

**OVERVIEW**



1. USB-C (USB 10Gbps)	7. Thunderbolt 5
2. Card reader	8. Thunderbolt 5
3. USB-A (USB 10Gbps)	9. Headphone / microphone combo jack (3.5mm)
4. USB-A (USB 10Gbps)	10. HDMI
5. USB-A (USB 10Gbps), Always On	11. Power connector
6. Ethernet (2.5GbE RJ-45)	

## PERFORMANCE

### Processor

#### Processor Family

Intel® Core™ Ultra 9 Processor (Series 2)

#### Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU	Overall TOPS
Core Ultra 9 275HX	24 (8 P-core + 16 E-core)	24	P-core 2.7GHz / E-core 2.1GHz	P-core 5.4GHz / E-core 4.6GHz	36MB Intel® Smart Cache	Intel® Graphics, up to 8 TOPS	Intel® AI Boost, up to 13 TOPS	Up to 36 TOPS
Core Ultra 9 290HX Plus	24 (8 P-core + 16 E-core)	24	P-core 2.7GHz / E-core 1.8GHz	P-core 5.5GHz / E-core 4.7GHz	36MB Intel® Smart Cache	Intel® Graphics, up to 8 TOPS	Intel® AI Boost, up to 13 TOPS	Up to 36 TOPS

### AI (Artificial Intelligence)

#### AI PC Category

AI-Powered Gaming PC<sup>[1]</sup>

#### NPU

Integrated Intel® AI Boost, up to 13 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.

### 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™ 5080 Laptop GPU	Discrete	16GB GDDR7	2287 MHz	175W	1334 TOPS	DLSS 4, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 5090 Laptop GPU	Discrete	24GB GDDR7	2160 MHz	175W	1824 TOPS	DLSS 4, 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 8K@60Hz
- USB-C® supports up to 8K@60Hz

Notes:

[1] For Max resolution, DSC-enabled display is required. Three external output display devices cannot be supported at the same time when displaying 8K resolution.

### Chipset

#### Chipset

Intel® HM870 chipset

## Memory

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

Up to 192GB DDR5-4000 offering

### Memory Slots

Four DDR5 SODIMM slots, dual-channel capable

### Memory Type\*\*

- DDR5-4000<sup>[2]</sup>
- DDR5-5200<sup>[3]</sup>

Notes:

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

[2] There are more than two memory sticks installed, and the memory supports speeds of up to DDR5-4000.

[3] The memory overclock needs to be manually enabled in the BIOS, and no more than two memory sticks should be installed.

## Storage

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

Up to four drives, 4x M.2 SSD

- M.2 2280 SSD up to 2TB each<sup>[2]</sup>

### Storage Slot<sup>[3]</sup>

Four M.2 slots

- One M.2 2280 PCIe® 5.0 x4 slot
- Three M.2 2280 PCIe® 4.0 x4 slots

### Storage Type\*\*\*

Disk Type	Interface	Offering
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	2TB
M.2 2280 SSD	PCIe® NVMe®, PCIe® 5.0 x4 Performance	1TB / 2TB

Notes:

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

[2] The system supports four SSDs via four M.2 slots, but Lenovo® offers one or two SSD configuration with the other two or three slots for user self-expansion.

[3] 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

### Optical

None

### Card Reader

SD card reader

## Multi-Media

### Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

### Speakers

6 stereo speakers, 2W x4 (woofers), 2W x2 (tweeters), optimized with Nahimic Audio, Smart Amplifier (AMP)

### Microphone

Dual-microphone array

### Camera\*\*

- 5.0MP + 3D IR, with E-shutter, fixed focus
- 5.0MP + IR, 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>

- Models with 2D panel:  
MobileMark® 30@250nits: 2.5 hr  
Local video (1080p) playback@150nits: 4 hr
- Models with 3D panel:  
MobileMark® 30@250nits: 2 hr  
Local video (1080p) playback@150nits: 4 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

