# **OVERVIEW**



1. Power button	7. HDMI 2.1 TMDS
2. Headphone / microphone combo jack (3.5mm)	8. VGA
3. USB-C (USB 5Gbps), with 15W charging	9. 4x USB-A (Hi-Speed USB)
4. USB-A (USB 5Gbps)	10. Ethernet (RJ-45)
5. USB-A (USB 5Gbps)	11. Optional ports on expansion cards
6. Headphone jack (3.5mm)	12. Power connector

## LOQ Tower 17IRR9

## PERFORMANCE

### **Processor**

#### **Processor Family**

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

#### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core i5- 13400	10 (6 P-core + 4 E-core)	16	P-core 2.5GHz / E- core 1.8GHz	P-core 4.6GHz / E-core 3.3GHz	20MB	Intel® UHD Graphics 730
Core i7- 13700	16 (8 P-core + 8 E-core)	24	, SOMB		Intel® UHD Graphics 770	
Core i5- 14400	10 (6 P-core + 4 E-core)	16	P-core 2.5GHz / E- core 1.8GHz P-core 4.7GHz / E-core 3.5GHz 2		20MB	Intel® UHD Graphics 730
Core i5- 14400F	10 (6 P-core + 4 E-core)	16	P-core 2.5GHz / E- core 1.8GHz	P-core 4.7GHz / E-core 3.5GHz	20MB	-
Core i7- 14700	20 (8 P-core + 12 E-core)	28	P-core 2.1GHz / E- core 1.5GHzMax Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz		33MB	Intel® UHD Graphics 770
Core i7- 14700F	20 (8 P-core + 12 E-core)	28	P-core 2.1GHz / E- core 1.5GHz	Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz	33MB	-

## **Operating System**

#### **Operating System**\*\*

- Windows® 11 Pro
- Windows® 11 Home
- Windows  $^{\scriptscriptstyle (\! 8)}$  11 Home Single Language
- No preload operating system

## Graphics

#### Graphics\*\*

Graphics	Туре	Memory	AI TOPS (Peak)	Max Resolution Connector		Key Features
Intel® UHD graphics 730	Integrated	Shared	-	2048*1536@50Hz(VGA), 1 3840x2160@60Hz(HDMI®) 2		DirectX® 12
Intel® UHD graphics 770	Integrated	Shared	-	2048*1536@50Hz(VGA), 3840x2160@60Hz(HDMI®)	1x VGA, 1x HDMI® 2.1 TMDS	DirectX® 12
NVIDIA® GeForce RTX™ 3050	Discrete	6GB GDDR6	108	7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP), 2560x1660@60Hz(DVI)	1x HDMI® 2.1 FRL, 1x DP 1.4, 1x DVI	DirectX® 12
NVIDIA® GeForce RTX™ 4060	Discrete	8G GDDR6	242	7680x4320@60Hz with DSC, HDR(HDMI <sup>®</sup> ), 7680x4320@60Hz with DSC, HDR(DP)	1x HDMI® 2.1a FRL, 3x DP 1.4a	DirectX® 12
NVIDIA® GeForce RTX™ 4060 Ti	Discrete	8G GDDR6	353	7680x4320@60Hz with DSC, HDR(HDMI <sup>®</sup> ), 7680x4320@60Hz with DSC, HDR(DP)	1x HDMI® 2.1a FRL, 3x DP 1.4a	DirectX® 12
AMD Radeon™ RX 7600	Discrete	8GB GDDR6	-	7680x4320@60Hz(HDMI®), 7680x4320@120Hz(DP)	3x DP 1.4a, 1x HDMI® 2.1 FRL	DirectX® 12

## **Monitor Support**

### **Monitor Support**

Supports up to 4 independent displays via discrete graphics

## Chipset

Chipset

Intel<sup>®</sup> B760 chipset

#### Memory

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

Up to 32GB DDR5-5600

#### **Memory Slots**

Two DDR5 UDIMM slots, dual-channel capable

#### Memory Type\*\*[2]

- DDR5-4800<sup>[3]</sup>
- DDR5-5600

#### **Memory Protection**

Non-ECC

#### Notes:

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

[2], [3] Installed memory is actually DDR5-5600 but may run as DDR5-4800 or DDR5-5600 depending on the memory support capability of processor.

## Storage

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

Up to two drives, 1x 3.5" HDD + 1x M.2 SSD

- 3.5" HDD up to 2TB
- M.2 SSD up to 1TB

#### Storage Type\*\*\*

Disk Type	Interface	RPM
3.5" SATA HDD	SATA 6Gb/s	7.2K
M.2 2280 SSD	PCIe <sup>®</sup> NVMe <sup>®</sup> , PCIe <sup>®</sup> 4.0 x4	-

#### RAID

No support

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo<sup>®</sup> storage offerings.

