

OVERVIEW



1. USB 3.2 Gen 2 (Always On)	6. Card reader
2. USB 3.2 Gen 2	7. USB-C 3.2 Gen 2
3. Ethernet (RJ-45)	8. USB-C 3.2 Gen 2 (data transfer / DP 1.4 only)
4. HDMI	9. Headphone / microphone combo jack (3.5mm)
5. Power connector	



PERFORMANCE

Processor

Processor Family

12th Generation Intel® Core™ i5 or 13th Generation Intel® Core™ i5 / i7 / i9 Processor

Processor**[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core™ i5- 12450H	8 (4 P-core + 4 E-core)	12	P-core 2.0GHz / E-core 1.5GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	Intel® UHD Graphics
Core™ i5- 13420H	8 (4 P-core + 4 E-core)	12	P-core 2.1GHz / E-core 1.5GHz P-core 4.6GHz / E-core 3.4GHz		12MB	Intel® UHD Graphics
Core™ i5- 13500H	12 (4 P-core + 8 E-core)	16	P-core 2.6GHz / E-core 1.9GHz	P-core 4.7GHz / E-core 3.5GHz	18MB	Intel® Iris® Xe Graphics
Core™ i7- 13620H	10 (6 P-core + 4 E-core)	16	P-core 2.4GHz / E-core 1.8GHz	P-core 4.9GHz / E-core 3.6GHz	24MB	Intel® UHD Graphics
Core™ i7- 13700H	14 (6 P-core + 8 E-core)	20	P-core 2.4GHz / E-core 1.8GHz	P-core 5.0GHz / E-core 3.7GHz	24MB	Intel® Iris® Xe Graphics

Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as 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	Туре	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce RTX™ 3050 Laptop GPU	Discrete	6GB GDDR6	1732 MHz	95W	Advanced Optimus, DLSS 2, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4050 Laptop GPU	Discrete	6GB GDDR6	2370 MHz	100W	Advanced Optimus, DLSS 3, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4060 Laptop GPU	Discrete	8GB GDDR6	2370 MHz	125W	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

Intel® SoC (System on Chip) platform

Memory

Max Memory[1]

Legion Slim 5 16IRH8



- Up to 16GB DDR5-4800 offering
- Up to 32GB DDR5-5200 offering

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type**

- DDR5-4800^[2]
- DDR5-5200^[3]

Notes:

- [1] The max memory is based on the test results with current Lenovo® memory offerings.
- [2] Installed memory is actually 5600MHz but may run at 4800MHz due to processor limitation.
- [3] Installed memory is actually 5600MHz but may run at 5200MHz due to processor limitation.

Storage

Storage Support[1]

Up to two drives, 2x M.2 SSD

• M.2 2280 SSD up to 1TB

Storage Slot

Two M.2 2280 PCle® 4.0 x4 slots

Storage Type

Disk Type	Interface	Offering	
M.2 2280 SSD	PCle® NVMe®, PCle® 4.0 x4	512GB / 1TB	

Notes:

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

Removable Storage

Card Reader

4-in-1 card reader (SD, SDHC, SDXC, MMC)

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 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

Batterv**

- Integrated Li-Polymer 60Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- Integrated Li-Polymer 80Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)

Max Battery Life[1]

 Models with 60Wh battery: MobileMark® 2018: 5.8 hr

Local video (1080p) playback@150nits: 6.6 hr

Models with 80Wh battery:

MobileMark® 2018: 7.6 hr

Local video (1080p) playback@150nits: 8.9 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]

- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

[1] AC adapter offerings depend on the country.

Special Features

Special Features**

- Al Chip: LA1
- 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"	WUXGA (1920x1200)	None	IPS	300nits	Anti- glare	16:10	1200:1	45% NTSC	144Hz	89°/89°/89°/89°	NVIDIA® G- SYNC®, Advanced Optimus
16"	WQXGA (2560x1600)	None	IPS	300nits ^[2]	Anti- glare	16:10	1200:1	100% sRGB	165Hz	89°/89°/89°/89°	Dolby® Vision™, NVIDIA® G- SYNC®, Advanced Optimus support, 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™, NVIDIA® G- SYNC®, Advanced Optimus support, TÜV Low Blue Light

Color Calibration

- X-Rite® factory color calibration
- No color calibration

Touchscreen

Non-touch

Notes:

- [1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
- [2] Minimum brightness tested in lab.



Input Device

Keyboard

6-row, multimedia Fn keys, numeric keypad

Keyboard Backlight**

- 4-Zone RGB 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]

Models	Dimensions
Models with RTX 4050 / 3050 graphics	359.7 x 260.3 x 19.9-21.9mm (14.16 x 10.25 x 0.78-0.86 inches)
Models with RTX 4060 / 4070 graphics	359.7 x 260.3 x 19.9-25.2mm (14.16 x 10.25 x 0.78-0.99 inches)

Weight^[2]

Less than 2.4 kg (5.29 lbs)

Case Color**

- Misty grey (top), storm grey (bottom)
- Storm grey (top), onyx grey (bottom)

Surface Treatment

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][3]

Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card

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

Ports^[1]

Standard Ports

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- 1x USB 3.2 Gen 2
- 1x USB 3.2 Gen 2 (Always On)
- 1x USB-C® 3.2 Gen 2 (support data transfer and DisplayPort™ 1.4)
- 1x USB-C® 3.2 Gen 2 (support data transfer, Power Delivery 140W and DisplayPort™ 1.4)
- 1x HDMI® 2.1, up to 8K/30Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (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.

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
- No base warranty

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)

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• 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).

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 Slim 5 16IRH8

CERTIFICATIONS

Green Certifications[2]

- ErP Lot 6
- ErP Lot 26
- RoHS compliant

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration.

[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system OS. Please visit epeat.net and energystar.gov for more information.

Other Certifications

Other Certifications

- (Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)
- None
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