

OVERVIEW



1. USB-C (USB 10Gbps), with PD 140W & DP 1.4	5. HDMI
2. Combo audio jack	6. Ethernet (RJ-45)
3. USB-A (USB 5Gbps)	7. USB-A (USB 5Gbps)
4. USB-A (USB 5Gbps)	8. Power connector

PERFORMANCE

Processor

Processor Family

AMD Ryzen™ 5 / 7 8000 Series Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU
AMD Ryzen™ 5 8645HS	6	12	4.3GHz	5.0GHz	6MB L2 / 16MB L3	AMD Radeon™ 760M	AMD Ryzen™ AI
AMD Ryzen™ 7 8845HS	8	16	3.8GHz	5.1GHz	8MB L2 / 16MB L3	AMD Radeon™ 780M	AMD Ryzen™ AI

AI (Artificial Intelligence)

AI PC Category

AI-Powered Gaming PC

NPU

AMD Ryzen™ AI integrated in AMD Ryzen™ 8000 Series processor, up to 16 TOPS

Operating System

Operating System**

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

Graphics

Graphics**

Graphics	Type	Memory	Boost Clock	TGP	AI TOPS	Key Features
NVIDIA® GeForce RTX™ 3050 Laptop GPU	Discrete	6GB GDDR6	1732 MHz	95W	142	Advanced Optimus, DLSS 2, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4050 Laptop GPU	Discrete	6GB GDDR6	2370 MHz	105W	194	Advanced Optimus, DLSS 3.5, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4060 Laptop GPU	Discrete	8GB GDDR6	2370 MHz	115W ^[1]	233	Advanced Optimus, DLSS 3.5, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate

Notes:

[1] The actual TGP may depend on system configuration. System configured with 170W power adapter, TGP will be 105W. System configured with 230W power adapter, TGP will be 115W.

Monitor Support

Monitor Support

Supports up to 3 independent displays (native display and 2 external monitors via HDMI®, USB-C®)

- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 4k@60Hz

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory^[1]

Up to 32GB DDR5-5600

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type

DDR5-5600

Notes:

[1] Maximum memory is only to test technical readiness of notebook. Available memory to sell would vary.

Storage

Storage Support^[1]

Up to two drives, 2x M.2 SSD

- M.2 2242 SSD up to 1TB

Storage Slot

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	512GB / 1TB

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, optimized with Nahimic Audio

Microphone

Dual-microphone array

Camera**

- FHD 1080p, with E-shutter, fixed focus
- HD 720p, with E-shutter, fixed focus

Battery

Battery

Integrated Li-Polymer 60Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)

Max Battery Life^[1]

MobileMark® 25: 5.4 hr

Local video (1080p) playback@150nits: 11.5 hr

Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark® 2014, MobileMark® 2018, MobileMark® 25, 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]

- 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.

Special Features

Special Features

AI Chip: LA1

DESIGN

Display

Display**[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
15.6"	FHD (1920x1080)	None	IPS	300nits	Anti-glare	16:9	1000:1	100% sRGB	144Hz	85° / 85° / 85° / 85°	Advanced Optimus, NVIDIA® G-SYNC®, TÜV Low Blue Light (Software)
15.6"	WQHD (2560x1440)	None	IPS	350nits	Anti-glare	16:9	1000:1	100% sRGB	165Hz	85° / 85° / 85° / 85°	Advanced Optimus, NVIDIA® G-SYNC®, TÜV Low Blue Light (Software)

Touchscreen

Non-touch

Notes:

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

Input Device

Keyboard

6-row, multimedia Fn keys, numeric keypad

Keyboard Backlight**

- 4-Zone RGB backlight
- White 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]

359.86 x 258.7 x 21.9-23.9 mm (14.17 x 10.19 x 0.86-0.94 inches)

Weight[2]

Starting at 2.38 kg (5.25 lbs)

Case Color

Luna grey

Surface Treatment

Painting

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^[1]

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

WLAN + Bluetooth®^{[2][3]}

Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card

Notes:

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

[2] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[3] Intel® Wi-Fi® 6 full features might be limited by country-level restrictions.

Ports^[1]

Standard Ports

- 3x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with Lenovo® PD 140W and DisplayPort™ 1.4
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Power connector

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 USB-C®.

For more compatible docking solutions, please visit [Docking for LOQ 15AHP9](#)

SECURITY & PRIVACY

Security

Security Chip

Firmware TPM 2.0 integrated in SoC

Fingerprint Reader

No fingerprint reader

BIOS Security

- Administrator password
- Power-on password
- Hard disk password
- Self-healing BIOS

Other Security

E-shutter

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)
- 2-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) courier or carry-in service

ACCESSORIES

Bundled Accessories

Bundled Accessories^[1]

- Lenovo® LOQ M100 RGB Mouse (USB connector)
- None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for LOQ 15AHP9](#)

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).

CERTIFICATIONS

Green Certifications^[1]

Green Certifications

- ErP Lot 3
- RoHS compliant

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>.

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

Other Certifications

TÜV Rheinland® Low Blue Light (Software Solution)

- Feature with ** means that only one offering listed under the feature is configured on selected models.
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