

# **OVERVIEW**



1. USB 2.0	5. HDMI
2. USB 3.2 Gen 2	6. Power connector
3. USB 3.2 Gen 2	7. USB-C 3.2 Gen 2
4. Ethernet (RJ-45)	8. Headphone / microphone combo jack (3.5mm)



## **PERFORMANCE**

### **Processor**

#### **Processor Family**

AMD Ryzen™ 5 / 7 Processor

#### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	
AMD Ryzen™ 5 7640HS	6	12	4.3GHz	5.0GHz	6MB L2 / 16MB L3	AMD Radeon™ 760M	
AMD Ryzen™ 7 7840HS	MD Ryzen™ 7 7840HS 8 16		3.8GHz	5.1GHz	8MB L2 / 16MB L3	AMD Radeon™ 780M	

## **Operating System**

## Operating System\*\*

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

## **Graphics**

## Graphics\*\*

	Graphics	Туре	Memory	Boost Clock	TGP	Key Features
- 1	NVIDIA® GeForce RTX™ 3050 Laptop GPU	Discrete	6GB GDDR6	1732 MHz	95W	MUX Switch, Advanced Optimus, Dynamic Boost 2.0, DirectX® 12 Ultimate
- 1	NVIDIA® GeForce RTX™ 4050 Laptop GPU	Discrete	6GB GDDR6	2370 MHz	95W	MUX Switch, Advanced Optimus, DLSS 3.5, Dynamic Boost 2.0, DirectX® 12 Ultimate
- 1	NVIDIA® GeForce RTX™ 4060 Laptop GPU	Discrete	8GB GDDR6	2370 MHz	115W	MUX Switch, Advanced Optimus, DLSS 3.5, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate

## **Monitor Support**

### **Monitor Support**

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

- HDMI® supports up to 4096x2160@60Hz
- USB-C® supports up to 5120x3200@60Hz

## **Chipset**

### Chipset

AMD SoC (System on Chip) platform

## **Memory**

Max Memory[1]

Up to 32GB DDR5-5600

### **Memory Slots**

Two DDR5 SO-DIMM slots, dual-channel capable

## **Memory Type**

DDR5-5600

Notes:

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

## **Storage**

### Storage Support[1]

Up to two drives, 2x M.2 SSD

• M.2 2242 SSD up to 1TB each

#### **Storage Slot**



Two M.2 slots

- One M.2 2242 PCIe® 4.0 x4 slot
- One M.2 2280 PCIe® 4.0 x4 slot

#### **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 Gaming Audio

#### Microphone

Dual-microphone array

#### Camera

FHD 1080p, with E-shutter, fixed focus

### **Battery**

#### Battery\*\*

- 60Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr)
- 80Wh Rechargeable Li-ion Battery, supports Rapid Charge Pro (charge up to 50% in 30min)

#### Max Battery Life[1]

• Models with 60Wh battery:

MobileMark® 2018: 5.3 hr

Local video (1080p) playback@150nits: 7.8 hr

Models with 80Wh battery:

MobileMark® 2018: 6.5 hr

Local video (1080p) playback@150nits: 9.3 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\*\*[1]

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

## **Special Features**

## Special Features

Al Chip: LA1



## **DESIGN**

## **Display**

Display\*\*[1]

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16"	WUXGA (1920x1200)	None	IPS	350nits	Anti- glare	16:10	1200:1	45% NTSC	144Hz	89° / 89° /	NVIDIA® G- SYNC®, AMD FreeSync™, Advanced Optimus
16"	WQXGA (2560x1600)	None	IPS	350nits	Anti- glare	16:10	1200:1	100% sRGB	165Hz	89° / 89° /	NVIDIA® G- SYNC®, AMD FreeSync™, TÜV Low Blue Light, Advanced Optimus support

**Touchscreen** 

Non-touch

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)[1]

359.6 x 277.6 x 21-25.9 mm (14.16 x 10.93 x 0.83-1.02 inches)

Weight<sup>[2]</sup>

Starting at 2.6 kg (5.73 lbs)

**Case Color** 

Storm 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**

WLAN + Bluetooth®[1][2]

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

#### **WWAN**

No support

#### Ethernet[3]

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

#### Notes:

[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] Wi-Fi® 6 full features might be limited by country-level restrictions.

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

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

#### **Standard Ports**

- 1x USB 2.0
- 2x USB 3.2 Gen 2
- 1x USB-C® 3.2 Gen 2 (support data transfer, Lenovo® Power Delivery 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 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.

[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<sup>®</sup>.

For more compatible docking solutions, please visit <u>Docking for LOQ™ 16APH8</u>

## **SECURITY & PRIVACY**

## **Security**

#### **Security Chip**

Firmware TPM 2.0 integrated in SoC

#### **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 <u>BIOS Simulator[1]</u>



#### **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

## **ACCESSORIES**

## **Bundled Accessories**

Bundled Accessories[1]

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

Notes:

[1] For more compatible accessory solutions, please visit Accessories for LOQ™ 16APH8

## OPERATING REQUIREMENTS

## **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)

#### **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>11</sup>

## **Green Certifications**

- ErP Lot 6/26
- 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 <a href="https://compliance.lenovo.com">https://compliance.lenovo.com</a>.



### **Other Certifications**

### Mil-Spec Test

MIL-STD-810H military test passed

### **Other Certifications**

(Optional) TÜV Rheinland® Low Blue Light (Hardware Solution)

- Feature with \*\* means that only one option listed under the feature can be configured on selected models.

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