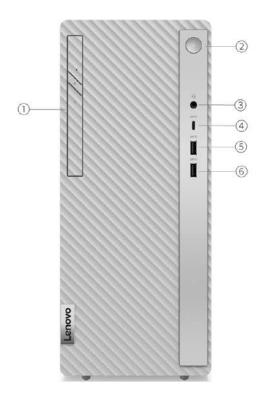
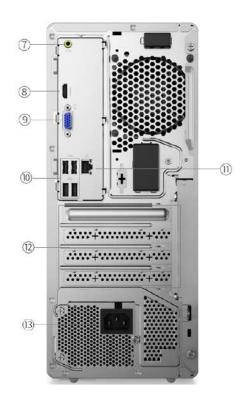


# **OVERVIEW**





1. Optical drive *	8. HDMI 2.0b
2. Power button	9. VGA
3. Headphone / microphone combo jack (3.5mm)	10. 4x USB 2.0
4. USB-C 3.2 Gen 1	11. Ethernet (RJ-45)
5. USB 3.2 Gen 1	12. Optional ports on expansion cards
6. USB 3.2 Gen 2	13. Power connector
7. Audio line-out (3.5mm)	

# Notes:

• Items with \* are only available on selected models



# **PERFORMANCE**

## **Processor**

## **Processor Family**

Intel® Celeron®, Intel Pentium®, or 12th Generation Intel Core™ i3 / i5 / i7 Processor

### Processor\*\*[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Celeron G6900	2	2	3.4GHz	-	4MB	DDR4- 3200	Intel UHD Graphics 710
Pentium Gold G7400	2	4	3.7GHz	-	6МВ	DDR4- 3200	Intel UHD Graphics 710
Core i3-12100	4 (4 P-core + 0 E-core)	8	P-core 3.3GHz	P-core 4.3GHz	12MB	DDR4- 3200	Intel UHD Graphics 730
Core i5-12400	6 (6 P-core + 0 E-core)	12	P-core 2.5GHz	P-core 4.4GHz	18MB	DDR4- 3200	Intel UHD Graphics 730
Core i5- 12400F	6 (6 P-core + 0 E-core)	12	P-core 2.5GHz	P-core 4.4GHz	18MB	DDR4- 3200	-
Core i7-12700	12 (8 P-core + 4 E-core)	20	P-core 2.1GHz / E-core 1.6GHz	Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz	25MB	DDR4- 3200	Intel UHD Graphics 770
Core i7- 12700F	12 (8 P-core + 4 E-core)	20	P-core 2.1GHz / E-core 1.6GHz	Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz	25MB	DDR4- 3200	-

### Notes:

[1] Intel Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

# **Operating System**

# Operating System\*\*

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

# **Graphics**

# Graphics\*\*[1]

Graphics	Туре	Memory	Boost Clock	TGP	Connector	Max Resolution	Key Features
Intel UHD Graphics 770 <sup>[2]</sup>	Integrated	Shared	NA	NA	1x HDMI® 1.4b, 1x VGA	1920x1200@50Hz(VGA), 1920x1080@60Hz(HDMI)	DirectX® 12
Intel UHD graphics 710[3]	Integrated	Shared	-	-	1x VGA, 1x HDMI 1.4b	1920x1200@50Hz(VGA), 1920x1080@60Hz(HDMI)	DirectX 12
Intel UHD graphics 730 <sup>[4]</sup>	Integrated	Shared	-	-	1x VGA, 1x HDMI 1.4b	1920x1200@50Hz(VGA), 1920x1080@60Hz(HDMI)	DirectX 12
AMD Radeon™ RX 6400	Discrete	4GB GDDR6	-	-	1x HDMI 2.1 FRL, 1x DP 1.4a	7680x4320@60Hz(HDMI), 7680x4320@60Hz(DP)	DirectX 12, OpenGL 4.6
Intel Iris® Xe Max Graphics	Discrete	2GB LPDDR4X	-	-	1x HDMI 1.4, 1x VGA	3840x2160@30Hz(HDMI), 1920x1080@60Hz(VGA)	DirectX 12

### Notes:

[1], [2], [3], [4] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).



# **Monitor Support**

### **Monitor Support**

Supports up to 2 independent displays via onboard ports (VGA and HDMI), more displays support via discrete graphics

# **Chipset**

## Chipset

Intel B660 chipset

# **Memory**

# Max Memory[1]

Up to 32GB DDR4-3200

### **Memory Slots**

Two DDR4 UDIMM slots, dual-channel capable

### **Memory Type**

DDR4-3200

#### **Memory Protection**

Non-ECC

Notes:

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

# **Storage**

### Storage Support[1]

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® NVMe®, PCIe 3.0 x4	-
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4	-

## **RAID**

No support

Notes

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

# Removable Storage

### **Optical**

- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- 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
260W	Fixed	90%	100-240V, 50-60Hz
260W	Fixed	85%	100-240V, 50-60Hz

# **DESIGN**

# **Input Device**

## Keyboard\*\*

- · EOS Wireless Keyboard, black
- · Lenovo Calliope Keyboard (USB connector), black
- No keyboard

#### Mouse

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

### Mechanical

#### **Form Factor**

Tower (13.6L)

### Dimensions (WxDxH)[1]

145 x 287.9 x 340 mm (5.71 x 11.33 x 13.39 inches)

## Packaging Dimensions (WxDxH)

240 x 395 x 530 mm (9.45 x 15.55 x 20.87 inches)

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

Around 5.4 kg (11.9 lbs)

#### **Packaging Weight**

All models: 7.4 kg (16.31 lbs)

# **Case Color**

Cloud grey

## Bays

1x 3.5" disk bay

# **Expansion Slots**

- One PCIe 4.0 x16, full height
- One PCIe 4.0 x1, full height
- Two M.2 slots (one for WLAN, one for SSD)

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

- (Optional) 1x front system fan
- (Optional) 1x rear system fan
- (Optional) 1x front system fan, 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 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®\*\*

- 802.11ac 2x2 Wi-Fi® + Bluetooth 5.1, M.2 Card[1]
- Wi-Fi 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card<sup>[2]</sup>



#### Notes:

[1], [2] Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitations.

#### Ports<sup>11</sup>

#### **Front Ports**

- 1x USB-C® 3.2 Gen 1 (support data transfer and 5V@3A charging)
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

#### Rear Ports[2]

- 4x USB 2.0
- 1x HDMI 2.0b
- 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® 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] 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**<sup>[1]</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
- OB

#### 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 <a href="https://smartfind.lenovo.com/">https://smartfind.lenovo.com/</a>. To learn more details of warranty policy, please access <a href="https://pcsupport.lenovo.com/warranty">https://pcsupport.lenovo.com/warranty</a>.

# ENVIRONMENTAL



# **Operating Environment**

### **Temperature**

Operating: 5°C (41°F) to 35°C (95°F)
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<sup>111</sup>

#### **Green Certifications**

- (Optional) ENERGY STAR® 8.0
- 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.

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





intel

intel

intel



intel





intel





intel