

OVERVIEW



1. Headphone / microphone combo jack (3.5mm)	6. HDMI
2. USB-A (USB 5Gbps)	7. USB-C (USB 10Gbps), with USB PD 65-100W & DP 2.1
3. USB-A (USB 5Gbps)	8. USB-C (USB 10Gbps), with DP 2.1
4. 2.5GbE (RJ-45)	9. USB-A (USB 10Gbps), Always On
5. Power connector	

PERFORMANCE

Processor

Processor Family

AMD Ryzen™ 9 9000 Series Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
AMD Ryzen™ 9 9955HX	16	32	2.5GHz	5.4GHz	16MB L2 / 64MB L3	AMD Radeon™ 610M
AMD Ryzen™ 9 9955HX3D	16	32	2.5GHz	5.4GHz	16MB L2 / 128MB L3	AMD Radeon™ 610M

AI (Artificial Intelligence)

AI PC Category

AI-Powered Gaming PC

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™ 5070 Ti Laptop GPU	Discrete	12GB GDDR7	2220 MHz	140W	992 TOPS	DLSS 4, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 5080 Laptop GPU	Discrete	16GB GDDR7	2287 MHz	175W	1334 TOPS	DLSS 4, 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 8K@60Hz
- USB-C® supports up to 8K@60Hz

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory^[1]

Up to 64GB DDR5-5600 offering

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type

DDR5-5600

Notes:

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

Storage

Max Storage Support^[1]

Up to two drives, 2x M.2 SSD

- M.2 2280 SSD up to 2TB^[2]

Storage Slot^[3]

Two M.2 slots

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

Storage Type^{*}**

Disk Type	Interface	Offering
M.2 2242 SSD	PCIe® NVMe®, PCIe® 4.0 x4	1TB
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 dual SSD via two M.2 slots, but Lenovo® offers only one SSD configuration with a second slot 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

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers

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

Microphone

Dual-microphone array

Camera^{}**

- HD 720p, with E-shutter, fixed focus
- 5.0MP, with E-shutter, fixed focus

Battery

Battery^{}**

- 80Wh Rechargeable Li-ion Battery, supports Super Rapid Charge (10min charge 0-30% capacity, 30min charge 0-70% capacity, 80min charge 0-100% capacity)
- 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^[1]

- Models with 80Wh battery:
MobileMark® 30@25Onits: 1.9 hr
Local video (1080p) playback@150nits: 2.9 hr
- Models with 99.9Wh battery:
MobileMark® 30@25Onits: 2.5 hr
Local video (1080p) playback@150nits: 3.7 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]

- 300W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 400W 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: LA3

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"	WQXGA (2560x1600)	Non-touch	OLED	1100nits (HDR peak) / 500nits (SDR typical)	Glossy	16:10	1,000,000:1	100% DCI-P3	240Hz	89° / 89° / 89° / 89°	DisplayHDR™ True Black 1000, Dolby Vision®, NVIDIA® G-SYNC®, AMD FreeSync™, Advanced Optimus support, TÜV Low Blue Light, TÜV High Gaming Performance, TÜV Rheinland® Flicker Free

Touchscreen

Non-touch

Screen-to-Body Ratio

92% AAR (active area ratio)

Color Calibration

X-Rite® factory color calibration

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 (with lighting lens on the front side)

Touchpad

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

Mechanical

Dimensions (WxDxH)^[1]

364.38 x 275.94 x 21.9-26.65 mm (14.35 x 10.86 x 0.86-1.05 inches)

Weight^[2]

Starting at 2.56 kg (5.64 lbs)

Case Color

Eclipse black

Case Material

Aluminium (top), aluminium (bottom)

Surface Treatment

Anodizing sandblasting

System Lighting

"Legion" logo with RGB lighting on top cover

RGB lighting on rear thermal vent

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® 7, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4, M.2 card^[2]

WWAN

No support

Ethernet

2.5GbE, 1x RJ-45

Notes:

[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

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

Ports^[1]

Standard Ports

- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with DisplayPort™ 2.1
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 65-100W and DisplayPort™ 2.1^[2]
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (2.5GbE RJ-45)
- 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.

Thunderbolt™ 5: 80 Gbit/s (bidirectional), up to 120 Gbit/s in bandwidth boost mode for video-intensive applications.

[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 Legion Pro 7 16AFR10H](#)

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

Other Security

E-shutter

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 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]**

- 4 switchable keycaps
- Lenovo® Legion™ Gaming Speed Mouse Pad M
- None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for Legion Pro 7 16AFR10H](#).

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)

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

Other Certifications

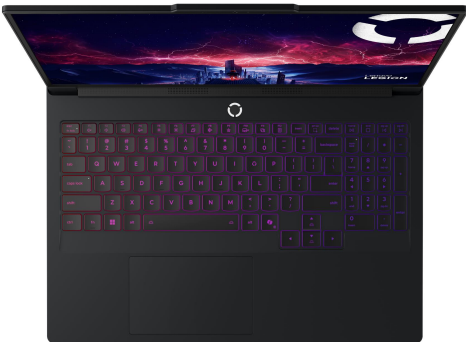
- TÜV Rheinland® Flicker Free
 - TÜV Rheinland® High Gaming Performance
 - TÜV Rheinland® Low Blue Light (Hardware Solution)
-
- Feature with ** means that only one option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
 - 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.
 - 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.



AMD



AMD



AMD



AMD



AMD



AMD