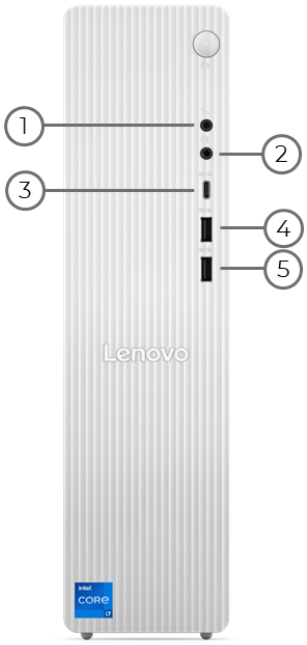
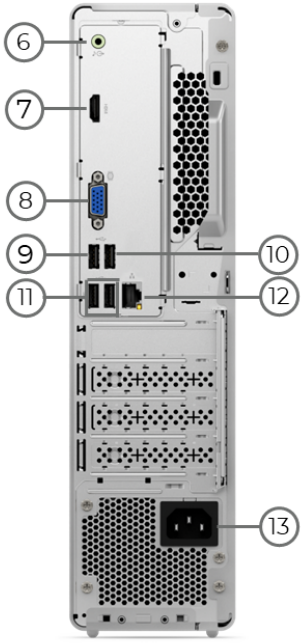
OVERVIEW





1. 1x Microphone (3.5mm)	8. 1x VGA
2. 1x headphone / microphone combo jack (3.5mm)	9. 1x USB-A (USB 5Gbps), with Smart Power On
3. 1x USB-C (USB 5Gbps), with 15W charging	10. 1x USB-A (USB 5Gbps)
4. 1x USB-A (USB 5Gbps)	11. 2x USB-A (Hi-Speed USB)
5. 1x USB-A (USB 5Gbps)	12. 1x Ethernet (RJ-45)
6. 1x Audio-out (3.5mm)	13. 1x Power connector
7. 1x HDMI 2.1 TMDS	

PERFORMANCE

Processor

Processor Family

13th Generation Intel® Core™ i5 / i7 Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core 3 100U	6 (2 P-core + 4 E-core)	8	P-core 1.2GHz / E-core 900MHz	Max Turbo up to 4.7GHz / P-core 4.7GHz / E-core 3.3GHz	10MB Intel® Smart Cache	DDR5-5200	Intel® Graphics
Core 5 210H	8 (4 P-core + 4 E-core)	12	P-core 2.2GHz / E-core 1.6GHz	P-core 4.8GHz / E-core 3.6GHz	12MB Intel® Smart Cache	-	Intel® Graphics
Core 7 240H	10 (6 P-core + 4 E-core)	16	P-core 2.5GHz / E-core 1.8GHz	P-core 5.2GHz / E-core 4.0GHz	24MB Intel® Smart Cache	-	Intel® Graphics
Core i3-1315U[1]	6 (2 P-core + 4 E-core)	8	-	P-core 4.5GHz / E-core 3.3GHz	10MB Intel® Smart Cache	DDR5-5200	Intel® UHD Graphics
Core i5-13420H	8 (4 P-core + 4 E-core)	12	-	P-core 4.6GHz / E-core 3.4GHz	12MB Intel® Smart Cache	DDR5-5200	Intel® UHD Graphics
Core i7-13620H	10 (6 P-core + 4 E-core)	16	-	P-core 4.9GHz / E-core 3.6GHz	24MB Intel® Smart Cache	DDR5-5200	Intel® UHD Graphics

Notes:

[1] Models with the Intel® Core™ i3 1315U only have a PCIe® 3.0 x1 slot due to CPU limitations

