

OVERVIEW



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

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

PERFORMANCE

Processor

Processor Family

Intel® H Series Core™ Ultra 5 / 7 / 9 Processor; supports up to 16 cores; up to 5.1GHz; TDP ratings of up to 55W

Processor**^[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	AI Engine
Core™ Ultra 5 125H	14 (4 P-core + 8 E-core + 2 LPE-core)	18	P-core 1.2GHz / E-core 700MHz / LPE-core 700MHz	P-core 4.5GHz / E-core 3.6GHz / LPE-core 2.5GHz	18MB	Intel® Arc™ Graphics	Intel® AI Boost
Core™ Ultra 5 135H	14 (4 P-core + 8 E-core + 2 LPE-core)	18	P-core 1.7GHz / E-core 1.2GHz / LPE-core 700MHz	P-core 4.6GHz / E-core 3.6GHz / LPE-core 2.5GHz	18MB	Intel® Arc™ Graphics	Intel® AI Boost
Core™ Ultra 7 155H	16 (6 P-core + 8 E-core + 2 LPE-core)	22	P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz	P-core 4.8GHz / E-core 3.8GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ Graphics	Intel® AI Boost
Core™ Ultra 7 165H	16 (6 P-core + 8 E-core + 2 LPE-core)	22	P-core 1.4GHz / E-core 900MHz / LPE-core 700MHz	P-core 5.0GHz / E-core 3.8GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ Graphics	Intel® AI Boost
Core™ Ultra 9 185H	16 (6 P-core + 8 E-core + 2 LPE-core)	22	P-core 2.3GHz / E-core 1.8GHz / LPE-core 1GHz	P-core 5.1GHz / E-core 3.8GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ Graphics	Intel® AI Boost

Notes:

^[1] Intel® Arc™ graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

Operating System

Operating System

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Ubuntu Linux LTS^[1]
- Red Hat Enterprise Linux 9.2 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](#))
- No preload operating system

Notes:

^[1] Ubuntu Linux LTS will be available after August 6th, 2024.

NPU

NPU

Intel® AI Boost integrated in Intel® Core™ Ultra processor

Graphics

Graphics

Graphics	Type	Memory	TGP	Key Features
Intel® Arc™ Graphics ^[1]	Integrated	Shared	Share CPU TDP	DirectX® 12.1
Intel® Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12.1
NVIDIA® RTX 500 Ada Generation Laptop GPU	Discrete	4GB GDDR6	35W	DirectX® 12 Ultimate, Vulkan Support, NVIDIA® FXAA / TXAA Anti-Aliasing, NVIDIA® RTX Desktop Manager

Notes:

[1] Intel® Arc™ graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ 4 and HDMI®).
Max resolution for multiple external display:

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

Max resolution for single external display:

- Thunderbolt™ 4 supports up to 7680x4320@60Hz
- HDMI® supports up to 7680x4320@60Hz (with DSC)^[1]

Notes:

[1] 8K (7680x4320@60Hz) support needs 2 display pipes. That is, simultaneous display number will “-1” when 8K resolution displayed.

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory

Up to 96GB (2x 48GB DDR5 SO-DIMM)

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type

DDR5-5600 non-ECC

Storage

Storage Support^[1]

One drive, up to 2TB M.2 2280 SSD

Storage Slot

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

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.

Removable Storage

Card Reader

No 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®

Camera**

- 5.0MP + IR with privacy shutter and Ultrasonic Human Presence Detection, fixed focus
- 5.0MP + IR with privacy shutter, fixed focus
- 5.0MP with privacy shutter, fixed focus

Battery

Battery**

- Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 75Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Power Adapter

Power Adapter**[1]

- 100W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 135W USB-C® slim (3-pin) AC adapter, supports PD 3.0, 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	300nits	Anti-glare	16:10	800:1	45% NTSC	60Hz	85°/85°/85°/85°	88% screen to body ratio, DC dimming
16"	WUXGA (1920x1200)	On-cell multi-touch	IPS	300nits	Anti-glare	16:10	1000:1	45% NTSC	60Hz	85°/85°/85°/85°	88% screen to body ratio, Eyesafe® Certified 2.0, TÜV Low Blue Light, DC dimming
16"	WUXGA (1920x1200)	None	IPS	400nits	Anti-glare	16:10	1200:1	100% sRGB	60Hz	89°/89°/89°/89°	88% screen to body ratio, Eyesafe® Certified 2.0, DC dimming
16"	WQUXGA (3840x2400)	None	OLED	400nits	Anti-reflection, anti-smudge	16:10	100,000:1	100% DCI-P3	60Hz	89°/89°/89°/89°	88% screen to body ratio, Eyesafe® Certified 2.0, TÜV Low Blue Light, Dolby Vision®, DisplayHDR™ True Black 500, X-Rite® Factory Color Calibration, PWM

[illegible]

[on Microsoft®.](#)

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 USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 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.

Docking

Docking

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

For more compatible docking solutions, please visit

[Docking for ThinkPad® P16s Gen 3](#)

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
- Self-healing BIOS
- Supervisor password

Other Security

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

MANAGEABILITY

System Management

System Management

- Intel® vPro® Enterprise
- Non-vPro®

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

- 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

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
98% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the battery
90% PCC recycled plastic used in 100W and 135W adapters

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
- 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.

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.
- Lenovo reserves the right to change specifications or other product information without notice. Lenovo is not responsible for photographic or typographical errors. LENOVO PROVIDES THIS PUBLICATION "AS IS," WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore this disclaimer may not apply to you.
- The specifications on this page may not be available in all regions, and may be changed or updated without notice.

