

**OVERVIEW**



1. USB 3.2 Gen 1	5. Power connector
2. HDMI	6. USB-C 3.2 Gen 2
3. Ethernet (RJ-45)	7. Combo audio jack
4. USB 3.2 Gen 1	8. USB 3.2 Gen 1

## PERFORMANCE

### Processor

#### Processor Family

12th Generation Intel® Core™ i5 Processor

#### Processor

Processor Name	Cores	Threads	Max Frequency	Cache	Memory Support	Processor Graphics
Core i5-12450HX	8 (4 P-core + 4 E-core)	12	P-core 4.4GHz / E-core 3.1GHz	12MB	DDR5-4800	Intel UHD Graphics

### Operating System

#### Operating System\*\*

- Windows® 11 Home
- Windows 11 Home Single Language
- Windows 11 Pro
- No operating system

### Graphics

#### Graphics\*\*

Graphics	Type	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce RTX™ 2050 Laptop GPU	Discrete	4GB GDDR6	1575 MHz	65W	Advanced Optimus, DLSS 2, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA GeForce RTX 4050 Laptop GPU	Discrete	6GB GDDR6	2370 MHz	105W	Advanced Optimus, DLSS 3, Dynamic Boost 2.0, DirectX 12 Ultimate
NVIDIA GeForce RTX 3050 Laptop GPU	Discrete	6GB GDDR6	1732 MHz	95W	Advanced Optimus, DLSS 2, Dynamic Boost 2.0, DirectX 12 Ultimate

### Monitor Support

#### Monitor Support<sup>[1]</sup>

Supports up to 3 independent displays (native display and 2 external monitors via HDMI®, USB-C®)

- HDMI supports up to 7680x4320@60Hz
- USB-C supports up to 7680x4320@30Hz

Notes:

[1] Two external output display devices cannot be supported at the same time when displaying 8K resolution or max refresh rate.

### Chipset

#### Chipset

Intel HM670 chipset

### Memory

#### Max Memory<sup>[1]</sup>

Up to 16GB DDR5-4800 offering

#### Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

#### Memory Type

DDR5-4800

Notes:

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

### Storage

## Storage Support<sup>[1]</sup>

Up to two drives, 2x M.2 SSD

- M.2 2242 SSD up to 1TB

## Storage Slot

Two M.2 PCIe® 4.0 x4 slots

## Storage Type

Disk Type	Interface	Offering
M.2 2242 SSD	PCIe NVMe®, PCIe 4.0 x4	512GB / 1TB

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo storage offerings.

## Removable Storage

### Card Reader

No card reader

## Multi-Media

### Audio Chip

High Definition (HD) Audio, Realtek® ALC3287 codec

### Speakers

Stereo speakers, 2W x2, optimized with Nahimic Audio

### Microphone

Dual-microphone array

### Camera

HD 720p, with E-shutter, fixed focus

## Battery

### Battery

Integrated Li-Polymer 60Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)

### Max Battery Life<sup>[1]</sup>

MobileMark® 2025: 5.7 hr

Local video (1080p) playback@150nits: 6.3 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<sup>\*\*[1]</sup>

- 135W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- 170W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

[1] AC adapter offerings depend on the country.

## Special Features

### Special Features

AI Chip: LA1

## DESIGN

## Display

### Display

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
15.6"	FHD (1920x1080)	None	IPS	300nits	Anti-glare	16:9	1000:1	100% sRGB	144Hz	85°/85°/85°/85°	Advanced Optimus, NVIDIA G-SYNC®, TÜV Low Blue Light (Software)

### Touchscreen

Non-touch

## Input Device

### Keyboard

6-row, multimedia Fn keys, numeric keypad

### Keyboard Backlight

White backlight

### Touchpad

Buttonless Mylar® surface multi-touch touchpad, supports Precision TouchPad (PTP), 75 x 120 mm (2.95 x 4.72 inches)

## Mechanical

### Dimensions (WxDxH)<sup>[1]</sup>

359.86 x 258.7 x 21.9-23.9 mm (14.17 x 10.19 x 0.86-0.94 inches)

### Weight<sup>[2]</sup>

Starting at 2.4 kg (5.29 lbs)

### Case Color

Luna grey

### Surface Treatment

Painting

### Case Material

PC-ABS (top), PC-ABS (bottom)

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<sup>[1]</sup>

Gigabit Ethernet, 1x RJ-45, supports Wake-on-LAN

#### WLAN + Bluetooth®

Wi-Fi® 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2, M.2 card

Notes:

[1] Wake-on-LAN needs the power adapter plugged in.

### Ports<sup>[1]</sup>

#### Standard Ports

- 1x Ethernet (RJ-45)
- 1x HDMI 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Power connector
- 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 140W and DisplayPort™ 1.4)
- 3x USB 3.2 Gen 1

#### 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.

## SECURITY & PRIVACY

### Security

#### Security Chip

Firmware TPM 2.0 integrated in SoC

#### Fingerprint Reader

No fingerprint reader

#### BIOS Security

- Administrator password
- Power-on password
- Hard disk password
- Self-healing BIOS

#### Other Security

E-shutter

## SERVICE

### Warranty

#### Base Warranty\*\*

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 2-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) courier or carry-in service

## ENVIRONMENTAL

### Operating Environment

#### Temperature<sup>[1]</sup>

- 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 charging the battery pack, the environment temperature must be no lower than 10 °C (50 °F).

## ACCESSORIES

### Bundled Accessories

#### Bundled Accessories

- Lenovo LOQ M100 RGB Mouse (USB connector)
- None

## CERTIFICATIONS

### Green Certifications<sup>[1]</sup>

#### 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.

### Other Certifications

#### Other Certifications

TÜV Rheinland® Low Blue Light (Software Solution)

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