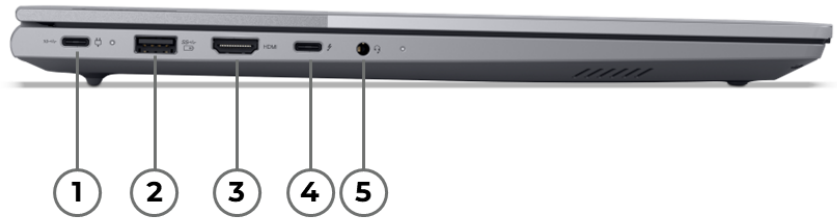
OVERVIEW





1. USB-C (USB 10Gbps), with PD 45-65W & DP 1.4	6. SD card reader
2. USB-A (USB 5Gbps), Always On	7. USB-A (USB 5Gbps)
3. HDMI	8. Ethernet (RJ-45)
4. Thunderbolt 4	9. Kensington Nano Security Slot
5. Headphone / microphone combo jack (3.5mm)	

PERFORMANCE

Processor

Processor Family

- Intel® H Series Core Ultra 5 / 9 Processor (Series 1)
- Intel® U or H Series Core Ultra 5 / 7 Processor (Series 2)

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU	Overall TOPS
Core Ultra 5 135H	14 (4 P-core + 8 E-core + 2 LP E-core)	18	P-core 1.7GHz / E-core 1.2GHz / LP E-core 700MHz	P-core 4.6GHz / E-core 3.6GHz / LP E-core 2.5GHz	18MB Intel® Smart Cache	Intel® Arc™ Graphics, up to 18 TOPS[1]	Intel® AI Boost, up to 11 TOPS	Up to 33 TOPS
Core Ultra 5 225H	14 (4 P-core + 8 E-core + 2 LP E-core)	14	P-core 1.7GHz / E-core 1.3GHz / LP E-core 700MHz	P-core 4.9GHz / E-core 4.3GHz / LP E-core 2.5GHz	18MB Intel® Smart Cache	Intel® Arc™ 130T GPU, up to 63 TOPS[2]	Intel® AI Boost, up to 13 TOPS	Up to 83 TOPS
Core Ultra 5 225U	12 (2 P-core + 8 E-core + 2 LP E-core)	14	P-core 1.5GHz / E-core 1.3GHz / LP E-core 700MHz	P-core 4.8GHz / E-core 3.8GHz / LP E-core 2.4GHz	12MB Intel® Smart Cache	Intel® Graphics, up to 8 TOPS	Intel® AI Boost, up to 12 TOPS	Up to 24 TOPS
Core Ultra 7 255H	16 (6 P-core + 8 E-core + 2 LP E-core)	16	P-core 2.0GHz / E-core 1.5GHz / LP E-core 700MHz	P-core 5.1GHz / E-core 4.4GHz / LP E-core 2.5GHz	24MB Intel® Smart Cache	Intel® Arc™ 140T GPU, up to 74 TOPS[3]	Intel® AI Boost, up to 13 TOPS	Up to 96 TOPS
Core Ultra 9 185H	16 (6 P-core + 8 E-core + 2 LP E-core)	22	P-core 2.3GHz / E-core 1.8GHz / LP E-core 1.0GHz	P-core 5.1GHz / E-core 3.8GHz / LP E-core 2.5GHz	24MB Intel® Smart Cache	Intel® Arc™ Graphics, up to 19 TOPS[4]	Intel® AI Boost, up to 11 TOPS	Up to 35 TOPS

Notes:

[1], [2], [3], [4] 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.

AI (Artificial Intelligence)

AI PC Category

AI PC[1]

NPU

Integrated Intel® AI Boost, up to 13 TOPS

Notes:

[1] AI PCs have a Neural Processing Unit (NPU) designed to accelerate artificial intelligence and machine learning workloads on the device.

Operating System

Operating System[1]

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

Notes:

[1] Windows® 11 Pro Education license can be requested for EMEA Education Customers only with limited specs. Any request please contact Lenovo® Sales Representative for more information.

Graphics

Graphics**

Graphics	Type	Memory	Key Features
Intel® Graphics	Integrated	Shared	DirectX® 12.2
Intel® Arc™ 130T GPU[1]	Integrated	Shared	DirectX® 12.2
Intel® Arc™ 140T GPU[2]	Integrated	Shared	DirectX® 12.2
Intel® Arc™ Graphics[3]	Integrated	Shared	DirectX® 12.2

Notes:

[1], [2], [3] 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[1]

Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™)
• HDMI® supports up to 4096x2160@60Hz
• USB-C® supports up to 5120x2880@60Hz
• Thunderbolt™ supports up to 5120x2880@60Hz

Notes:

[1] Refresh rates >60hz also supported, however max resolution will be limited.

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory[1]

Up to 64GB DDR5-5600

Memory Slots

Two DDR5 SODIMM slots, dual-channel capable

Memory Type

DDR5-5600

Notes:

[1] The max memory is based on the technical readiness of the system. Available memory to sell would vary.

