

**OVERVIEW**



1. 2x USB 3.2 Gen 1	7. 4x USB 2.0
2. Headphone (3.5mm)	8. Ethernet (RJ-45)
3. Microphone (3.5mm)	9. 3x Audio connectors (3.5mm)
4. Power button	10. Optional ports on expansion cards
5. 2x USB 3.2 Gen 1	11. Power connector
6. USB-C 3.2 Gen 2	

## PERFORMANCE

### Processor

#### Processor Family

12th Generation Intel® Core™ i5 / i7 / i9 Processor

#### Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i5-12400	6 (6 P-core + 0 E-core)	12	P-core 2.5GHz	P-core 4.4GHz	18MB	DDR5-4800	Intel UHD Graphics 730
Core i5-12400F	6 (6 P-core + 0 E-core)	12	P-core 2.5GHz	P-core 4.4GHz	18MB	DDR5-4800	-
Core i7-12700	12 (8 P-core + 4 E-core)	20	P-core 2.1GHz / E-core 1.6GHz	P-core 4.8GHz / E-core 3.6GHz	25MB	DDR5-4800	Intel UHD Graphics 770
Core i7-12700F	12 (8 P-core + 4 E-core)	20	P-core 2.1GHz / E-core 1.6GHz	P-core 4.8GHz / E-core 3.6GHz	25MB	DDR5-4800	-
Core i9-12900	16 (8 P-core + 8 E-core)	24	P-core 2.4GHz / E-core 1.8GHz	P-core 5.0GHz / E-core 3.8GHz	30MB	DDR5-4800	Intel UHD Graphics 770
Core i9-12900F	16 (8 P-core + 8 E-core)	24	P-core 2.4GHz / E-core 1.8GHz	P-core 5.0GHz / E-core 3.8GHz	30MB	DDR5-4800	-

### Operating System

#### Operating System

- Windows® 11 Pro 64
- Windows 11 Home 64
- Windows 11 Home 64 Single Language
- No operating system

### Graphics

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

Graphics	Type	Memory	Boost Clock	TGP	Connector	Max Resolution	Key Features	Remark
NVIDIA® GeForce GTX 1650 SUPER	Discrete	4GB GDDR6	-	-	1x HDMI® 2.0b, 2x DP 1.4	7680x4320 @60Hz(DP), 4096x2160@60Hz(HDMI)	DirectX® 12	-
NVIDIA GeForce GTX 1660 SUPER	Discrete	6GB GDDR6	-	-	1x DVI, 1x HDMI 2.0b, 1x DP 1.4	4096x2160@60Hz(HDMI), 5120x3200@60Hz(DP), 2560x1660@60Hz(DVI)	DirectX 12	-
NVIDIA GeForce RTX™ 3060	Discrete	12G GDDR6	-	-	3x DP 1.4a, 1x HDMI 2.1 FRL	7680x4320@60Hz(HDMI), 7680x4320@60Hz(DP)	DirectX 12	-
NVIDIA GeForce RTX 3060 Ti	Discrete	8G GDDR6	-	-	3x DP 1.4a, 1x HDMI 2.1 FRL	7680x4320@60Hz(HDMI), 7680x4320@60Hz(DP)	DirectX 12	-
NVIDIA GeForce RTX 3070	Discrete	8G GDDR6	-	-	3x DP 1.4a, 1x HDMI 2.1	7680x4320@60Hz(HDMI); 7680x4320@60Hz(DP)	DirectX 12	-

#### Notes:

1. The information of integrated graphics are not applicable for the models without integrated graphics (for the details, please refer to processor section)

### Monitor Support

#### Monitor Support

Supports up to 4 independent displays via discrete graphics

## Chipset

### Chipset

Intel B660 chipset

## Memory

### Max Memory<sup>[1][2]</sup>

Up to 128GB DDR5-4800

### Memory Slots

Four DDR5 UDIMM slots, dual-channel capable

### Memory Type

- DDR5-4800
- DDR5-4800, Armor

### Memory Protection

Non-ECC

#### Notes:

1. The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.
2. Installed memory is actually 4800MHz, but may run at 4000MHz or 4400MHz depending on the memory support rules of Intel.