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®), 1920x1200@60Hz(VGA)	1x HDMI® 2.1 TMDS, 1x VGA	DirectX® 12, OpenGL 4.6
Intel® Graphics	Integrated	Shared	3840x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA)	1x HDMI® 2.1 TMDS, 1x VGA	DirectX® 12, OpenGL 4.6
Intel® Arc™ A310 LP Graphics	Discrete	4GB GDDR6	3840x2160@60Hz(HDMI®), 1600x1200@60Hz(VGA)	1x HDMI® 2.1 TMDS, 1x VGA	DirectX® 12, OpenGL 4.6

Notes:

[1] 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 + HDMI®)

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory[1]

Up to 32GB DDR5-5200

Memory Slots

Two DDR5 SODIMM slots, dual-channel capable

Memory Type**

- DDR5-5200
- DDR5-5600

Notes:

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

Storage

Max Storage Support[1]

Up to three drives, 1x 3.5" HDD + 2x M.2 SSD
• 3.5" HDD bay only for customer self upgrade
• M.2 SSD up to 1TB each

Storage Type

Disk Type	Interface
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4

Notes:

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

Removable Storage

Optical

None

Card Reader

No card reader

Multi-Media

Audio Chip**

- High Definition (HD) Audio, Realtek® ALC623-CG codec
- 24-bit DAC supports 44.1K/48K/96K sample rate, 2 channel DAC supports 16/20/24-bit PCM format for independent two stereo channel or 2.1 audio playback
- 24-bit ADC supports 44.1K/48K/96K sample rate, 2 channel ADC supports 16/20/24-bit PCM format for independent two stereo channel audio inputs

Speakers

No speakers

Power Supply

Power Supply**

Power	Type	Efficiency	Key Features
180W	Fixed	85%	100-240V, 50-60Hz
260W[1]	Fixed	90%	100-240V, 50-60Hz

Notes:

[1] Hybrid PSU sources configured for supply assurance; assembled product has maximum wattage of 258W.

DESIGN

Input Device

Keyboard**

- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Keyboard (USB connector), cloud grey
- No keyboard

Mouse**

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

Mechanical

Form Factor

SFF (8.2L)

Dimensions (WxDxH)[1]

89 x 291.4 x 339.5mm (3.5 x 11.5 x 13.4 inches)

Packaging Dimensions (WxDxH)

195 x 395 x 530 mm (7.7 x 15.6 x 20.9 inches)

Weight[2]

Around 3.59 kg (7.9 lbs)

Packaging Weight

All models: Around 5.89 kg (13.0 lbs)

Case Color

Cloud grey

Bays

1x 3.5″ disk bay

Expansion Slots[3]

- One PCIe® 3.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe® 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
- Three M.2 slots (one for WLAN, two for SSD)

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.
[3] Models with the Intel® Core™ i3 1315U only have a PCIe® 3.0 x1 slot due to CPU limitations

CONNECTIVITY

Network

WLAN + Bluetooth®[1]

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]

Front Ports

- 1x USB-C® (USB 5Gbps / USB 3.2 Gen 1), with 15W charging
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

Rear Ports[2]

- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), with Smart Power On
- 2x USB-A (Hi-Speed USB / USB 2.0)
- 1x HDMI® 2.1 TMDS
- 1x VGA
- 1x Ethernet (RJ-45)
- 1x audio-out (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.
Thunderbolt™ 5: 80 Gbit/s (bidirectional), up to 120 Gbit/s in bandwidth boost mode for video-intensive applications.
[2] For video ports on discrete graphics, please see graphics section

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

Non-vPro®

SERVICE

Warranty[1]

Base Warranty**

- 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.

ACCESSORIES

Bundled Accessories

Bundled Accessories***

- Intelligent Cable (USB-A to USB-C®)
- Vertical Stand
- Vertical stand and USB A to Intelligent Cable (USB-A to USB-C®)
- None

OPERATING REQUIREMENTS

Operating Environment

Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

Relative Humidity

- Operating: 10% to 90% (non-condensing)
- Storage: 10% to 90% (non-condensing)

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
- 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.
- Feature with *** means that one or more options listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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