

**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\*\*<sup>[1]</sup>

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Celeron 7305	5 (1 P-core + 4 E-core)	6	P-core 1.1GHz / E-core 0.9GHz	-	8MB	DDR4-3200	Intel UHD Graphics
Pentium Gold 8505	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	DDR4-3200	Intel UHD Graphics
Core i5-12450H	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	DDR4-3200	Intel UHD Graphics
Core i3-1215U	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	DDR4-3200	Intel UHD Graphics
Core i3-1220P	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	DDR4-3200	Intel UHD Graphics
Core i5-1235U	10 (2 P-core + 8 E-core)	12	P-core 1.3GHz / E-core 0.9GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	DDR4-3200	Intel Iris® Xe Graphics
Core i5-1240P	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 Iris Xe Graphics
Core i7-1260P	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 Iris Xe Graphics
Core i5-13420H	8 (4 P-core + 4 E-core)	12	P-core 2.1GHz / E-core 1.5GHz	P-core 4.6GHz / E-core 3.4GHz	12MB	DDR4-3200	Intel UHD Graphics
Core i7-13620H	10 (6 P-core + 4 E-core)	16	P-core 2.4GHz / E-core 1.8GHz	P-core 4.9GHz / E-core 3.6GHz	24MB	DDR4-3200	Intel UHD Graphics

Notes:

<sup>[1]</sup> 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.

### Operating System

#### Operating System\*\*

- Windows® 11 Pro
- Windows 11 Home
- Windows 11 Home in S mode
- Windows 11 Home Single Language
- No operating system

### Graphics

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

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

Notes:

<sup>[1]</sup> 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

Up to 16GB DDR4-3200

### Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

### Memory Type

DDR4-3200

### Memory Protection

Non-ECC

## Storage

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

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	Offering	Security
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] 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\*\*<sup>[1][2]</sup>

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle (L/R/U/D)	Key Features
23.8"	FHD (1920x1080)	None	IPS	250 nits	Anti-glare	16:9	1000:1	72% NTSC	horizontal: +/- 89°, vertical: +/- 89°	Borderless design
23.8"	FHD (1920x1080)	Multi-touch	IPS	250 nits	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:

<sup>[1]</sup> California Electronic Waste Recycling Fee

In California USA, per state law, Lenovo® charges an electronic waste recycling fee on this covered device at the time of sale of the product. For more information, please go to <https://www.calrecycle.ca.gov/Electronics/Consumer>.

<sup>[2]</sup> IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

### Input Device

#### Pen

No support

#### Keyboard\*\*

- EOS Wireless Keyboard, black
- EOS Wireless Keyboard, white
- 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

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

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<sup>[2]</sup>**

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

**Onboard Ethernet**

Gigabit Ethernet, 1x RJ-45

**WLAN + Bluetooth®\*\***

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

**Rear Ports**

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

**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.

## SECURITY & PRIVACY

### Security

#### Security Chip

Firmware TPM 2.0 integrated in SoC

#### Physical Locks

No physical locks

#### BIOS Security

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

## SERVICE

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

#### Base Warranty\*\*

- 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] 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://pcsupport.lenovo.com/warranty>.

## ENVIRONMENTAL

### Operating Environment

#### Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°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>[1]</sup>

#### Green Certifications

- ENERGY STAR® 8.0
- ErP Lot 3 and Lot 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.

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