## **Removable Storage**

Optical

#### None

Card Reader

No card reader

### Multi-Media

Audio Chip High Definition (HD) Audio, Realtek® ALC623-CG codec Speakers

No speakers

## **Power Supply**

#### Power Supply\*\*

Power	Туре	Efficiency	Key Features
300W	Fixed	90%	100-240V, 50-60Hz
310W	Fixed	92%	100-240V, 50-60Hz
380W	Fixed	92%	100-240V, 50-60Hz
500W	Fixed	92%	100-240V, 50-60Hz

Lenovo

## DESIGN

## Input Device

#### Keyboard

• Lenovo® Calliope Keyboard (USB connector), black

## None

#### Mouse

- Lenovo<sup>®</sup> Calliope Mouse (USB connector), black
- No mouse

## Mechanical

## Form Factor

Tower (17L)

#### Dimensions (WxDxH)[1]

170 x 279 x 376 mm (6.7 x 10.98 x 14.8 inches)

#### Packaging Dimensions (WxDxH)

270 x 525 x 395 mm (10.62 x 20.66 x 15.55 inches)

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

Around 8.0 kg (17.6 lbs)

#### Packaging Weight

All models: Around 11.1 kg (24.47 lbs)

#### Case Color

Raven black (chassis), luna grey (front bezel)

#### Bays

1x 3.5" disk bay

#### **Expansion Slots**

- One PCIe® 4.0 x16, full height
- One PCIe<sup>®</sup> 3.0 x1, full height
- Two M.2 slots (one for WLAN, one for SSD)

#### Cooling System (Fan & Cooler)\*\*

- (Optional) 1x front system fan, 1x rear system fan
- (Optional) 1x rear system fan

#### Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo<sup>®</sup> 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

### **Onboard Ethernet**

Gigabit Ethernet, 1x RJ-45

#### WLAN + Bluetooth®\*\*

- Wi-Fi<sup>®</sup> 6, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.2, M.2 card<sup>[1]</sup>
- Wi-Fi<sup>®</sup> 6E, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.3, M.2 card<sup>[2]</sup>
- No WLAN and Bluetooth®

## Notes:

- [1] Bluetooth<sup>®</sup> 5.2 requires Windows<sup>®</sup> 11.
- [2] Bluetooth<sup>®</sup> 5.3 requires Windows<sup>®</sup> 11.

## Ports<sup>III</sup>

Lenovo

#### **Front Ports**

- 1x USB-C<sup>®</sup> (USB 5Gbps / USB 3.2 Gen 1), with 15W charging
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x headphone / microphone combo jack (3.5mm)

#### Rear Ports<sup>[2]</sup>

- 4x USB-A (Hi-Speed USB / USB 2.0)
- 1x HDMI® 2.1 TMDS
- 1x VGA
- 1x Ethernet (RJ-45)
- 1x headphone (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;

USB4<sup>®</sup> 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;

USB4<sup>®</sup> 40Gbps (USB 40Gbps): 40 Gbit/s;

Thunderbolt™ 3/4: 40 Gbit/s.

[2] For video ports on discrete graphics, please see graphics section.

# **SECURITY & PRIVACY**

### Security

Security Chip

Firmware TPM 2.0 integrated in processor

#### **BIOS Security**

- Administrator password
- Hard disk password
- Power-on password
- More BIOS security features, please visit <u>BIOS Simulator</u>[1]

#### 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**<sup>III</sup>

#### Base Warranty\*\*

- 1-year mail-in service
- 1-year courier or carry-in service
- 1-year limited onsite service
- 2-year courier or carry-in service
- 3-year courier or carry-in service

#### Notes:

[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to <u>https://smartfind.lenovo.com/</u>. To learn more details of warranty policy, please access <u>https://support.lenovo.com/warrantylookup/warrantypolicy</u>.

# **OPERATING REQUIREMENTS**

## **Operating Environment**

#### Temperature

- Operating: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

#### **Relative Humidity**

- Operating: 20% to 80%
- Storage: 20% to 90%

#### Altitude

- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 10668 m (35,000 ft)

# CERTIFICATIONS

## **Green Certifications**<sup>III</sup>

#### Green Certifications

- (Optional) ENERGY STAR<sup>®</sup> 8.0
- ErP Lot 3
- RoHS compliant
- None

#### Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or selfdeclaration. For ESG & regulatory compliance documents, please visit <u>https://compliance.lenovo.com</u>.

- 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.
- Feature with \*\*\* means that one or more options listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
- Lenovo reserves the right to change specifications or other product information without notice. Lenovo is not responsible for photographic or typographical errors. LENOVO PROVIDES THIS PUBLICATION "AS IS," WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore this disclaimer may not apply to you.
- The specifications on this page may not be available in all regions, and may be changed or updated without notice.













