

OVERVIEW



1. Headphone / microphone combo jack (3.5mm)	6. USB 3.2 Gen 2
2. USB-C 3.2 Gen 1 (data transfer / DP 1.4 only)	7. Ethernet (RJ-45)
3. USB-C 3.2 Gen 2 / Thunderbolt 3	8. USB 3.2 Gen 2
4. USB 3.2 Gen 1 (Always On)	9. Power connector
5. HDMI 2.0	10. Kensington Security Slot

PERFORMANCE

Processor

Processor Family

10th Generation Intel® Core™ i7 / i9 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i7-10870H	8	16	2.2GHz	5.0GHz	16MB	DDR4-3200	Intel UHD Graphics
Core i7-10875H	8	16	2.3GHz	5.1GHz	16MB	DDR4-3200	Intel UHD Graphics
Core i9-10980HK	8	16	2.4GHz	5.3GHz	16MB	DDR4-3200	Intel UHD Graphics

Operating System

Operating System

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

Graphics

Graphics

Graphics	Type	Memory	Key Features
NVIDIA® GeForce® RTX™ 2060	Discrete	6GB GDDR6	VR ready, DirectX® 12
NVIDIA GeForce RTX 2070 Max-Q	Discrete	8GB GDDR6	VR ready, DirectX 12
NVIDIA GeForce RTX 2070 SUPER Max-Q	Discrete	8GB GDDR6	VR ready, DirectX 12
NVIDIA GeForce RTX 2080 SUPER Max-Q	Discrete	8GB GDDR6	VR ready, DirectX 12

Monitor Support

Monitor Support

Supports up to 3 independent displays via native display and 2 external monitors; supports external monitors via HDMI® (up to 4096x2304@60Hz) or USB-C (up to 4096x2304@60Hz)

Chipset

Chipset

Intel HM470 chipset

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 2280 SSD

- M.2 2280 SSD up to 1TB

Storage Type

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

RAID
RAID 0 support (RAID preset on some models)

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, Dolby® Atmos® for gaming

Microphone
Dual array microphone

Camera
720p, with privacy shutter, fixed focus

Battery

Battery
Integrated Li-Polymer 80Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)

Max Battery Life^[1]
MobileMark® 2018: 7.3 hr

Notes:

1. 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
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	300 nits	Anti-glare	16:9	-	100% sRGB	-	Refresh rate 144Hz, Dolby Vision™, DC dimmer
15.6"	FHD (1920x1080)	None	IPS	500 nits	Anti-glare	16:9	-	100% Adobe® RGB	-	Refresh rate 144Hz, Dolby Vision, HDR 400, G-Sync, DC dimmer

Color Calibration
X-Rite Pantone factory color calibration

Touchscreen

Non-touch

Notes:

1. 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, CORSAIR iCUE

Keyboard Backlight

RGB LED backlight

Touchpad

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

Mechanical

Dimensions (WxDxH)

359.34 x 259.04 x 19.9 mm (14.15 x 10.20 x 0.78 inches)

Weight^[1]

2.25 kg (4.96 lbs)

Case Color

Slate grey (top), black (bottom)

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 rear thermal vent

Notes:

1. The system weight varies depending on configurations

CONNECTIVITY

Network

Onboard Ethernet

Gigabit Ethernet

WLAN + Bluetooth™

802.11ax 2x2 Wi-Fi + Bluetooth 5.0, M.2 Card

Ports^[1]

Standard Ports^[2]

- 1x USB 3.2 Gen 1 (Always On)
- 2x USB 3.2 Gen 2
- 1x USB-C 3.2 Gen 2 / Thunderbolt™ 3 (support data transfer and DisplayPort™ 1.4)
- 1x USB-C 3.2 Gen 1 (support data transfer and DisplayPort 1.4)
- 1x HDMI 2.0
- 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

Physical Locks

Kensington® Security Slot

Fingerprint Reader

No fingerprint reader

BIOS Security

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

Other Security

Camera privacy 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

- 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)

CERTIFICATIONS

Green Certifications

Green Certifications

- ErP Lot 3
- RoHS compliant

