

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

- HDD/SSD mode: up to two drives, 1x 2.5" HDD + 1x M.2 2242/2280 SSD
 - 2.5" HDD up to 2TB
 - M.2 2280 SSD up to 1TB
 - M.2 2242 SSD up to 512GB
- One drive, 1x M.2 2280 SSD or 1x M.2 2242 SSD
 - M.2 2280 SSD up to 1TB
 - M.2 2242 SSD up to 512GB

Storage Type

Disk Type	Interface	RPM	Security
M.2 2242 SSD	PCIe NVMe, PCIe 3.0 x2	-	-

M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	-
2.5" SATA HDD	SATA 6Gb/s	7.2K	-
2.5" SATA HDD	SATA 6Gb/s	5.4K	-

Removable Storage

Optical

None

Card Reader

No card reader

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, 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

230W slim tip AC adapter

DESIGN

Display

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, DC dimmer
15.6"	FHD (1920x1080)	None	IPS	300 nits	Anti-glare	16:9	-	72% NTSC	-	Refresh rate 144Hz, DC dimmer
15.6"	FHD (1920x1080)	None	IPS	300 nits	Anti-glare	16:9	-	72% NTSC	-	Refresh rate 60Hz, DC dimmer

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

Physical Locks

Kensington® Security Slot

Fingerprint Reader

No fingerprint reader

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 compliant

