OVERVIEW



1. USB-C (USB 10Gbps), with USB PD 65-100W & 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

Notes:

- Port 1: PD 140W is the input power and requires the use of Lenovo unique adapter, otherwise it may support lower than 140W.

PERFORMANCE

Processor

Processor Family

AMD Ryzen™ 5 / 7 100 Series, Ryzen™ 7 7000 or AMD Ryzen™ 5 / 7 8000 Series Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU	Overall TOPS
AMD Ryzen™ 5 8645HS	6	12	4.3GHz	5.0GHz	6MB L2 / 16MB L3	AMD Radeon™ 760M	AMD Ryzen™ AI, up to 16 TOPS	Up to 31 TOPS
AMD Ryzen™ 7 7445HS	6	12	3.55GHz	4.7GHz	6MB L2 / 16MB L3	AMD Radeon™ 740M	-	-
AMD Ryzen™ 7 8845HS	8	16	3.8GHz	5.1GHz	8MB L2 / 16MB L3	AMD Radeon™ 780M	AMD Ryzen™ AI, up to 16 TOPS	Up to 38 TOPS

AI (Artificial Intelligence)

AI PC Category

- AI-Powered Gaming PC[1]
- AI PC[2]

NPU

Integrated AMD Ryzen™ AI, up to 16 TOPS

Notes:

[1] AI-Powered Gaming PCs feature Lenovo® AI Engine+ and NVIDIA® GeForce RTX™ GPUs to handle AI-driven tasks and deliver exceptional gaming performance.

[2] AI PCs have a NPU capable of 10+ TOPs to run the Copilot assistant by pressing the Microsoft® Copilot key or using Win + C.

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 (Peak)	Key Features
NVIDIA® GeForce RTX™ 3050 Laptop GPU	Discrete	6GB GDDR6	1732 MHz	95W	142 TOPS	Advanced Optimus, DLSS 2, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4050 Laptop GPU	Discrete	6GB GDDR6	2370 MHz	105W	194 TOPS	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 TOPS	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 SODIMM 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

Max Storage Support[1]

Up to two drives, 2x M.2 SSD
• M.2 2242 SSD up to 1TB 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	512GB / 1TB

Notes:

[1] The storage capacity supported is based on the test results with 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

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

60Wh Rechargeable Li-ion 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, 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]

- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- No power adapter

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)	Non-touch	IPS	300nits	Anti-glare	16:9	1000:1	100% sRGB	144Hz	85° / 85° / 85° / 85°	Advanced Optimus, NVIDIA® G-SYNC®
15.6"	WQHD (2560x1440)	Non-touch	IPS	350nits	Anti-glare	16:9	1000:1	100% sRGB	165Hz	85° / 85° / 85° / 85°	Advanced Optimus, NVIDIA® G-SYNC®

Touchscreen

Non-touch

Screen-to-Body Ratio

88% AAR (active area ratio)

Notes:

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

Input Device

Pen

No support

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

Case Material

PC-ABS (top), PC-ABS (bottom)

Surface Treatment

Painting

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

WWAN

No support

Ethernet

Gigabit Ethernet, 1x RJ-45

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

- 3x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 65-100W and DisplayPort™ 1.4[2]
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Slim tip 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.

[2] Supports Lenovo® protocol for 140W charging but requires a unique Lenovo® adapter for operation.

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
- Master hard disk password
- Power-on password
- User hard disk password
- User password
- Self-healing BIOS
- More BIOS security features, please visit BIOS Simulator[1]

Other Security

E-shutter

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.

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

(Optional) TÜV Rheinland® Low Blue Light (Software Solution)

- 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.
- 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.











