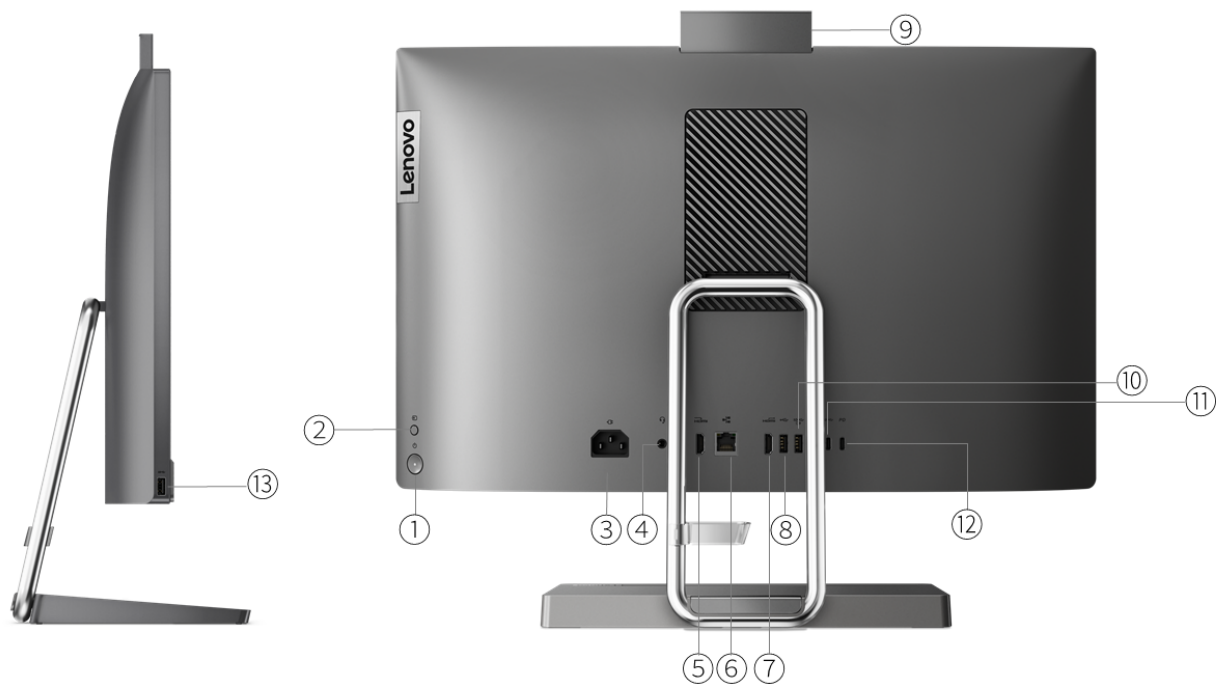


OVERVIEW



1. Power button	8. USB 2.0
2. PC / monitor mode switch	9. Top camera
3. Power connector	10. USB 3.2 Gen 2
4. Headphone / microphone combo jack (3.5mm)	11. USB-C 3.2 Gen 2
5. HDMI-in 2.1 TMDS	12. USB-C 2.0 (support data transfer, PD 3.0)
6. Ethernet (RJ-45)	13. USB 3.2 Gen 1
7. HDMI-out 2.1 TMDS	

PERFORMANCE

Processor

Processor Family

12th / 13th Generation Intel® Core™ i5 / i7 Processor

Processor**^[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i5-12500H	12 (4 P-core + 8 E-core)	16	P-core 2.5GHz / E-core 1.8GHz	P-core 4.5GHz / E-core 3.3GHz	18MB Intel® Smart Cache	DDR5-4800	Intel® Iris® Xe Graphics
Core i7-12700H	14 (6 P-core + 8 E-core)	20	P-core 2.3GHz / E-core 1.7GHz	P-core 4.7GHz / E-core 3.5GHz	24MB Intel® Smart Cache	DDR5-4800	Intel® Iris® Xe Graphics
Core i5-13500H	12 (4 P-core + 8 E-core)	16	P-core 2.6GHz / E-core 1.9GHz	P-core 4.7GHz / E-core 3.5GHz	18MB Intel® Smart Cache	DDR5-4800	Intel® Iris® Xe Graphics
Core i7-13700H	14 (6 P-core + 8 E-core)	20	P-core 2.4GHz / E-core 1.8GHz	P-core 5.0GHz / E-core 3.7GHz	24MB Intel® Smart Cache	DDR5-4800	Intel® Iris® Xe Graphics

Notes:

^[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

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

Graphics

Graphics**^[1]

