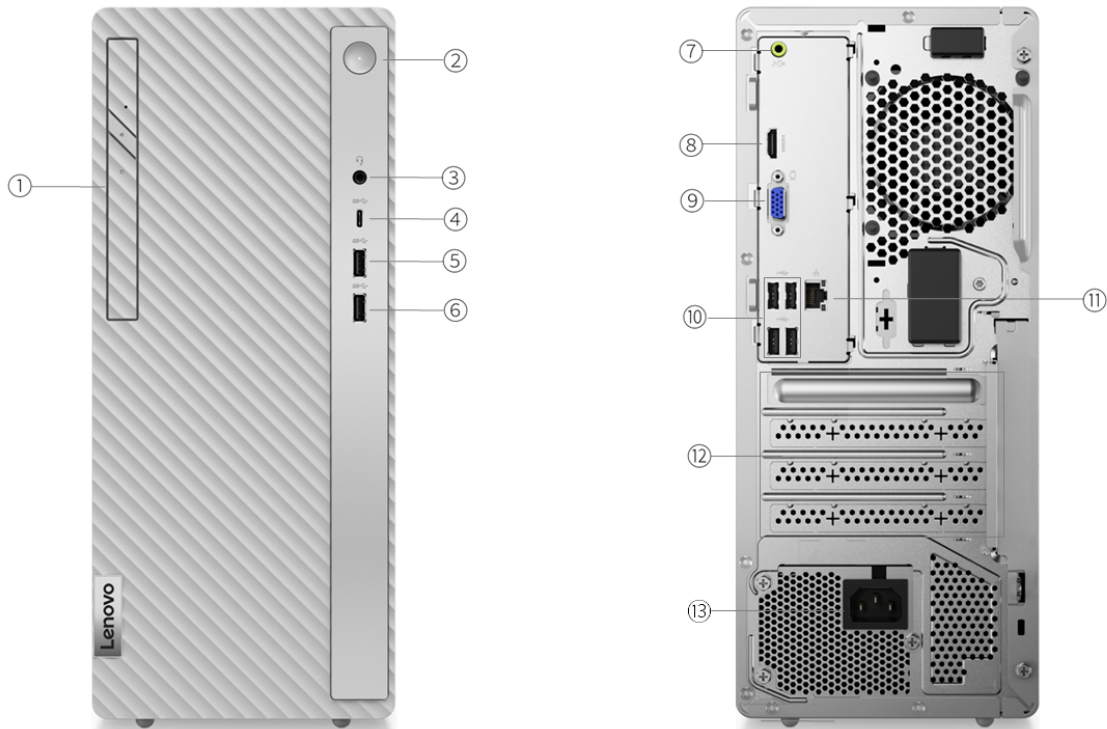


OVERVIEW



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	-	2.5MB L2 Cache / 4MB Intel® Smart Cache	DDR4-3200	Intel® UHD Graphics 710
Pentium® Gold G7400	2	4	3.7GHz	-	2.5MB L2 Cache / 6MB Intel® Smart Cache	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	5MB L2 Cache / 12MB Intel® Smart Cache	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	7.5MB L2 Cache / 18MB Intel® Smart Cache	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 Intel® Smart Cache	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 Intel® Smart Cache	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	12MB L2 Cache / 20MB Intel® Smart Cache	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 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

Graphics

Graphics**[1]

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

RX 6400		GDDR6			7680x4320@60Hz(DP)	FRL, 1x DP 1.4a	OpenGL 4.6
---------	--	-------	--	--	--------------------	-----------------	------------

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

Max 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

- 24-bit DAC supports 44.1K/48K/96K sample rate, 4 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, 4 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
260W	Fixed	90%	100-240V, 50-60Hz
260W	Fixed	85%	100-240V, 50-60Hz

DESIGN

Input Device

Keyboard**

- Lenovo® Calliope Keyboard (USB connector), black
- Wireless EOS Keyboard, 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^[2]

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 front system fan, 1x rear system fan
- (Optional) 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

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]

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.

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 chipset

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: -40°C (-40°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]

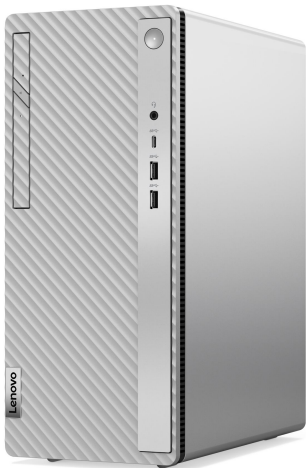
Green Certifications

- (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. 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.



intel



intel



intel



intel



intel



intel