- 400W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- No power adapter

## Special Features

### Special Features

AI Chip: LA3-P

## DESIGN

## Display

### Display\*\*<sup>[1]</sup>

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
18"	WQUXGA 2D (3840x2400) / 3D (1920x1200)	Non-touch	IPS <sup>[2]</sup>	500nits	Glossy	16:10	1200:1	100% DCI-P3	240Hz / 440Hz	89° / 89° / 89° / 89°	Dolby Vision®, DisplayHDR™ 400, NVIDIA® G-SYNC®, Advanced Optimus support, TÜV Rheinland® Low Blue Light, TÜV Rheinland® High Gaming Performance, 3D display
18"	WQUXGA (3840x2400)	Non-touch	IPS <sup>[3]</sup>	520nits	Glossy	16:10	1200:1	100% DCI-P3	240Hz / 440Hz	89° / 89° / 89° / 89°	Dolby Vision®, DisplayHDR™ 400, NVIDIA® G-SYNC®, Advanced Optimus support, TÜV Rheinland® Low Blue Light, TÜV Rheinland® High Gaming Performance

**Touchscreen**

Non-touch

**Screen-to-Body Ratio**

93.1% AAR (active area ratio)

**Color Calibration**

X-Rite® factory color calibration

Notes:

- [1] To achieve max refresh rate of 440Hz, please set HSR-on in BIOS while resolution will be downgraded to 1920x1200.
- [2], [3] 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, key travel 1.6mm, cap recess 0.3mm, Copilot key

**Keyboard Backlight**

Per-key RGB backlight

**Touchpad**

Buttonless glass surface multi-touch touchpad, supports Precision TouchPad (PTP), 95 x 150 mm (3.74 x 5.91 inches)

**Mechanical**

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

403 x 296.9 x 23.9-27.95 mm (15.87 x 11.69 x 0.94-1.10 inches)

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

Models	Weight
Models with 2D display	Around 3.5 kg (7.72 lbs)
Models with 3D display	Around 3.75 kg (8.27 lbs)

**Case Color**

Eclipse black

**Case Material**

Aluminium + forge carbon (top), Aluminium (bottom)

**Surface Treatment**

Forged carbon with soft painted

**System Lighting**

- "Legion" logo with RGB lighting on top cover
- RGB lighting on power button
- "U" Strip RGB 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**

**WLAN + Bluetooth<sup>®</sup><sup>[1]</sup>**

Intel® Killer™ Wi-Fi® 7 BE1750x, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4, M.2 card

**WWAN**

No support

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

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

### 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.

[2] Wake-on-LAN needs the AC adapter plugged in and the system in S3 mode (sleep mode). Since Wake-on-LAN is enabled by default, there are no options displayed in the BIOS.

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

### Standard Ports<sup>[2]</sup>

- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2)
- 2x Thunderbolt™ 5, with USB PD 95-100W and DisplayPort™ 2.1
- 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 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] Thunderbolt™ 5: 80 Gbit/s (bidirectional), up to 120 Gbit/s in bandwidth boost mode for video-intensive applications.

## Docking

### Docking

Various docking solutions supported via Thunderbolt™ / USB-C®.

For more compatible docking solutions, please visit [Docking for Legion 9 18IAX10](#)

## SECURITY & PRIVACY

### Security

#### Security Chip

Firmware TPM 2.0 integrated in chipset

#### Fingerprint Reader

No fingerprint reader

#### BIOS Security

- Administrator password
- Hard disk 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](#)

#### Other Security

- E-shutter
- IR camera for Windows® Hello (facial recognition)

## 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
- No base warranty

## ACCESSORIES

### Bundled Accessories

#### Bundled Accessories<sup>[1]</sup>

- Anti-Reflection screen protector
- None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for Legion 9 18IAX10](#).

## 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)

#### 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

- CQC Portable Artificial Intelligence Computer (AIPC) Highest Graded Evaluation
- Pantone® SkinTone™ Validated
- Pantone® Validated
- TÜV Rheinland® High Gaming Performance
- 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.
- Feature with \*\*\* means that one or more options listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.

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