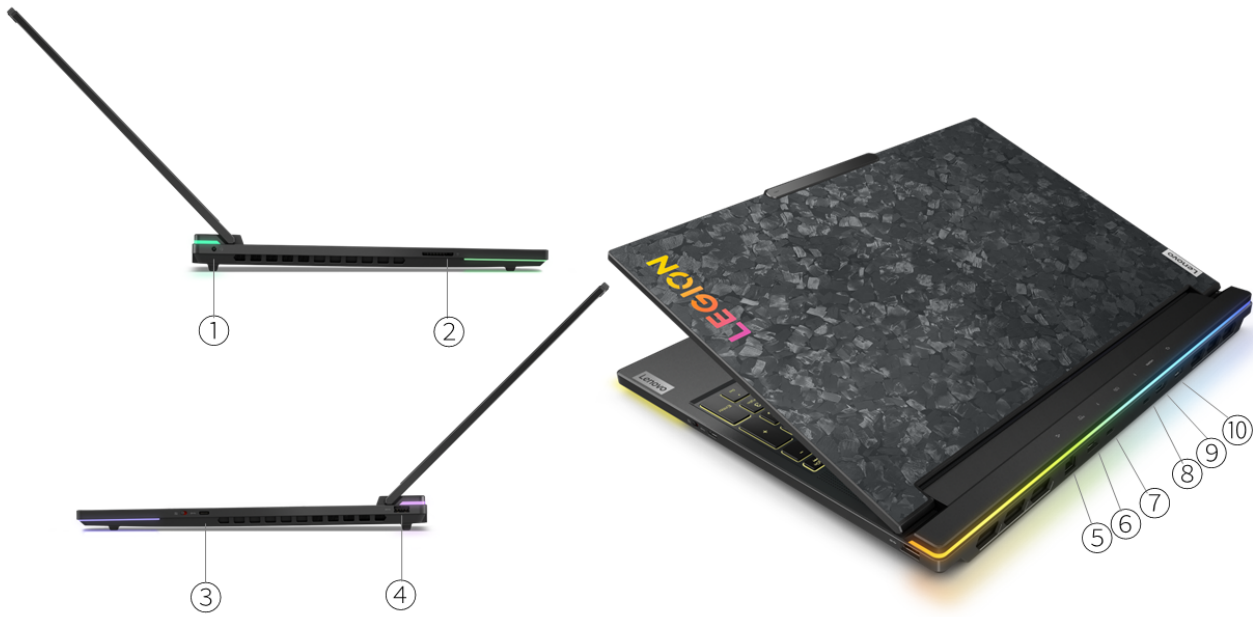


## OVERVIEW



1. Headphone / microphone combo jack (3.5mm)	6. USB 3.2 Gen 1 (Always On)
2. Card reader	7. Thunderbolt 4
3. USB-C 3.2 Gen 1 (data transfer only)	8. Thunderbolt 4
4. USB 3.2 Gen 1	9. HDMI
5. 2.5GbE (RJ-45)	10. Power connector

## PERFORMANCE

### Processor

#### Processor Family

13th Generation Intel® Core™ i9 Processor

#### Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core i9-13980HX	24 (8 P-core + 16 E-core)	32	P-core 2.2GHz / E-core 1.6GHz	P-core 5.6GHz / E-core 4.0GHz	36MB	Intel® UHD Graphics

### 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	Key Features
NVIDIA® GeForce RTX™ 4080 Laptop GPU	Discrete	12GB GDDR6	2280 MHz	175W	Advanced Optimus, DLSS 3.5, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4090 Laptop GPU	Discrete	16GB GDDR6	2040 MHz	175W	Advanced Optimus, DLSS 3.5, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate

### Monitor Support

#### Monitor Support<sup>[1]</sup>

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)

- HDMI® supports up to 7680x4320@60Hz
- Thunderbolt™ supports up to 7680x4320@60Hz

Notes:

[1] Three external output display devices cannot be supported at the same time when displaying 8K resolution.

### Chipset

#### Chipset

Intel® HM770 chipset

### Memory

#### Max Memory<sup>[1][2]</sup>

- Up to 32GB DDR5-5600 offering
- Up to 32GB DDR5-6400 (overclock) offering
- Up to 64GB DDR5-5600 (overclock) offering

#### Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

#### Memory Type\*\*

- DDR5-5600
- DDR5-5600 (overclock)<sup>[3]</sup>
- DDR5-6400 (overclock)

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

[2] When you update memory capacity, please contact with Lenovo® Service to replace the memory.

