nano-SIM card slot *	7. SD Express 7.0 card reader
2. Headphone (3.5mm)	8. Smart card reader *
3. USB 3.2 Gen 1 (Always On)	9. USB4
4. USB 3.2 Gen 1	10. USB4
5. Kensington Nano Security Slot	11. Power-in (Slim Tip)
6. HDMI	

Notes:

- Items with * are only available on selected models

PERFORMANCE

Processor

Processor Family

Up to AMD Ryzen™ PRO 7040HS Series Processor, supports up to 8 cores, up to 5.2GHz

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache
AMD Ryzen™ 5 PRO 7640HS	6	12	4.3GHz	5.0GHz	6MB L2 / 16MB L3
AMD Ryzen™ 7 7840HS	8	16	3.8GHz	5.1GHz	8MB L2 / 16MB L3
AMD Ryzen™ 7 PRO 7840HS	8	16	3.8GHz	5.1GHz	8MB L2 / 16MB L3
AMD Ryzen™ 9 PRO 7940HS	8	16	4.0GHz	5.2GHz	8MB L2 / 16MB L3

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.2 (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 Nov 30, 2023.

Graphics

Graphics

Graphics	Type	Memory	TGP	Key Features
AMD Radeon™ 760M	Integrated	Shared	Share CPU TDP	DirectX® 12
AMD Radeon™ 780M	Integrated	Shared	Share CPU TDP	DirectX® 12
NVIDIA® RTX 2000 Ada Generation Laptop GPU	Discrete	8GB GDDR6	35W	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager
NVIDIA® RTX A1000 Laptop GPU	Discrete	6GB GDDR6	35W	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager
NVIDIA® RTX A500 Laptop GPU	Discrete	4GB GDDR6	35W	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 USB4®)
• HDMI® supports up to 7680x4320@60Hz
• USB4® supports up to 5120x3200@60Hz (USB-C® to DP)

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory

Up to 64GB (2x 32GB DDR5 SO-DIMM)

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type

DDR5-5600 non-ECC

Storage

Storage Support[1]

Up to two drives, 2x M.2 SSD
• M.2 2280 SSD up to 4TB, 2TB each

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	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® ALC3287 codec

Speakers

Stereo speakers, 2W x2, Dolby Audio™

Microphone

- Dual-microphone array, far-field, Dolby Voice®
- No microphone

Camera**

- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- FHD 1080p with privacy shutter, fixed focus
- No camera

Battery

Battery

Integrated Li-Polymer 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Power Adapter

Power Adapter**[1]

- 135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

[1] AC adapter offerings depend on the country.

DESIGN

Display

Display**[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle (L/R/U/D)	Key Features
16″	WUXGA (1920x1200)	None	IPS	300nits	Anti-glare	16:10	800:1	45% NTSC	85°/85°/85°/85°	83.9% screen to body ratio, DC dimming
16″	WUXGA (1920x1200)	None	IPS	300nits	Anti-glare	16:10	1200:1	100% sRGB	85°/85°/85°/85°	TÜV Low Blue Light, 83.9% screen to body ratio, DC dimming
16″	WUXGA (1920x1200)	Multi-touch	IPS	300nits	Anti-glare	16:10	800:1	45% NTSC	85°/85°/85°/85°	83.9% screen to body ratio, DC dimming
16″	WQUXGA (3840x2400)	None	IPS	800nits	Anti-glare	16:10	1500:1	100% DCI-P3	85°/85°/85°/85°	DisplayHDR™ 400, Dolby Vision®, Eyesafe® Certified 2.0, TÜV Low Blue Light, X-Rite® Factory Color Calibration, 83.9% screen to body ratio, DC dimming

Color Calibration

- X-Rite® factory color calibration (WQUXGA display)
- No color calibration

Touchscreen

- On-cell multi-touch, supports 10-point touch (selected FHD display)
- Non-touch

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

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 Mylar® surface multi-touch touchpad, 67.6 x 115 mm (2.66 x 4.53 inches)

Mechanical

Dimensions (WxDxH)[1]

365 x 262 x 24.66 mm (14.37 x 10.32 x 0.97 inches)

Weight[2]

Starting at 2.2 kg (4.85 lbs)

Case Color

Thunder black

Case Material

PC-ABS (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

Ethernet

No onboard Ethernet

WLAN + Bluetooth®

Qualcomm® Wi-Fi® 6E NFA725A, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3[1]

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] 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

- 2x USB 3.2 Gen 1 (one Always On)
- 2x USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)[2]
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x SD Express 7.0 card reader
- 1x Security keyhole

Optional Ports

- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

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.
[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® P16v Gen 1 (AMD)

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0 (TCG certified) and Microsoft® Pluton TPM 2.0, one enabled at one time

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

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

Other Security

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

MANAGEABILITY

System Management

System Management

- AMD PRO Manageability
- Non-DASH

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]

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- Lenovo® USB-C® to VGA Adapter

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® P16v Gen 1 (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]

85% PCC recycled plastic used in key caps
90% PCC recycled plastic used in speaker enclosure
90% PCC recycled plastic used in the battery
30% PCC recycled plastic used in 135W and 170W adapters
90% recycled and/or sustainable packaging

Notes:

[1] PCC: Post Consumer Content, recycled materials from customers.
FSC: Forest Stewardship Council.

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 dependent on system 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
- (Optional) 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.

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