Graphics	Type	Memory	Max Resolution	Connector	Key Features
Intel® UHD Graphics	Integrated	Shared	3840x2160@60Hz(HDMI®)	1x HDMI® 2.1 TMDS	DirectX® 12.1
Intel® Iris® Xe Graphics ^[2]	Integrated	Shared	3840x2160@60Hz(HDMI®)	1x HDMI® 2.1 TMDS	DirectX® 12.1
Intel® Arc™ A370M Graphics	Discrete	4GB GDDR6	3840x2160@60Hz(HDMI®)	1x HDMI® 2.1 TMDS	DirectX® 12 Ultimate

Notes:

^[1], ^[2] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

Monitor Support

Monitor Support

Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory^[1]

Up to 16GB DDR5-4800

Memory Slots

Two DDR5 SODIMM slots, dual-channel capable

Memory Type**

- DDR5-4800
- DDR5-5200

Memory Protection

Non-ECC

Notes:

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

Storage

Max Storage Support^{[1][2]}

One drive, up to 1TB M.2 SSD

Storage Type**

Disk Type	Interface
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.

[2] 2.5" HDD bracket kit only comes with pre-configured HDD models.

Removable Storage

Optical

None

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC274-CG codec

Speakers

Stereo speakers, 5W x2, JBL®-branded

Microphone

Dual-microphone array

Camera**

- 5.0-megapixel IR camera, fixed focus
- 5.0-megapixel IR camera, fixed focus, with AI chip
- 5.0-megapixel, fixed focus

Power Supply

Power Supply**

Power	Type	Efficiency	Key Features
180W	Fixed	90%	100V - 240V, 50-60Hz
230W	Fixed	92%	100V - 240V, 50-60Hz

DESIGN

Display

Display

**[]

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle (L/R/U/D)	Key Features
23.8"	FHD (1920x1080)	Multi-touch	IPS	250nits	Anti-glare	16:9	1000:1	72% NTSC	horizontal: +/- 89°, vertical: +/- 89°	Borderless design
23.8"	FHD (1920x1080)	Non-touch	IPS	250nits	Anti-glare	16:9	1000:1	72% NTSC	horizontal: +/- 89°, vertical: +/- 89°	Borderless design
23.8"	QHD (2560x1440)	Non-touch	IPS	300nits	Anti-glare	16:9	1000:1	72% NTSC	horizontal: +/- 89°, vertical: +/- 89°	borderless, 100Hz

Touchscreen

- Capacitive-type multi-touch, supports 10-point touch
- Non-touch

Notes:

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

Input Device

Pen

No support

Keyboard**

- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Wireless Keyboard, black
- Euterpe Wireless Keyboard, grey

Mouse**

- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Euterpe Wireless Mouse, grey

Mechanical

Form Factor

AIO (23.8 inches)

Dimensions (WxDxH)^[]

541.2 x 187.57 x 433.38 mm (21.3 x 7.38 x 17.06 inches)

Packaging Dimensions (WxDxH)

187.57 x 541 x 433.38 mm (7.38 x 21.29 x 17.26 inches)

Weight^[2]

Models	Weight
Integrated graphic models	7.57 kg (16.68 lbs)
Discrete graphic models	8.07 kg (17.79 lbs)

Packaging Weight**

- Discrete graphic models: 11.81 kg (26.03 lbs)
- Integrated graphic models: 11.29 kg (24.89 lbs)

Case Color

Storm grey

Bays

No bays

Expansion Slots

Two M.2 slots (one for WLAN, one for SSD)

Stand

Monitor stand, supports -5° to +25° tilt

Others

(Optional) Wireless charger

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]

- Wi-Fi® 5, 802.11ac 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card^[2]
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card^[3]

Onboard Ethernet

Gigabit Ethernet, 1x RJ-45

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

Ports^[1]

Rear Ports

- 1x USB-C® 2.0 with DisplayPort™-In function (Only for QHD models)
- 1x USB-C® 3.2 Gen 2
- 1x USB 2.0
- 1x USB 3.2 Gen 2
- 1x HDMI® 2.1 TMDS
- 1x HDMI®-in
- 1x Ethernet (RJ-45)
- 1x headphone / microphone combo jack (3.5mm)
- 1x mode switcher
- 1x power connector

Left Ports

1x USB 3.2 Gen 1

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.

Thunderbolt™ 5: 80 Gbit/s (bidirectional), up to 120 Gbit/s in bandwidth boost mode for video-intensive applications.

SECURITY & PRIVACY

Security

Security Chip

Firmware TPM 2.0 integrated in SoC

BIOS Security

- Administrator password
- Hard disk password
- Power-on password
- More BIOS security features, please visit [BIOS Simulator^{\[1\]}](#)

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.

MANAGEABILITY

System Management

System Management

None

SERVICE

Warranty^[1]

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 <https://smartfind.lenovo.com/>. To learn more details of warranty policy, please access <https://support.lenovo.com/warrantylookup/warrantypolicy>.

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°F)

Relative 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^[1]

Green Certifications

- ErP Lot 3/7
- 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>.

- 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.

- 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.