Storage

Max Storage Support[1]

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

Storage Slot[2]

Two M.2 2280 PCIe® 4.0 x4 slots

Storage Type

Disk Type	Interface	Offering
M.2 2242 SSD	PCIe® NVMe®, PCIe® 4.0 x4	256GB / 512GB / 1TB

Notes:

[1] The system supports dual SSD via two M.2 slots, but Lenovo® offers only one SSD configuration with a second slot for user self-expansion.
The max storage capacity is only technical readiness and may be different from current Lenovo® storage offerings.
[2] 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 card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

Speakers

Stereo speakers, 2W x2, Dolby Audio™

Microphone

Dual-microphone array with smart noise-cancelling

Camera**

- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus

Battery

Battery**

- 45Wh Rechargeable Li-ion Battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- 71Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr) with 100W AC adapter

Max Battery Life[1]**

- Models with 45Wh battery:
  MobileMark® 30@250nits: 7.7 hr
  Local video (1080p) playback@150nits: 13.1 hr
- Models with 71Wh battery:
  MobileMark® 30@250nits: 14 hr
  Local video (1080p) playback@150nits: 19.5 hr

Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark® 2014, MobileMark® 2018, MobileMark® 25, MobileMark® 30, JEITA 2.0, JEITA 3.0, continuous 1080p video playback (with 150nits brightness and default volume level) or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

Power Adapter

Power Adapter**[1]

- 65W USB-C® (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim (2-pin, wall-mount) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:

[1] AC adapter offerings depend on the country.

Special Features

Special Features

Modern Standby

DESIGN

Display

Display**[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle	Key Features

										(L/R/U/D)	
16″	WUXGA (1920x1200)	Non-touch	IPS[2]	300nits	Anti-glare	16:10	1000:1	45% NTSC	60Hz	89° / 89° / 89° / 89°	TÜV Rheinland® Low Blue Light (Software)
16″	WUXGA (1920x1200)	Multi-touch	IPS[3]	300nits	Anti-glare	16:10	1000:1	45% NTSC	60Hz	89° / 89° / 89° / 89°	TÜV Rheinland® Low Blue Light (Software)
16″	WQXGA (2560x1600)	Non-touch	IPS[4]	400nits	Anti-glare	16:10	1200:1	100% sRGB	120Hz	89° / 89° / 89° / 89°	Eyesafe® Certified 2.0, TCON

Touchscreen

- In-cell multi-touch, supports 10-point touch
- Non-touch

Screen-to-Body Ratio

90%

Color Calibration

- TCON (Timing Controller) color calibration
- No color calibration

Notes:

[1] WQXGA display is available exclusively in Korea.
[2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

Input Device

Pen

No support

Keyboard

6-row, spill-resistant, multimedia Fn keys, numeric keypad, key travel 1.5mm, Copilot key

Keyboard Backlight

- LED backlight
- Non-backlight

Touchpad

Buttonless Mylar® surface multi-touch touchpad, supports Precision TouchPad (PTP), 75 x 120 mm (2.95 x 4.72 inches)

Mechanical

Dimensions (WxDxH)[1]

356 x 253.5 x 17.5 mm (14.01 x 9.98 x 0.69 inches)

Weight[2]

Starting at 1.7 kg (3.75 lbs)

Case Color

Arctic grey, dual-tone design

Case Material

Aluminium (top), PC-ABS (bottom)

Surface Treatment

Anodizing sandblasting (top), texture (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]

- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card
- Intel® Wi-Fi® 6 AX203, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card
- Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card

WWAN

No support

Ethernet[2]

Gigabit Ethernet, 1x RJ-45, supports Wake-on-LAN

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.

[2] Wake-on-LAN needs the power adapter plugged in.

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
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 45-65W and DisplayPort™ 1.4
- 1x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 45-65W and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x SD card reader

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.

Docking

Docking

Various docking solutions supported via Thunderbolt™ / USB-C®.
For more compatible docking solutions, please visit Docking for ThinkBook® 16 G8 IAL

SECURITY & PRIVACY

Security

Security Chip

Firmware TPM 2.0 integrated in SoC

Physical Locks

Kensington Nano Security Slot™, 2.5 x 6 mm

Fingerprint Reader

- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

BIOS Security

- Hard disk password
- Power-on password
- Supervisor password

- User password
- Self-healing BIOS
- More BIOS security features, please visit BIOS Simulator[1]

Other Security

- Camera privacy shutter
- (Optional) IR camera for Windows® Hello (facial recognition)

Notes:

[1] The BIOS simulator is just for reference. Default settings and some options may vary depending on the hardware, operating system and BIOS version.

MANAGEABILITY

System Management

System Management

Non-vPro®

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 2-year (1-yr battery) courier or carry-in service
- No base warranty

ACCESSORIES

Bundled Accessories

Bundled Accessories[1]

- Lenovo® 15.6″ laptop casual toploader, polyester
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkBook® 16 G8 IAL.

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

- At altitudes up to 2438 m (8,000 ft)
  - Operating: 5°C to 35°C (41°F to 95°F)
  - Storage: 5°C to 43°C (41°F to 109°F)
- At altitudes above 2438 m (8,000 ft)
  - Maximum temperature when operating under the unpressurized condition: 31.3°C (88°F)

Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage: 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]

15% PCC recycled plastic used in the cover frame
25% PCC recycled plastic used in the battery frame
50% PCC recycled plastic used in keycaps
30% PCC recycled plastic used in speaker
90% PCC recycled plastic used in standard 65W adapter
FSC certified content in carton box and accessory box
Dry pressed pulp cushion
Bamboo fiber bag (for NA / EMEA)
Bamboo fiber screen sheet
90% recycled content in OBP bag

Notes:

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

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]

- ENERGY STAR® 9.0
- EPEAT 1.0 Gold Registered[3]
- ErP Lot 6/26
- 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.
[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
- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- (Optional) TÜV Rheinland® Low Blue Light (Software Solution)[1]

Notes:

[1] TÜV Rheinland® Low Blue Light (Software Solution) certification is optional and only available on the models with preloaded OS.

- 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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