PERFORMANCE

Processor

Processor Family

10th Generation Intel® Core™ i5 / i7 / i9 Processor

Processor[**]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i9-10980HK	8	16	2.4GHz	5.3GHz	16MB	DDR4-3200	Intel UHD Graphics
Core i7-10870H	8	16	2.2GHz	5.0GHz	16MB	DDR4-3200	Intel UHD Graphics
Core i5-10300H	4	8	2.5GHz	4.5GHz	8MB	DDR4-2933	Intel UHD Graphics
Core i7-10750H	6	12	2.6GHz	5.0GHz	12MB	DDR4-2933	Intel UHD Graphics
Core i7-10875H	8	16	2.3GHz	5.1GHz	16MB	DDR4-3200	Intel UHD Graphics

Operating System

Operating System[**]

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

Graphics

Graphics[**]

Graphics	Type	Memory	Key Features
NVIDIA® GeForce GTX 1650 Ti	Discrete	4GB GDDR6	DirectX® 12
NVIDIA GeForce GTX 1660 Ti with Max-Q Design	Discrete	6GB GDDR6	VR ready, DirectX 12
NVIDIA GeForce RTX™ 2060 with Max-Q Design	Discrete	6GB GDDR6	VR ready, DirectX 12

Monitor Support

Monitor Support

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

Chipset

Chipset

Intel HM470 chipset

Memory

Max Memory[1]

- Up to 16GB (8GB soldered + 8GB SO-DIMM) DDR4-2933 offering
- Up to 16GB (8GB soldered + 8GB SO-DIMM) DDR4-3200 offering
- Up to 32GB (16GB soldered + 16GB SO-DIMM) DDR4-2933 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[**][2]

- DDR4-2933
- DDR4-3200

Notes:

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

[2] Installed memory is actually 3200MHz but may run at 2933MHz due to processor limitation.

Storage

Storage Support[1]

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

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, Dolby® Atmos® for gaming

Microphone

Dual-microphone array

Camera

HD 720p, with privacy shutter, fixed focus

Battery

Battery

Integrated Li-Polymer 71Wh battery, supports Rapid Charge Boost (get 2 hours of runtime with a 15-minute charge)

Max Battery Life[1]

MobileMark® 2018: 5.8 hr

Notes:

[1] 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	Type	Brightness	Surface	Aspect Ratio	Color Gamut	Key Features
15.6"	FHD (1920x1080)	None	IPS	300nits	Anti-glare	16:9	100% sRGB	Refresh rate 144Hz, DC dimmer, Dolby Vision™
15.6"	FHD (1920x1080)	None	IPS	300nits	Anti-glare	16:9	100% sRGB	Refresh rate 60Hz, DC dimmer, Dolby Vision
15.6"	UHD (3840x2160)	None	IPS	500nits	Anti-glare	16:9	100% Adobe® RGB	Refresh rate 60Hz, DisplayHDR™ 400, DC dimmer, Dolby Vision

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)

Mechanical

Dimensions (WxDxH)[1]

356 x 250 x 15.9-17.9 mm (14.01 x 9.84 x 0.6-0.7 inches)

Weight[2]

1.86 kg (4.1 lbs)

Case Color

Slate 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

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]

- 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

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.

Ports[1]

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 / Thunderbolt™ 3 (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 chipset

Fingerprint Reader

Touch style fingerprint reader on power button

BIOS Security

- Supervisor password
- Hard disk password

Other Security

Camera privacy shutter

SERVICE

Warranty

Base Warranty**

- 1-year depot service
- 1-year courier with 2-year system board service (Korea only)
- 2-year (1-yr battery) courier 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[1]

Green Certifications

- ErP Lot 3
- RoHS compliant

Notes:

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

- Feature with ** means that only one offering listed under the feature is configured on selected models.

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