

# **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 3.5, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4060 Laptop GPU	Discrete	8GB GDDR6	2370 MHz	125W	Advanced Optimus, DLSS 3.5, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4070 Laptop GPU	Discrete	8GB GDDR6	2175 MHz	140W	Advanced Optimus, DLSS 3.5, 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<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] Installed memory is actually DDR5-5600 but may run as DDR5-4800 due to processor limitation.
- [3] 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 SSD

• M.2 2280 SSD up to 1TB each

## **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**

## Battery\*\*

- 60Wh Rechargeable Li-ion Battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- 80Wh Rechargeable Li-ion 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, 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]

- 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 <sup>[2]</sup>	Anti- glare	16:10	1200:1	100% sRGB	165Hz	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**

Pen

No support

Keyboard

## Legion Slim 5 16IRH8



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<sup>[2]</sup>

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

## WWAN

No support

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

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

## **Standard Ports**

• 1x USB 3.2 Gen 2

## Legion Slim 5 16IRH8



- 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, Lenovo® Power Delivery 140W and DisplayPort™ 1.4)<sup>[2]</sup>
- 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.

[2] PD 140W is the input power and requires the use of Lenovo® unique adapter, otherwise it may support lower than 140W.

### **SECURITY & PRIVACY**

## Security

### **Security Chip**

Firmware TPM 2.0 integrated in SoC

#### **Fingerprint Reader**

No fingerprint reader

#### **BIOS Security**

- Administrator password
- Hard disk password
- · Power-on 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

## **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

## 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:  $5^{\circ}$ C to  $43^{\circ}$ C ( $41^{\circ}$ F to  $109^{\circ}$ F)
- At altitudes above 2438 m (8,000 ft)
  - Maximum temperature when operating under the unpressurized condition: 31.3°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)

#### Altitudo

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**

- ErP Lot 6/26
- · RoHS compliant

#### Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit <a href="https://compliance.lenovo.com">https://compliance.lenovo.com</a>.

#### Other Certifications

## **Other Certifications**

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





intel.









