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 5600H | 6 | 12 | 3.3GHz | 4.2GHz | 3MB L2 / 16MB L3 | AMD Radeon™ Graphics |
| AMD Ryzen 7 5800H | 8 | 16 | 3.2GHz | 4.4GHz | 4MB L2 / 16MB L3 | AMD Radeon Graphics |
| AMD Ryzen 9 5900HX | 8 | 16 | 3.3GHz | 4.6GHz | 4MB L2 / 16MB L3 | AMD Radeon Graphics |

Operating System

Operating System**

- Windows® 10 Home 64
- Windows 10 Home 64 Single Language
- Windows 10 Pro 64
- Windows 11 Home
- Windows 11 Home Single Language
- Windows 11 Pro
- No operating system

Graphics

Graphics**

| Graphics | Туре | Memory | Boost Clock | TGP | Key Features |
|--------------------------------------------|----------|--------------|------------------------|------|--------------------------------------------------------------------------------------|
| NVIDIA® GeForce RTX™ 3050 Ti Laptop GPU | Discrete | 4GB GDDR6 | 1485 MHz / 1695 MHz | 90W | Advanced Optimus, Resizable BAR, Dynamic Boost 2.0, DirectX® 12 Ultimate |
| NVIDIA GeForce RTX 3060 Laptop GPU | Discrete | 6GB GDDR6 | 1282 MHz / 1425 MHz | 100W | Advanced Optimus, Resizable BAR, Dynamic Boost 2.0, VR ready, DirectX 12 Ultimate |

Monitor Support

Monitor Support

Supports up to 3 independent displays (native display and 2 external monitors via USB-C®)

• USB-C supports up to 5120x2160@60Hz

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory^[1]

- Up to 16GB (8GB soldered + 8GB SO-DIMM) DDR4-3200 offering
- Up to 32GB (16GB soldered + 16GB SO-DIMM) DDR4-3200 offering

Memory Slots

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

Memory Type

DDR4-3200

Notes:

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

Storage

Storage Support^[1]

Up to two drives, 2x M.2 SSD • M.2 2280 SSD up to 2TB

Storage Slot

Two M.2 2280 PCIe® 3.0 x4 slots

Storage Type

| Disk Type | Interface | | | | |
|--------------|-------------------------|--|--|--|--|
| M.2 2280 SSD | PCIe NVMe®, PCIe 3.0 x4 | | | | |

Notes:

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

Removable Storage

Optical

None

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, Nahimic Audio, Harman Speakers, Smart AMP

Microphone

Dual-microphone array

Camera

HD 720p, with camera shutter, fixed focus

Battery

Battery^[1]

Integrated Li-Polymer 71Wh battery, supports Rapid Charge Express (get 3 hours of runtime with a 15-minute charge) **Max Battery Life**^[2]

Wax Ballery Life

MobileMark® 2018: 7.8 hr

Notes:

[1] Rapid Charge Express is only effective in hibernates or fully shutting down the computer.

[2] 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**

| Size | Resolution | Touch | Туре | Brightness | Surface | Aspect Ratio | Contrast Ratio | Color Gamut | Viewing Angle | Key Features |
|------|------------|-------|------|------------|---------|-----------------|-------------------|----------------|------------------|--------------|
|------|------------|-------|------|------------|---------|-----------------|-------------------|----------------|------------------|--------------|

Legion S7 15ACH6



| | | | | | | | | | (L/R/U/D) | |
|-------|---------------------|------|-----|---------|----------------|------|--------|-----------------------|-------------|----------------------------------------------------------------------------------------|
| 15.6″ | FHD (1920x1080) | None | IPS | 300nits | Anti- glare | 16:9 | 1000:1 | 100% sRGB | 85°/85°/-/- | Refresh rate 165Hz, Dolby® Vision™, AMD FreeSync™, NVIDIA G- SYNC®, DC dimmer |
| 15.6″ | WQHD (2560x1440) | None | IPS | 300nits | Anti- glare | 16:9 | 1000:1 | 100% sRGB | 89°/89°/-/- | Refresh rate 165Hz, Dolby Vision, AMD FreeSync, NVIDIA G- SYNC, DC dimmer |
| 15.6″ | UHD (3840x2160) | None | IPS | 500nits | Anti- glare | 16:9 | 1500:1 | 100% Adobe® RGB | 89°/89°/-/- | Refresh rate 60Hz, DisplayHDR™ 400, Dolby Vision, AMD FreeSync, DC dimmer |

Color Calibration

- X-Rite[®] factory color calibration
- No color calibration

Touchscreen

Non-touch

Input Device

Keyboard

6-row, spill-resistant, multimedia Fn keys, numeric keypad

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]

356 x 252 x 15.9-18.9 mm (14.02 x 9.92 x 0.63-0.74 inches)

Weight^[2]

Around 1.9 kg (4.19 lbs)

Case Color**

- Shadow black
- Storm grey

Surface Treatment

Anodizing

Case Material

Aluminium (top), aluminium (bottom)

System Lighting**

- "Y" logo with white lighting on top cover RGB lighting on power button (storm grey models)
- RGB lighting on power button (shadow black models)

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]

No onboard Ethernet

WLAN + Bluetooth®**[2][3]

- Wi-Fi[®] 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card
- Intel® Killer Wi-Fi 6 AX1650, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card

Notes:

- [1] Wake-on-LAN needs the power adapter plugged in.
- [2] Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitations.
- [3] Wi-Fi 6 full features might be limited by country-level restrictions.

Ports^{III}

Standard Ports

- 1x Card reader
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Power connector
- 1x USB 3.2 Gen 2
- 1x USB 3.2 Gen 2 (Always On)
- 2x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 100w and DisplayPort™ 1.4)

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.

Monitor Cable

Monitor Cable

- Lenovo USB-C 3-in-1 Hub (USB-C to VGA / HDMI® / USB-A)
- No monitor cable

SECURITY & PRIVACY

Security

Security Chip

Firmware TPM 2.0 integrated in SoC

Fingerprint Reader

Touch style fingerprint reader integrated in power button

BIOS Security

- Power-on password
- Supervisor password
- Hard disk password

Other Security

Camera privacy 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)

Legion S7 15ACH6

Lenovo

- 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).

CERTIFICATIONS

Green Certifications⁽¹⁾

Green Certifications

- ENERGY STAR® 8.0
- ErP Lot 3

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or selfdeclaration.

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