[3] Based on Intel® normal specification, 2x 32GB memory configuration up to DDR5-5200. Through optimization of hardware and software, the memory can run as DDR5-5600.

## Storage

### Storage Support<sup>[1]</sup>

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

### 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	1TB / 2TB

### RAID

- RAID 0 support
- No support

Notes:

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

## Removable Storage

### Card Reader

SD 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

FHD 1080p, with E-shutter, fixed focus

## Battery

### Battery

99.9Wh Rechargeable Li-ion Battery, supports Super Rapid Charge (10min charge 0-30% capacity, 30min charge 0-70% capacity, 80min charge 0-100% capacity)

### Max Battery Life<sup>[1]</sup>

MobileMark® 2018: 5.37 hr

Local video (1080p) playback@150nits: 8 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\*\*

- (Optional) 140W USB-C® slim (3-pin) AC adapter, 100-240V, 50-60Hz
- 330W slim tip tiny GaN (3-pin) AC adapter, 100-240V, 50-60Hz

## Special Features

### Special Features

- AI Chip: LA2
- Hybrid thermal solution (liquid cooling + air cooling + liquid metal)

## 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"	3.2K (3200x2000)	None	Mini LED	1200nits	Anti-glare	16:10	1,000,000:1	100% DCI-P3, 100% Adobe® RGB, 100% sRGB	165Hz	89° / 89° / 89° / 89°	Dolby Vision®, DisplayHDR™ 1000, NVIDIA® G-SYNC®, Advanced Optimus support, TÜV Low Blue Light, Mini LED backlight 1536 zones (6 pieces mini LED per zone)

#### Touchscreen

Non-touch

### Input Device

#### Pen

No support

#### Keyboard

6-row, multimedia Fn keys, numeric keypad, 8 switchable keycaps

#### Keyboard Backlight

Per-key RGB backlight

#### Touchpad

Buttonless glass surface multi-touch touchpad, supports Precision TouchPad (PTP), 58 x 120 mm (2.28 x 4.72 inches)

### Mechanical

#### Dimensions (WxDxH)<sup>[1]</sup>

357.7 x 277.7 x 18.9 mm (14.08 x 10.93 x 0.74 inches)

#### Weight<sup>[2]</sup>

Around 2.56 kg (5.64 lbs)

#### Case Color

Carbon black

#### Surface Treatment

Forged carbon with soft painted

#### Case Material

Aluminium + forge carbon (top), magnesium-aluminium (bottom)

#### System Lighting

Legion logo RGB lighting on top cover

RGB lighting on power button

"U" strip RGB lighting

Hinge cap lighting

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<sup>[1]</sup>

2.5GbE, Intel® Killer Ethernet E3100G 2.5 Gbps, 1x RJ-45, supports Wake-on-LAN

#### WLAN + Bluetooth®\*\*<sup>[2]</sup>

- Intel® Killer Wi-Fi® 6E AX1675i, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card<sup>[3]</sup>
- MediaTek Wi-Fi® 7 MT7927, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 Card<sup>[4]</sup>

#### WWAN

No support

#### 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] 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.

Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](#).

[4] 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country.

Bluetooth® 5.3 operation requires Windows® 11. For more information please visit [General Bluetooth® Support Information on Microsoft®](#).

### Ports<sup>[1]</sup>

#### Standard Ports

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C® 3.2 Gen 1 (support data transfer only)
- 2x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer, Lenovo® Power Delivery 140W and DisplayPort™ 1.4)<sup>[2]</sup>
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (2.5GbE RJ-45)
- 1x Card reader
- 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.

[2] PD 140W is the input power and requires the use of Lenovo® unique adapter, otherwise it may support lower than 140W.

## SECURITY & PRIVACY

### Security

#### Security Chip

Firmware TPM 2.0 integrated in chipset

### Fingerprint Reader

Touch style fingerprint reader integrated in power button

### BIOS Security

- Administrator password
- Hard disk password
- Power-on 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<sup>[1]</sup>

8 switchable keycaps

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for Legion 9 16IRX8](#)

## OPERATING REQUIREMENTS

### Operating Environment

#### Temperature<sup>[1]</sup>

- 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<sup>[1]</sup>

#### 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

### Other Certifications

- TÜV Rheinland® Low Blue Light (Hardware Solution)
- UL Solutions - Gaming Performance and Comfort (GOLD)
  
- 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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