OVERVIEW



1. Headphone / microphone combo jack (3.5mm)	6. USB 3.2 Gen 1
2. USB 3.2 Gen 1	7. USB 3.2 Gen 1 (Always On)
3. Ethernet (RJ-45)	8. Power connector
4. USB-C 3.2 Gen 2	9. USB 3.2 Gen 1
5. HDMI	10. USB-C 3.2 Gen 2 (data transfer / DP 1.4 only)

PERFORMANCE

Processor

Processor Family

AMD Ryzen™ 9 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
AMD Ryzen 9 7945HX	16	32	2.5GHz	5.4GHz	16MB L2 / 64MB L3	AMD Radeon™ 610M Graphics

Operating System

Operating System

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

Graphics

Graphics

Graphics	Type	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce RTX™ 4080 Laptop GPU	Discrete	12GB GDDR6	2280 MHz	175W	Advanced Optimus, DLSS 3, Resizable BAR, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate
NVIDIA GeForce RTX 4090 Laptop GPU	Discrete	16GB GDDR6	2040 MHz	175W	Advanced Optimus, DLSS 3, Resizable BAR, Dynamic Boost 2.0, VR ready, DirectX 12 Ultimate

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and 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 DDR5-5200 offering

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type[2]

DDR5-5200

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.

[2] Installed memory is actually 5600MHz but may run at 5200MHz due to processor limitation.

Storage

Storage Support[1]

Up to two drives, 2x M.2 SSD
• M.2 2280 SSD up to 1TB

Storage Slot

Two M.2 2280 PCIe® 4.0 x4 slots

Storage Type

Disk Type	Interface	Offering
M.2 2280 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. The system may support larger storage as the technology develops.

Removable Storage

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers

Stereo speakers (super linear speaker), 2W x2, audio by HARMAN, optimized with Nahimic Audio, Smart Amplifier (AMP)

Microphone

Dual-microphone array

Camera

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

Battery

Battery

- Integrated Li-Polymer 80Wh battery, supports Super Rapid Charge Pro (10min charge 0~40% capacity, 30min charge 0~80% capacity, 60min charge 0~100% capacity)
- Integrated Li-Polymer 99.9Wh battery, supports Super Rapid Charge (10min charge 0~30% capacity, 30min charge 0~70% capacity, 80min charge 0~100% capacity)

Max Battery Life[1]

- Models with 80Wh battery:
  MobileMark® 2018: 4.6 hr
  Local video (1080p) playback@150nits: 4.9 hr
- Models with 99.9Wh battery:
  MobileMark 2018: 5.5 hr
  Local video (1080p) playback: 5.6 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, 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

330W slim tip tiny GaN (3-pin) AC adapter, 100-240V, 50-60Hz

Special Features

Special Features

- Legion Coldfront 5.0 cooling system
- AI Chip: LA2-Q

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
16″	WQXGA (2560x1600)	None	IPS	500 nits	Anti-glare	16:10	1200:1	100% sRGB	240Hz	89°/89°/89°/89°	DisplayHDR™ 400, Dolby® Vision™, Advanced Optimus support, AMD FreeSync™, NVIDIA G-SYNC®, TÜV Low Blue Light, TÜV High Gaming Performance

Color Calibration

X-Rite® factory color calibration

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

- Per-key RGB backlight (with lighting lens on the front side)
- White backlight

Touchpad

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

Mechanical

Dimensions (WxDxH)[1]

363.4 x 263.55 x 21.97-25.9 mm (14.31 x 10.38 x 0.86-1.02 inches)

Weight[2]

Less than 2.8 kg (6.17 lbs)

Case Color

Onyx grey

Surface Treatment

Anodizing

Case Material

Aluminium (top), aluminium (bottom)

System Lighting

RGB lighting on power button

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

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

WLAN + Bluetooth®[1][2]

Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card

Notes:

[1] Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitations.
[2] Wi-Fi 6E full features might be limited by country-level restrictions.
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.

Ports[1]

Standard Ports

- 3x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C 3.2 Gen 2 (support data transfer and DisplayPort™ 1.4)
- 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 140W and DisplayPort 1.4)
- 1x HDMI 2.1, up to 8K/60Hz
- 1x Ethernet (RJ-45)
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Power connector

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.

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

ENVIRONMENTAL

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)

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).

ACCESSORIES

Bundled Accessories

Bundled Accessories

- 4 switchable keycaps and easy tool
- None

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.

Other Certifications

Other Certifications

- TÜV Rheinland® High Gaming Performance
- TÜV Rheinland Low Blue Light (Hardware Solution)

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LEGION


LEGION








LEGION