

PERFORMANCE

Processor

Processor Family

9th Generation Intel® Core™ i5 / i7 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i5-9300H	4	8	2.4GHz	4.1GHz	8MB	DDR4-2666	Intel UHD Graphics 630
Core i5-9300HF	4	8	2.4GHz	4.1GHz	8MB	DDR4-2666	-
Core i7-9750H	6	12	2.6GHz	4.5GHz	12MB	DDR4-2666	Intel UHD Graphics 630
Core i7-9750HF	6	12	2.6GHz	4.5GHz	12MB	DDR4-2666	-

Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- FreeDOS

Graphics

Graphics	Type	Memory	Key Features
NVIDIA® GeForce® GTX 1660 Ti	Discrete	6GB GDDR6	VR ready, DirectX® 12
NVIDIA GeForce RTX™ 2060	Discrete	6GB GDDR6	VR ready, DirectX 12

Monitor Support

Supports up to 4 independent displays via native display and 3 external monitors; supports external monitors via HDMI® (up to 3840x2160@60Hz), MiniDP (7680x4320@60Hz) or USB-C (up to 3840x2160@60Hz)

Chipset

Intel HM370 chipset

Memory

Memory Type

DDR4-2666

Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

Max Memory

Up to 32GB DDR4-2666 offering

Notes:

- 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, 1x 2.5" HDD + 1x M.2 2280 SSD or 1x 2.5" HDD + 1x M.2 2242 SSD

- 2.5" HDD up to 2TB
- M.2 2242 SSD up to 512GB
- M.2 2280 SSD up to 1TB

Storage Type

Disk Type	Interface	RPM	Security
2.5" SATA HDD	SATA 6Gb/s	5.4K	-
2.5" SATA HDD	SATA 6Gb/s	7.2K	-
M.2 2242 SSD	PCIe NVMe, PCIe 3.0 x2	-	-

M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	-
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Removable Storage

- Optical**  
Not Support
- Card Reader**  
Not Support

Multi-Media

- Audio Chip**  
High Definition (HD) Audio, Realtek® ALC3287 codec
- Speakers**  
Stereo speakers, 2W x2, Dolby® Atmos® for gaming, HARMAN-branded
- Microphone**  
Dual array microphone
- Camera**  
720p, fixed focus

Battery

- Battery**  
Integrated Li-Polymer 57Wh battery
- Max Battery Life**
- MobileMark® 2014: 3.4 hr (RTX 2060), 10hr (UHD Graphics)
  - MobileMark 2014: 3.8 hr (GTX 1660 Ti), 10 hr (UHD Graphics)

Notes:

- All battery life claims are approximate maximum and based on results using the MobileMark 2014 and/or MobileMark 2018 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

230W slim tip AC adapter

DESIGN

Display

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
15.6"	FHD (1920x1080)	None	IPS	250 nits	Anti-glare	16:9	-	45% NTSC	-	Refresh rate 60Hz
15.6"	FHD (1920x1080)	None	IPS	300 nits	Anti-glare	16:9	-	72% NTSC	-	Refresh rate 60Hz
15.6"	FHD (1920x1080)	None	IPS	300 nits	Anti-glare	16:9	-	72% NTSC	-	Refresh rate 144Hz

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>

- Touchscreen**  
Non-touch

## Input Device

### Keyboard

6-row, multimedia Fn keys, numeric keypad

### Keyboard Backlight

LED backlight

### Touchpad

2-button Mylar® surface multi-touch touchpad

## Mechanical

### Dimensions (WxDxH)

360 x 267 x 24.2-25.9 mm (14.17 x 10.51 x 0.95-1.02 inches)

### Weight

2.3 kg (5.07 lbs)

### Case Color

Raven black

### Surface Treatment

Texture Painting

### Case Material

PC + ABS (top), PC + ABS (bottom)

### System Lighting

"Y" Logo with white lighting on top cover

## CONNECTIVITY

### Network

#### Onboard Ethernet

Gigabit Ethernet

#### WLAN + Bluetooth™

- 802.11ac 2x2 Wi-Fi + Bluetooth 4.2, M.2 card
- 802.11ac 1x1 Wi-Fi + Bluetooth 4.2, M.2 card

### Ports

#### Standard Ports

- 2x USB 3.1 Gen 1
- 1x USB 3.1 Gen 1 (Always On)
- 1x USB-C 3.1 Gen 1 (support data and DP 1.2)
- 1x HDMI 2.0
- 1x Mini DisplayPort™ 1.4
- 1x Ethernet (RJ-45)
- 1x headphone / microphone combo jack (3.5mm)
- 1x power connector

#### Notes:

- 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

#### Physical Locks

Kensington® Security Slot

## Fingerprint Reader

Not Support

## BIOS Security

- Power-on password
- Administrator password
- Hard disk password

## SERVICE

### Warranty

#### Base Warranty

- 1-year depot service
- 2-year (1-yr battery) depot service

## CERTIFICATIONS

### Green Certifications

- ErP Lot 3
- RoHS

