

OVERVIEW



1. E-camera shutter switch	6. USB-C 3.2 Gen 2
2. USB-C 3.2 Gen 1 (data transfer only)	7. 3x USB 3.2 Gen 1 (one Always On)
3. USB-C 3.2 Gen 2 (data transfer / DP 1.4 only)	8. HDMI 2.1
4. Headphone / microphone combo jack (3.5mm)	9. Power connector
5. Ethernet (RJ-45)	

PERFORMANCE

Processor

Processor Family

AMD Ryzen™ 7 / 9 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
AMD Ryzen 7 5800H	8	16	3.2GHz	4.4GHz	4MB L2 / 16MB L3	DDR4-3200	AMD Radeon™ Graphics
AMD Ryzen 9 5900HX	8	16	3.3GHz	4.6GHz	4MB L2 / 16MB L3	DDR4-3200	AMD Radeon Graphics

Operating System

Operating System

- Windows® 10 Pro 64
- Windows 10 Home 64
- No operating system

Graphics

Graphics^[1]

Graphics	Type	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce® RTX™ 3060 Laptop GPU	Discrete	6GB GDDR6	1425 MHz / 1702 MHz	130W	VR ready, DirectX® 12
NVIDIA GeForce RTX 3070 Laptop GPU	Discrete	8GB GDDR6	1560 MHz / 1620 MHz	140W	VR ready, DirectX 12
NVIDIA GeForce RTX 3080 Laptop GPU	Discrete	16GB GDDR6	1545 MHz / 1710 MHz	165W	VR ready, DirectX 12

Notes:

1. Free-Sync via integrated graphics; G-Sync via discrete graphics

Monitor Support

Monitor Support

Supports up to 4 independent displays via native display and 3 external monitors; supports external monitors via HDMI® (up to 4096x2160@60Hz) or USB-C (up to 5120x3200@60Hz)

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

Max Memory^[1]

Up to 32GB DDR4-3200 offering

Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type

DDR4-3200

Notes:

1. The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.

Storage

Storage Support

Up to two drives, 2x M.2 SSD

- M.2 2280 SSD up to 2TB

Storage Type

Disk Type	Interface	RPM	Security
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	-

Removable Storage

Optical

None

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers

Stereo speakers, 2W x2, Nahimic Audio, HARMAN-branded, Smart AMP with super line speaker

Microphone

Dual array microphone

Camera

720p, with E-camera shutter, fixed focus

Battery

Battery

Integrated Li-Polymer 80Wh battery, supports Rapid Charge Boost (get 2 hours of runtime with a 15-minute charge)

Max Battery Life^[1]

MobileMark® 2018: 5.1 hr (discrete mode) or 8.3 hr (hybrid mode)

Notes:

- All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, and/or JEITA 2.0 battery-life benchmark tests. Actual battery life will vary and depends 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

DESIGN

Display

Display^[1]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
16.0"	WQXGA (2560x1600)	None	IPS	500 nits	Anti-glare	16:10	1200:1	100% sRGB	178°	Refresh rate 165Hz, Dolby® Vision™, VESA HDR 400, Free-Sync, G-Sync, DC dimmer

Color Calibration

X-Rite® Pantone® factory color calibration

Touchscreen

Non-touch

Notes:

- California Electronic Waste Recycling Fee
In California, per state law, Lenovo charges an electronic waste recycling fee on this covered device at the time of sale of the product.

For more information, go to <https://www.calrecycle.ca.gov/Electronics/Consumer>

Input Device

Keyboard

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

Touchpad

Buttonless glass surface multi-touch touchpad, supports Precision TouchPad (PTP)

Mechanical

Dimensions (WxDxH)

Models	Dimensions
All models	360 x 260 x 20.1-23.5 mm (14.17 x 10.23 x 0.79-0.93 inches)

Weight^[1]

Models	Weight
All models	2.5 kg (5.5 lbs)

Case Color

Storm grey

Surface Treatment

Anodizing sandblasting

Case Material

Aluminium (top), aluminium (bottom)

System Lighting

"Y" logo RGB lighting on top cover

RGB lighting on power button

"U" strip RGB lighting

RGB lighting on left / right / rear thermal vent

Notes:

1. The system weight varies depending on configurations

CONNECTIVITY

Network

Onboard Ethernet

Gigabit Ethernet, Realtek RTL8111H

WLAN + Bluetooth®

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

Ports^[1]

Standard Ports^[2]

- 2x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C 3.2 Gen 1 (support data transfer only)
- 1x USB-C 3.2 Gen 2 (support data transfer and DisplayPort™ 1.4)
- 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 100W and DisplayPort 1.4)
- 1x HDMI 2.1
- 1x Ethernet (RJ-45)
- 1x Headphone / microphone combo jack (3.5mm)
- 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;
USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
Thunderbolt™ 3: 40 Gbit/s;
FireWire 400: 400 Mbit/s;
FireWire 800: 800 Mbit/s

2. Depending on many factors, actual data transfer speed may be lower than theoretical speed

SECURITY & PRIVACY

Security

Security Chip

Firmware TPM 2.0 integrated in chipset

Fingerprint Reader

No fingerprint reader

BIOS Security

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

Other Security

E-Camera shutter

SERVICE

Warranty

Base Warranty

- 1-year depot service
- 1-year depot with 2-year system board service
- 2-year (1-yr battery) depot service

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

Green Certifications

- ErP Lot 3
- RoHS compliant

Other Certifications

Other Certifications

- TÜV Rheinland® High Gaming Performance
- TÜV Rheinland Low Blue Light (Hardware Solution)



AMD



AMD



AMD



AMD



AMD



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