# **OVERVIEW**



1. Headphone / microphone combo 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. Thunderbolt 4
5. HDMI	10. USB-C 3.2 Gen 2 (data transfer / DP 1.4 only)

# PERFORMANCE

## Processor

#### **Processor Family**

12th Generation Intel<sup>®</sup> Core<sup>™</sup> i5 / i7 / i9 Processor

#### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core i5- 12500H	12 (4 P-core + 8 E-core)	16	P-core 2.5GHz / E-core 1.8GHz	P-core 4.5GHz / E-core 3.3GHz	18MB	Intel® Iris® Xe Graphics
Core i7- 12700H	14 (6 P-core + 8 E-core)	20	P-core 2.3GHz / E-core 1.7GHz	P-core 4.7GHz / E-core 3.5GHz	24MB	Intel® Iris® Xe Graphics
Core i9- 12900H	14 (6 P-core + 8 E-core)	20	P-core 2.5GHz / E-core 1.8GHz	P-core 5.0GHz / E-core 3.8GHz	24MB	Intel® Iris® Xe Graphics

# **Operating System**

#### **Operating System**\*\*

- Windows<sup>®</sup> 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™ 3060 Laptop GPU	Discrete	6GB GDDR6	1702 MHz	140W	Advanced Optimus, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 3070 Laptop GPU	Discrete	8GB GDDR6	1620 MHz	150W	Advanced Optimus, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 3070 Ti Laptop GPU	Discrete	8GB GDDR6	1485 MHz	150W	Advanced Optimus, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate

# **Monitor Support**

### Monitor Support<sup>[1]</sup>

Supports up to 5 independent displays (native display and 4 external monitors via HDMI® and USB-C®)

- HDMI<sup>®</sup> supports up to 7680x4320@60Hz
- USB-C<sup>®</sup> supports up to 7680x4320@60Hz

#### Notes:

[1] For Max resolution, DSC-enabled display is required. Three external output display devices cannot be supported at the same time when displaying 8K resolution.

## Chipset

### Chipset

Intel® SoC (System on Chip) platform

## Memory

Max Memory<sup>[1]</sup>

Up to 32GB DDR5-4800 offering

## Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Memory Type

DDR5-4800

Notes:

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

# Storage

### Storage Support<sup>[1]</sup>

Up to two drives, 2x M.2 SSD • M.2 2242 SSD up to 512GB

• 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 2242 SSD	PCIe® NVMe®, PCIe® 4.0 x4	512GB	
M.2 2280 SSD	PCIe <sup>®</sup> NVMe <sup>®</sup> , PCIe <sup>®</sup> 4.0 x4	512GB / 1TB	

### RAID

RAID 0 support

Notes:

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

## **Removable Storage**

Optical

#### None

Card Reader

No card reader

## Multi-Media

### Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

### Speakers

Stereo speakers, 2W x2, Nahimic Audio

Microphone

Dual-microphone array

### Camera

HD 720p, 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)

### Max Battery Life<sup>[1]</sup>

MobileMark® 2018: 4.01 hr (discrete mode) or 6.55 hr (hybrid mode)

Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark<sup>®</sup> 2014, MobileMark<sup>®</sup> 2018, MobileMark<sup>®</sup> 25, MobileMark<sup>®</sup> 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 300W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

# 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	100% sRGB	165Hz	89° / 89° / 89° / 89°	Dolby Vision®, NVIDIA® G-SYNC®, DC dimmer, Advanced Optimus, TÜV Low Blue Light
16″	WQXGA (2560x1600)	None	IPS	500nits	Anti- glare	16:10	1200:1	100% sRGB	165Hz	89° / 89° / 89° / 89°	Dolby Vision®, DisplayHDR™ 400, NVIDIA® G-SYNC®, DC dimmer, TÜV Low Blue Light, TÜV High Gaming Performance, Advanced Optimus
16″	WQXGA (2560x1600)	None	IPS	500nits	Anti- glare	16:10	1200:1	100% sRGB	240Hz	89° / 89° / 89° / 89°	Dolby Vision®, NVIDIA® G-SYNC®, DC dimmer, Advanced Optimus, 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**

### Pen

No support

### Keyboard\*\*

- Glacier white models: 6-row, multimedia Fn keys, numeric keypad, moon white keycaps
- Storm grey models: 6-row, multimedia Fn keys, numeric keypad, black keycaps

### Keyboard Backlight\*\*

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

### Touchpad

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

## Mechanical

### Dimensions (WxDxH)<sup>[1]</sup>

359.9 x 264.4 x 19.9 mm (14.17 x 10.41 x 0.78 inches)

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

Starting at 2.49 kg (5.49 lbs)

### Case Color\*\*

- Glacier white (top), dove grey (bottom)
- Storm grey (top), black (bottom)

#### Surface Treatment\*\*

- Glacier white models: Anodize electrophoresis deposition
- Storm grey models: Anodizing

#### **Case Material**

Aluminium (top), aluminium (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<sup>®</sup> 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<sup>[1]</sup>

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

#### WLAN + Bluetooth®\*\*[2]

- Wi-Fi<sup>®</sup> 5, 802.11ac 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.1, M.2 Card
- Wi-Fi<sup>®</sup> 6, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.1, M.2 card<sup>[3]</sup>
- Wi-Fi<sup>®</sup> 6E, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.1, M.2 card<sup>[4]</sup>

#### 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<sup>®</sup> 6 full features might be limited by country-level restrictions.

[4] Wi-Fi<sup>®</sup> 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>III</sup>

#### **Standard Ports**

- 1x USB 3.2 Gen 1 (Always On)
- 2x USB 3.2 Gen 1
- 1x USB-C<sup>®</sup> 3.2 Gen 2 (support data transfer, Lenovo<sup>®</sup> Power Delivery 135W and DisplayPort<sup>™</sup> 1.4)<sup>[2]</sup>
- 1x USB-C<sup>®</sup> 3.2 Gen 2 (support data transfer and DisplayPort<sup>™</sup> 1.4)
- 1x Thunderbolt<sup>™</sup> 4 / USB4<sup>®</sup> 40Gbps (support data transfer and DisplayPort<sup>™</sup> 1.4)
- 1x HDMI<sup>®</sup> 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<sup>®</sup> 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 135W is the input power and requires the use of Lenovo® unique adapter, otherwise it may support lower than 135W.

**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

# ACCESSORIES

## **Bundled Accessories**

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

None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for Legion 5 Pro 16IAH7H

# **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)

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

## **Other Certifications**

### **Other Certifications**

- (Optional) TÜV Rheinland® High Gaming Performance
- TÜV Rheinland<sup>®</sup> 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.
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