

**OVERVIEW**



1. Card reader	6. Power connector
2. USB 3.2 Gen 2 (Always On)	7. Thunderbolt 4
3. USB 3.2 Gen 2	8. USB-C 3.2 Gen 2
4. USB 3.2 Gen 2	9. Headphone / microphone combo jack (3.5mm)
5. HDMI	

## PERFORMANCE

### Processor

#### Processor Family

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

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

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor 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™ i7-13700H	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
Core™ i9-13900H	14 (6 P-core + 8 E-core)	20	P-core 2.6GHz / E-core 1.9GHz	P-core 5.4GHz / E-core 4.1GHz	24MB	Intel® Iris® Xe Graphics

Notes:

<sup>[1]</sup> 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	Type	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce RTX™ 4050 Laptop GPU	Discrete	6GB GDDR6	2370 MHz	115W	Advanced Optimus, DLSS 3, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4060 Laptop GPU	Discrete	8GB GDDR6	2370 MHz	115W	Advanced Optimus, DLSS 3, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4070 Laptop GPU	Discrete	8GB GDDR6	2175 MHz	115W	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<sup>[1]</sup>

Up to 32GB (16GB soldered + 16GB SO-DIMM) DDR5-5200 offering

#### Memory Slots

One memory soldered to systemboard, one DDR5 SO-DIMM slot, dual-channel capable

#### Memory Type<sup>[2]</sup>

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<sup>[1]</sup>

Up to two drives, 2x M.2 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

Notes:

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

## Removable Storage

### Card Reader

SD card reader

## Multi-Media

### Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

### Speakers

Stereo speakers, 2W x2, audio by HARMAN, optimized with Nahimic Audio, Smart Amplifier (AMP)

### Microphone

Dual-microphone array

### Camera

FHD 1080p, with E-shutter, fixed focus

## Battery

### Battery

Integrated Li-Polymer 99.9Wh 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>

MobileMark® 2018: 8.4 hr  
Local video (1080p) playback@150nits: 9.1 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

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

## Special Features

### Special Features<sup>\*\*\*[1]</sup>

- AI Chip: LA2-Q
- Legion Coldfront 5.0 cooling system

Notes:

[1] This chip powers Lenovo® AI Engine+, which uses software-based machine learning via its Lenovo® Vantage software to monitor in-game frame rates and adjust the internal components to target the highest performance.

**DESIGN**

**Display**

**Display\*\*[1]**

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)	None	IPS	300nits	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
16"	3.2K (3200x2000)	None	IPS	430nits	Anti-glare	16:10	1200:1	100% DCI-P3	165Hz	89°/89°/85°/85°	Dolby Vision®, NVIDIA® G-SYNC®, Advanced Optimus support, TÜV Low Blue Light

**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\*\***

- Glacier white models: 6-row, spill-resistant, multimedia Fn keys, numeric keypad, white keycaps
- Storm grey models: 6-row, spill-resistant, multimedia Fn keys, numeric keypad, storm grey keycaps

**Keyboard Backlight\*\***

- White backlight
- Per-key RGB backlight

**Touchpad**

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

**Mechanical**

**Dimensions (WxDxH)[1]**

357.7 x 259.3 x 17.6-19.9 mm (14.08 x 10.21 x 0.69- 0.78 inches)

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

Around 2 kg (4.4 lbs)

## Case Color\*\*

- Glacier white
- Storm grey

## Surface Treatment

Anodizing

## Case Material

Aluminium (top), aluminium (bottom)

## System Lighting

RGB lighting on power button

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

No onboard Ethernet

### WLAN + Bluetooth®\*\*<sup>[1][2]</sup>

- Wi-Fi® 6E, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card
- Intel® Killer Wi-Fi® 6E AX1675i, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card

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® 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<sup>[1]</sup>

### Standard Ports

- 1x USB 3.2 Gen 2 (Always On)
- 2x USB 3.2 Gen 2
- 1x USB-C® 3.2 Gen 2 (support data transfer, Lenovo® Power Delivery 140W and DisplayPort™ 1.4)
- 1x Thunderbolt™ 4 / USB4® 40Gbps (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 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

Touch style fingerprint reader integrated in power button

#### 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

## ACCESSORIES

### Bundled Accessories

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

None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for Legion Slim 7 16IRH8](#)

## 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)
- 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)

#### 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

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.
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