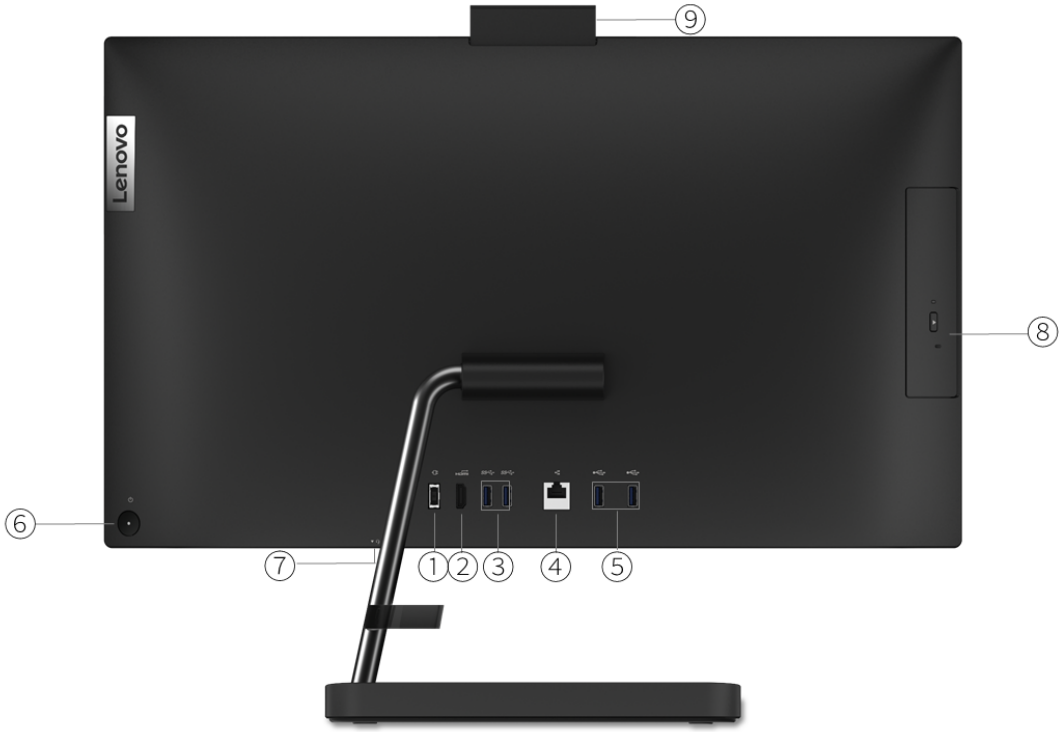
OVERVIEW



1. Power connector	6. Power button
2. HDMI 1.4	7. Headphone / microphone combo jack (3.5mm)
3. 2x USB 3.2 Gen 2	8. Optical drive eject button
4. Ethernet (RJ-45)	9. Top camera
5. 2x USB 2.0	

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	Processor Graphics
Celeron® 7305	5 (1 P-core + 4 E-core)	6	P-core 1.1GHz / E-core 0.9GHz	-	8MB Intel® Smart Cache	Intel® UHD Graphics
Pentium® Gold 8505[2]	5 (1 P-core + 4 E-core)	6	P-core 1.2GHz / E-core 0.9GHz	P-core 4.4GHz / E-core 3.3GHz	8MB Intel® Smart Cache	Intel® UHD Graphics
Core i3-1215U[3]	6 (2 P-core + 4 E-core)	8	P-core 1.2GHz / E-core 0.9GHz	P-core 4.4GHz / E-core 3.3GHz	10MB Intel® Smart Cache	Intel® UHD Graphics
Core i3-1220P[4]	10 (2 P-core + 8 E-core)	12	P-core 1.5GHz / E-core 1.1GHz	P-core 4.4GHz / E-core 3.3GHz	12MB Intel® Smart Cache	Intel® UHD Graphics
Core i5-1235U[5]	10 (2 P-core + 8 E-core)	12	-	P-core 4.4GHz / E-core 3.3GHz	12MB Intel® Smart Cache	Intel® Iris® Xe Graphics
Core i5-1240P[6]	12 (4 P-core + 8 E-core)	16	P-core 1.7GHz / E-core 1.2GHz	P-core 4.4GHz / E-core 3.3GHz	12MB Intel® Smart Cache	Intel® Iris® Xe Graphics
Core i5-12450H [7]	8 (4 P-core + 4 E-core)	12	P-core 2.0GHz / E-core 1.5GHz	P-core 4.4GHz / E-core 3.3GHz	12MB Intel® Smart Cache	Intel® UHD Graphics
Core i7-1260P[8]	12 (4 P-core + 8 E-core)	16	P-core 2.1GHz / E-core 1.5GHz	P-core 4.7GHz / E-core 3.4GHz	18MB Intel® Smart Cache	Intel® Iris® Xe Graphics
Core i5-13420H [9]	8 (4 P-core + 4 E-core)	12	-	P-core 4.6GHz / E-core 3.4GHz	12MB Intel® Smart Cache	Intel® UHD Graphics
Core i7-13620H [10]	10 (6 P-core + 4 E-core)	16	-	P-core 4.9GHz / E-core 3.6GHz	24MB Intel® Smart Cache	Intel® UHD 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.

