OVERVIEW



1. Headphone / microphone com	nbo 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[™] 5 / 7 / 9 Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	
AMD Ryzen™ 5 7645HX	6	12	4.0GHz	5.0GHz	6MB L2 / 32MB L3	AMD Radeon™ 610M Graphics	
AMD Ryzen™ 7 7745HX	8	16	3.6GHz	5.1GHz	8MB L2 / 32MB L3	AMD Radeon™ 610M Graphics	
AMD Ryzen [™] 9 7945HX	16 32 2.5GHz		2.5GHz	5.4GHz	16MB L2 / 64MB L3	AMD Radeon™ 610M Graphics	

Operating System

Operating System**

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

Graphics

Graphics**

Graphics	Туре	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce RTX™ 4050 Laptop GPU	Discrete	6GB GDDR6	2370 MHz	140W	Advanced Optimus, DLSS 3, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4060 Laptop GPU	Discrete	8GB GDDR6	2370 MHz	140W	Advanced Optimus, DLSS 3, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4070 Laptop GPU	Discrete	8GB GDDR6	2175 MHz	140W	Advanced Optimus, DLSS 3, 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.

[2] Installed memory is actually DDR5-5600 but may run as DDR5-5200 due to processor limitation.

Storage

Storage Support^[1]

Up to two drives, 2x M.2 2280 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		
M.2 2242 SSD	PCIe [®] NVMe [®] , PCIe [®] 4.0 x4	1TB		

Notes:

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

Removable Storage

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers

Stereo speakers, 2W x2, optimized with Nahimic Audio

Microphone

Dual-microphone array

Camera**

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

Max Battery Life^[1]

MobileMark® 2018: 5.3 hr Local video (1080p) playback@150nits: 6.8 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**[1]

- 230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 300W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

[1] AC adapter offerings depend on the country.

Special Features

Special Features

Legion Pro 5 16ARX8

Lenovo

Legion Coldfront 5.0 cooling system

DESIGN

Display

Display**[1]

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16″	WQXGA (2560x1600)	None	IPS	300nits	Anti- glare	16:10	1200:1	100% sRGB	165Hz	89°/89°/89°/89°	Dolby Vision®, AMD FreeSync™, NVIDIA® G- SYNC®, Advanced Optimus support, TÜV Low Blue Light
16″	WQXGA (2560x1600)	None	IPS	500nits	Anti- glare	16:10	1200:1	100% DCI- P3	240Hz	89°/89°/89°/89°	DisplayHDR [™] 400, Dolby Vision®, AMD FreeSync [™] , NVIDIA® G- SYNC®, TÜV Low Blue Light
16″	WQXGA (2560x1600)	None	IPS	500nits	Anti- glare	16:10	1200:1	100% sRGB	240Hz	89°/89°/89°/89°	DisplayHDR [™] 400, Dolby Vision®, 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**

- 4-Zone RGB backlight
- Blue backlight
- White backlight

Touchpad

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

Mechanical

Dimensions (WxDxH)^[1]

363.4 x 260.35 x 22.45-26.75 mm (14.31 x 10.25 x 0.88-1.05 inches)

Weight^[2]

Less than 2.5 kg (5.5 lbs)

Case Color

Onyx grey

Surface Treatment**

- Anodize electrophoresis deposition
- Anodizing

Case Material

Aluminium (top), PC-ABS (bottom)

System Lighting

No system 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]

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

WLAN + Bluetooth®**[2]

- Wi-Fi[®] 6, 802.11ax 2x2 Wi-Fi[®] + Bluetooth[®] 5.2, M.2 card^[3]
- Wi-Fi[®] 6E, 802.11ax 2x2 Wi-Fi[®] + Bluetooth[®] 5.2, M.2 card^[4]

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[®] 6 full features might be limited by country-level restrictions.

[4] 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^{III}

Standard Ports

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

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

ACCESSORIES

Bundled Accessories

Bundled Accessories^[1]

- Lenovo[®] Legion[™] M300 RGB Gaming Mouse (USB connector)
- None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for Legion Pro 5 16ARX8.

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)
- At altitudes above 2438 m (8,000 ft)
 - Maximum temperature when operating under the unpressurized condition: $31.3^{\circ}C$ (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 Certifications¹¹

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 <u>https://compliance.lenovo.com</u>.

Other Certifications

Other Certifications

- (Optional) TÜV Rheinland® High Gaming Performance
- TÜV Rheinland[®] Low Blue Light (Hardware Solution)
- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
- 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.