## Storage

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

Up to five drives, 2x 3.5" HDD + 2x M.2 SSD + 1x open 2.5 HDD Bay

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

### Storage Type

Disk Type	Interface	RPM	Offering	Security
3.5" SATA HDD	SATA 6Gb/s	7.2K	-	-
M.2 2280 SSD	PCIe® NVMe®	-	-	-

### RAID

No support

#### Notes:

1. The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.

## Removable Storage

### Optical

None

### Card Reader

No card reader

## Multi-Media

### Audio Chip

High Definition (HD) Audio, Realtek® ALC897-Q codec

### Speakers

No speakers

## Power Supply

### Power Supply

Power	Type	Efficiency	Key Features
350W	Fixed	85%	100-240V, 50-60Hz
500W	Fixed	85%	100V - 240V

550W	Fixed	88%	220V
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## DESIGN

### Input Device

#### Keyboard

- Lenovo Calliope Keyboard (USB connector), black
- No keyboard folio

#### Mouse

- Lenovo Calliope Mouse (USB connector), black
- No mouse

### Mechanical

#### Form Factor

Tower (26L)

#### Dimensions (WxDxH)

205 x 395.4 x 420 mm (8.1 x 15.57 x 16.54 inches)

#### Packaging Dimensions (WxDxH)

370 x 485 x 550 mm (14.57 x 19.09 x 21.65 inches)

#### Weight

14 kg (30.86 lbs)

#### Packaging Weight

All models: Around 16 kg (35.27 lbs)

#### Case Color

Black

#### Chassis

- (Optional) Normal side cover
- (Optional) Transparent side cover
- (Optional) Transparent side cover and inner decorate cover

#### Bays

- 1x 2.5" disk bay
- 2x 3.5" disk bay

#### Expansion Slots

- One PCIe 4.0 x16
- One PCIe 3.0 x4
- Three M.2 slots (one for WLAN, two for SSD)

#### Cooling System (Fan & Cooler)

- (Optional) Advance Air Cooling (1x Rear)
- (Optional) Advance Air Cooling with ARGB (1x Rear)
- (Optional) Advance Max Air Cooling with ARGB (1x Rear + 2x Front + 2x Top)
- (Optional) Advance Plus Air Cooling (1x Rear + 1x Front)
- (Optional) Advance Pro Air Cooling with ARGB (1x Rear + 2x Front)
- (Optional) Default Air Cooling (1x Rear)
- (Optional) Default Air Cooling with ARGB (1x Rear)
- (Optional) Default Plus Air Cooling (1x Rear + 1x Front)
- (Optional) Default Pro Air Cooling (1x Rear + 2x Front)

#### System Lighting

- (Optional) Internal ambient lighting
- Legion OY iconic LED

## CONNECTIVITY

### Network

#### Onboard Ethernet

Gigabit Ethernet, 1x RJ-45

## WLAN + Bluetooth<sup>[1]</sup>

Wi-Fi® 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card

### Notes:

1. Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitation

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

### Rear Ports<sup>[1][2]</sup>

- 4x USB 2.0
- 2x USB 3.2 Gen 1
- 3x audio connector (3.5mm)
- 1x USB-C® 3.2 Gen 2 (support data transfer and 5V@3A charging)
- 1x Lighting switch
- 1x Ethernet (RJ-45)
- 1x power connector

### Top Ports

- 2x USB 3.2 Gen 1
- 1x headphone (3.5mm)
- 1x microphone (3.5mm)

### 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;

USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 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 chipset

#### BIOS Security

- Administrator password
- Power-on password
- Hard disk password

## SERVICE

### Warranty

#### Base Warranty<sup>[1]</sup>

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

### Notes:

1. More information of warranty policy, please access <https://pcsupport.lenovo.com/warranty>.

## ENVIRONMENTAL

### Operating Environment

## Temperature

Storage: -40°C (-40°F) to 60°C (140°F)

## Humidity

- Operating: 20% to 80%
- Storage: 10% to 90%

## Altitude

- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

## CERTIFICATIONS

### Green Certifications

#### Green Certifications

- (Optional) ENERGY STAR® 8.0
- ErP Lot 3
- RoHS compliant

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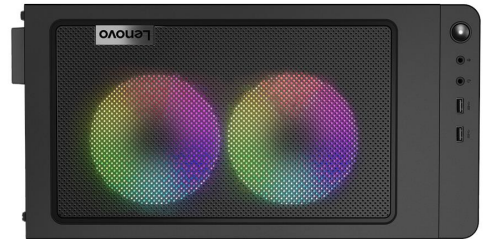
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