

**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. 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   |
| AMD Ryzen™ 7 7745HX | 8     | 16      | 3.6GHz         | 5.1GHz        | 8MB L2 / 32MB L3  | AMD Radeon™ 610M   |
| AMD Ryzen™ 9 7945HX | 16    | 32      | 2.5GHz         | 5.4GHz        | 16MB L2 / 64MB L3 | AMD Radeon™ 610M   |

### 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    | 140W | Advanced Optimus, DLSS 3.5, Dynamic Boost 2.0, DirectX® 12 Ultimate           |
| NVIDIA® GeForce RTX™ 4060 Laptop GPU | Discrete | 8GB GDDR6 | 2370 MHz    | 140W | 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

AMD SoC (System on Chip) platform

### Memory

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

Up to 32GB DDR5-5200 offering

#### Memory Slots

Two DDR5 SO-DIMM slots, 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 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 2242 SSD | PCIe® NVMe®, PCIe® 4.0 x4 | 1TB         |
| 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

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<sup>[1]</sup>

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, 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\*\*<sup>[1]</sup>

- 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 Coldfront 5.0 cooling system

## DESIGN

## Display

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

| 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®, 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)<sup>[1]</sup>

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

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

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<sup>[1]</sup>

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

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

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

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<sup>[1]</sup>

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

- 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<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

- (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.
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