

OVERVIEW



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

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 6600H | 6 | 12 | 3.3GHz | 4.5GHz | 3MB L2 / 16MB L3 | AMD Radeon™ 660M Graphics |
| AMD Ryzen 7 6800H | 8 | 16 | 3.2GHz | 4.7GHz | 4MB L2 / 16MB L3 | AMD Radeon 680M Graphics |
| AMD Ryzen 9 6900HX | 8 | 16 | 3.3GHz | 4.9GHz | 4MB L2 / 16MB L3 | AMD Radeon 680M Graphics |

Operating System

Operating System**

- Windows® 11 Home
- Windows 11 Home Single Language
- Windows 11 Pro
- No operating system

Graphics

Graphics**

| Graphics | Type | Memory | Key Features |
|---------------------|----------|-----------|--|
| AMD Radeon RX 6600S | Discrete | 4GB GDDR6 | DirectX® 12 Ultimate, AMD Smart Access Memory, AMD SmartShift Technology |
| AMD Radeon RX 6800S | Discrete | 8GB GDDR6 | DirectX 12 Ultimate, AMD Smart Access Memory, AMD SmartShift Technology |

Monitor Support

Monitor Support^[1]

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)

- HDMI supports up to 7680x4320@60Hz
- USB-C 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

AMD SoC (System on Chip) platform

Memory

Max Memory^[1]

- Up to 16GB (8GB soldered + 8GB SO-DIMM) DDR5-4800 offering
- Up to 24GB (8GB soldered + 16GB SO-DIMM) DDR5-4800 offering

Memory Slots

One memory soldered to systemboard, one DDR4 SO-DIMM slot, dual-channel capable

Memory Type

DDR5-4800

Notes:

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

Storage

Storage Support^[1]

One drive, up to 2TB M.2 2280 SSD

Storage Slot

One M.2 2280 PCIe® 4.0 x4 slot

Storage Type

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

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® ALC3306 codec

Speakers

Stereo speakers, 2W x2, audio by HARMAN, 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 71Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)
- Integrated Li-Polymer 99.99Wh battery, supports Super Rapid Charge (10min charge 0-30% capacity, 30min charge 0-70% capacity, 80min charge 0-100% capacity)

Max Battery Life^[1]

- Models with 71Wh battery:
 - MobileMark® 2018: 8 hr
 - Local video (1080p) playback: 9.1 hr
- Models with 99.99Wh battery:
 - MobileMark 2018: 9.2 hr
 - Local video (1080p) playback: 10.6 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.

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" | WUXGA (1920x1200) | None | IPS | 300nits ^[2] | Anti-glare | 16:10 | 1200:1 | 100% sRGB | 165Hz | 89°/89°/89°/89° | Dolby® Vision™, AMD FreeSync™, 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, AMD FreeSync, DC dimmer, TÜV Low Blue Light, TÜV High Gaming Performance |
| 16" | WQXGA (2560x1600) | None | IPS | 500nits | Anti-glare | 16:10 | 1200:1 | 100% sRGB | 240Hz | 89°/89°/89°/89° | Dolby Vision, AMD FreeSync, 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.

[2] Minimum brightness tested in lab.

Input Device

Keyboard

6-row, multimedia Fn keys, numeric keypad, swtichable keycaps

Keyboard Backlight**

- White backlight
- RGB backlight

Touchpad

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

Mechanical

Dimensions (WxDxH)^[1]

357.7 x 260 x 16.9 mm (14.08 x 10.24 x 0.67 inches)

Weight^[2]

| Models | Weight |
|-----------------------------|------------------------------|
| Models with 71Wh battery | Less than 2.175 kg (4.8 lbs) |
| Models with 99.99Wh battery | Less than 2.23 kg (4.9 lbs) |

Case Color**

- Onyx grey
- Storm grey

Surface Treatment

Iron sandblasting (anodized)

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 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®^[1]**

- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card^[2]
- Wi-Fi 6E, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card^[3]

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 6 full features might be limited by country-level restrictions.

[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.

Ports^[1]

Standard Ports

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 135W 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
- 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)
- 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]

None

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for Legion S7 16ARHA7](#)

CERTIFICATIONS

Green Certifications^[1]

Green Certifications^[2]

- 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.

[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® 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.
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