

# **OVERVIEW**



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



## **PERFORMANCE**

### **Processor**

#### **Processor Family**

14th Generation Intel® Core™ i9 Processor

#### **Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core i9- 14900HX	24 (8 P-core + 16 E-core)	32	P-core 2.2GHz / E-core 1.6GHz	P-core 5.8GHz / E-core 4.1GHz	36MB	Intel UHD Graphics

## **Operating System**

### Operating System\*\*

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

## **Graphics**

### Graphics\*\*

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

## **Monitor Support**

#### Monitor Support[1]

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

- HDMI supports up to 7680x4320@60Hz
- Thunderbolt<sup>™</sup> 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[1][2]

- Up to 32GB DDR5-5600 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)[3]

#### 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 DDR5-5200MHz. Through optimization of hardware and software, the memory can run at DDR5-5600MHz.



## **Storage**

#### Storage Support[1]

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

### 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**

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]

MobileMark® 2018: 6.1 hr

Local video (1080p) playback@150nits: 8.7 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\*\*\*

- (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\*\*

- Hybrid thermal solution (liquid cooling + air cooling + liquid metal)
- · Al Chip: LA3-P



### **DESIGN**

## **Display**

### **Display**

Size	Resolution	Touch	Туре	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	1000000:1	100% DCI-P3, 100% Adobe® RGB, 100% sRGB	165Hz	89°/89°/89°/89°	Dolby® Vison, 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**

### Keyboard

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

### **Keyboard Backlight**

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

#### **Touchpad**

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

### Mechanical

### Dimensions (WxDxH)[1]

357.7 x 277.7 x 18.9-22.7 mm (14.08 x 10.93 x 0.74-0.89 inches)

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

Around 2.6 kg (5.73 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[1]

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

### WLAN + Bluetooth®\*\*[2]

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

#### 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.

Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

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 see <u>General Bluetooth Support Information on Microsoft\*</u>.

[4] Wi-Fi 7 is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

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 see <u>General Bluetooth Support Information on Microsoft</u>.

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

#### **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 5Gbps / USB 3.2 Gen 1), data transfer only
- 2x USB-C (Thunderbolt 4 / USB4® 40Gbps), with PD 140W and DisplayPort™ 1.4
- 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 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.

## 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
- 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)

#### A Ititudo

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[1]

8 switchable keycaps

Notes:

[1] For more compatible accessory solutions, please visit Accessories for Legion 9 16IRX9.

## **CERTIFICATIONS**

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#### **Green Certifications**

- · Carbon Neutral Certified
- 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® Low Blue Light (Hardware Solution)
- UL Solutions Gaming Performance and Comfort (GOLD)
- Feature with \*\* means that only one offering listed under the feature is configured on selected models.

# Legion 9 16IRX9



- Feature with \*\*\* means that one or more offerings listed under the feature could be configured on selected models.
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