[2], [3], [4], [5], [6], [7], [8], [9], [10] 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
- Windows® 11 Home in S mode
- No preload operating system

Graphics

Graphics**[1]

Graphics	Type	Memory	Max Resolution	Connector	Key Features
Intel® UHD Graphics	Integrated	Shared	1920x1080@60Hz(HDMI®)	1x HDMI® 1.4	DirectX® 12.1
Intel® Iris® Xe Graphics	Integrated	Shared	1920x1080@60Hz(HDMI®)	1x HDMI® 1.4	DirectX® 12.1
NVIDIA® GeForce MX550	Discrete	2GB GDDR6	1920x1080@60Hz(HDMI®)	1x HDMI® 1.4	DirectX® 12
NVIDIA® GeForce MX550	Discrete	4GB GDDR6	1920x1080@60Hz(HDMI®)	1x HDMI® 1.4	DirectX® 12

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.

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 DDR4-3200

Memory Slots

Two DDR4 SODIMM 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

Max Storage Support[1][2]

Up to two drives, 1x 2.5" HDD + 1x M.2 SSD
• 2.5" HDD up to 1TB
• M.2 SSD up to 1TB

Storage Type**

Disk Type	Interface	RPM
2.5" SATA HDD	SATA 6Gb/s	5.4K
M.2 2242 SSD	PCIe® NVMe®, PCIe® 3.0 x4	-
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

- 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® ALC256 codec

Speakers

Stereo speakers, 3W x2, Audio by HARMAN

Microphone

Dual-microphone array

Camera**

- HD 720p, fixed focus
- IR & 5.0-megapixel, fixed focus
- No camera

Power Supply

Power Supply**

Power	Type	Efficiency	Key Features
90W	Adapter	89%	100V - 240V
135W	Adapter	89%	100V - 240V

DESIGN

Display

Display**[1]

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

Touchscreen

- Advanced In-cell Touch (AIT), supports 10-point touch
- Non-touch

Notes:

[1] 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 Keyboard (USB connector), silver
- Lenovo® Calliope Keyboard (USB connector), white
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Calliope Wireless Keyboard, silver
- Lenovo® Calliope Wireless Keyboard, white
- Wireless EOS Keyboard, black
- Wireless EOS Keyboard, white

Mouse**

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

Mechanical

Form Factor

AIO (23.8 inches)

Dimensions (WxDxH)[1]

541.2 x 185.34 x 433.96 mm (21.3 x 7.29 x 17.08 inches)

Packaging Dimensions (WxDxH)

235 x 666 x 561 mm (9.25 x 26.22 x 22.08 inches)

Weight[2]

Models	Weight
Models with stand	7.03 kg (15.49 lbs)

Packaging Weight

All models: 9.79 kg (21.58 lbs)

Case Color**

- Black
- White

Bays

- 1x 2.5″ disk bay
- 1x slim ODD bay

Expansion Slots

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

Stand

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

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

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.

Ports[1]

Rear Ports

- 1x HDMI® 1.4
- 1x Ethernet (RJ-45)
- 1x power connector
- 2x USB 2.0
- 2x USB 3.2 Gen 2

Bottom Ports

1x headphone / microphone combo jack (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;
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

Physical Locks

No physical locks

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.

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.
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