

## OVERVIEW



1. USB-C (USB 10Gbps), with PD 140W & DP 1.4	5. HDMI
2. Combo audio jack	6. Ethernet (RJ-45)
3. USB-A (USB 5Gbps)	7. USB-A (USB 5Gbps)
4. USB-A (USB 5Gbps)	8. Power connector

**Notes:**

- Port 1: PD 140W is the input power and requires the use of Lenovo unique adapter, otherwise it may support lower than 140W.

## PERFORMANCE

### Processor

#### Processor Family

13th Generation Intel® Core™ i5 / i7 or 14th Generation Intel® Core™ i7 Processor

#### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core i5-13450HX	10 (6 P-core + 4 E-core)	16	P-core 2.4GHz / E-core 1.8GHz	P-core 4.6GHz / E-core 3.4GHz	20MB Intel® Smart Cache	Intel® UHD Graphics
Core i7-13650HX	14 (6 P-core + 8 E-core)	20	P-core 2.6GHz / E-core 1.9GHz	P-core 4.9GHz / E-core 3.6GHz	24MB Intel® Smart Cache	Intel® UHD Graphics
Core i7-14700HX	20 (8 P-core + 12 E-core)	28	P-core 2.1GHz / E-core 1.5GHz	P-core 5.5GHz / E-core 3.9GHz	33MB Intel® Smart Cache	Intel® UHD Graphics

### Operating System

#### Operating System\*\*

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

### Graphics

#### Graphics\*\*

Graphics	Type	Memory	Boost Clock	TGP	AI TOPS (Peak)	Key Features
NVIDIA® GeForce RTX™ 3050 Laptop GPU	Discrete	6GB GDDR6	1732 MHz	95W	142 TOPS	Advanced Optimus, DLSS 2, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 3050A Laptop GPU	Discrete	4GB GDDR6	2205 MHz	65W	-	DLSS, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4050 Laptop GPU	Discrete	6GB GDDR6	2370 MHz	105W	194	Advanced Optimus, DLSS 3.5, Dynamic Boost 2.0, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 4060 Laptop GPU	Discrete	8GB GDDR6	2370 MHz	115W <sup>[1]</sup>	233 TOPS	Advanced Optimus, DLSS 3.5, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate

Notes:

[1] The actual TGP may depend on system configuration. System configured with 170W power adapter, TGP will be 105W. System configured with 230W power adapter, TGP will be 115W.

### Monitor Support

#### Monitor Support

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

- HDMI® supports up to 4K@60Hz
- USB-C® supports up to 4K@60Hz

### Chipset

#### Chipset

Intel® HM770 chipset

### Memory

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

- Up to 32GB DDR5-4800
- Up to 32GB DDR5-5600

#### Memory Slots

Two DDR5 SODIMM slots, dual-channel capable

#### Memory Type\*\*

- DDR5-4800
- DDR5-5600

Notes:

[1] Maximum memory is only to test technical readiness of notebook. Available memory to sell would vary.

## Storage

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

Up to two drives, 2x M.2 SSD

- M.2 2242 SSD up to 1TB each

#### Storage Slot<sup>[2]</sup>

Two M.2 2280 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.

[2] The actual data transfer rate of the following PCIe® interface also depends on the capabilities of the connected PCIe® device. The listed values represent theoretical maximums.

PCIe® 3.0 (x2 / x4): 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps);

PCIe® 4.0 (x2 / x4): 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps);

PCIe® 5.0 (x2 / x4): 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps).

## 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
- FHD 1080p, with E-shutter, fixed focus

## Battery

#### Battery

60Wh Rechargeable Li-ion Battery, supports Rapid Charge Pro (charge up to 50% in 30min)

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

MobileMark® 25: 4.1 hr

Local video (1080p) playback@150nits: 5.6 hr

Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark® 2014, MobileMark® 2018, MobileMark® 25, MobileMark® 30, JEITA 2.0, JEITA 3.0, 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<sup>[2]</sup>
- 230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- No power adapter

Notes:

[1] AC adapter offerings depend on the country.

[2] BIOS settings can be optimized to boost system overall performance on 170W AC adapter systems (power from battery + AC adapter will be combined to increase system TGP temporarily).

## Special Features

### Special Features

AI Chip: LA1

## DESIGN

### Display

#### Display\*\*<sup>[1]</sup>

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)	Non-touch	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)
15.6"	WQHD (2560x1440)	Non-touch	IPS	350nits	Anti-glare	16:9	1000:1	100% sRGB	165Hz	85° / 85° / 85° / 85°	Advanced Optimus, NVIDIA® G-SYNC®, TÜV Low Blue Light (Software)

### Touchscreen

Non-touch

### Screen-to-Body Ratio

88% AAR (active area ratio)

Notes:

[1] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

## Input Device

### Pen

No support

### Keyboard

6-row, multimedia Fn keys, numeric keypad

### Keyboard Backlight\*\*

- 4-Zone RGB 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 2.38 kg (5.25 lbs)

**Case Color**

Luna grey

**Case Material**

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

**Surface Treatment**

Painting

**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****WLAN + Bluetooth®<sup>[1]</sup>**

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

**WWAN**

No support

**Ethernet<sup>[2]</sup>**

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

**Notes:**

[1] Wi-Fi® operation (including Wi-Fi® 6, Wi-Fi® 6E, Wi-Fi® 7, etc.) is subject to the regulatory requirements of each country. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] Wake-on-LAN needs the AC adapter plugged in and the system in S3 mode (sleep mode). Since Wake-on-LAN is enabled by default, there are no options displayed in the BIOS.

**Ports<sup>[1]</sup>****Standard Ports**

- 3x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with Lenovo® PD 140W and DisplayPort™ 1.4<sup>[2]</sup>
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)
- 1x Power connector

**Notes:**

[1] The transfer speed of the 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.

[2] PD 140W is the input power and requires the use of Lenovo® unique adapter, otherwise it may support lower than 140W.

**Docking****Docking**

Various docking solutions supported via USB-C®.

For more compatible docking solutions, please visit [Docking for LOQ™ 15IRX9](#)

## SECURITY & PRIVACY

## Security

### Security Chip

Firmware TPM 2.0 integrated in chipset

### Fingerprint Reader

No fingerprint reader

### BIOS Security

- Administrator password
- Master hard disk password
- Power-on password
- User hard disk password
- User password
- Self-healing BIOS
- More BIOS security features, please visit [BIOS Simulator<sup>\[1\]</sup>](#)

### Other Security

E-shutter

Notes:

[1] The BIOS simulator is just for reference. Default settings and some options may vary depending on the hardware, operating system and BIOS version.

## 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
- No base warranty

## ACCESSORIES

### Bundled Accessories

#### Bundled Accessories<sup>[1]</sup>

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

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for LOQ™ 15IRX9](#)

## OPERATING REQUIREMENTS

### 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)

#### Relative 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<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. For ESG & regulatory compliance documents, please visit <https://compliance.lenovo.com>.

### Other Certifications

#### Mil-Spec Test

MIL-STD-810H military test passed

#### Other Certifications

TÜV Rheinland® Low Blue Light (Software Solution)

- Feature with \*\* means that only one option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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