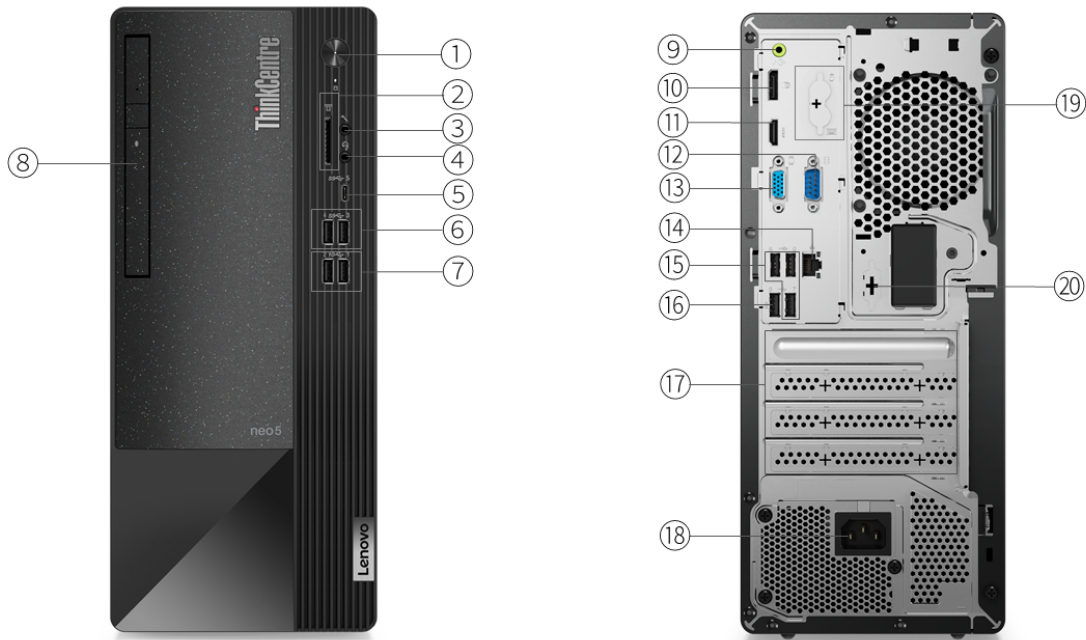


**OVERVIEW**



1. Power button	11. HDMI 1.4b
2. Card reader *	12. Serial
3. Microphone (3.5mm)	13. VGA
4. Headphone / microphone combo jack (3.5mm)	14. Ethernet (RJ-45)
5. 1x USB-C 3.2 Gen 1	15. 3x USB 2.0
6. 2x USB 3.2 Gen 1	16. 1x USB 2.0 (with smart power-on feature)
7. 2x USB 3.2 Gen 2	17. Optional ports on expansion cards *
8. Optical drive *	18. Power connector
9. Headphone (3.5mm)	19. 2x PS/2 ports (keyboard / mouse) *
10. DisplayPort 1.4	20. serial *

Notes:

- Ports with \* are only available on selected models

## PERFORMANCE

### Processor

#### Processor Family

Intel® Celeron®, Intel Pentium®, or 12th Generation Intel Core™ i3 / i5 / i7 / i9 Processor

#### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Celeron G6900	2	2	3.4GHz	-	4MB	DDR4-3200	Intel UHD Graphics 710
Pentium Gold G7400	2	4	3.7GHz	-	6MB	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	12MB	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	18MB	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	DDR4-3200	-
Core i5-12500	6 (6 P-core + 0 E-core)	12	P-core 3.0GHz	P-core 4.6GHz	18MB	DDR4-3200	Intel UHD Graphics 770
Core i7-12700	12 (8 P-core + 4 E-core)	20	P-core 2.1GHz / E-core 1.6GHz	P-core 4.8GHz / E-core 3.6GHz	25MB	DDR4-3200	Intel UHD Graphics 770
Core i9-12900	16 (8 P-core + 8 E-core)	24	P-core 2.4GHz / E-core 1.8GHz	P-core 5.0GHz / E-core 3.8GHz	30MB	DDR4-3200	Intel UHD Graphics 770

### Operating System

#### Operating System\*\*

- Windows® 11 Pro 64
- Windows 11 Home 64
- Windows 11 DG Windows 10 Pro 64
- Ubuntu Linux
- No operating system

### Graphics

#### Graphics\*\*\*[1]

Graphics	Type	Memory	Connector	Max Resolution	Key Features
Intel UHD graphics 710	Integrated	Shared	1x HDMI® 1.4b, 1x VGA, 1x DP 1.4	3840x2160@30Hz(HDMI), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP)	DirectX® 12
Intel UHD graphics 730	Integrated	Shared	1x HDMI 1.4b, 1x VGA, 1x DP 1.4	3840x2160@30Hz(HDMI), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP)	DirectX 12
Intel UHD graphics 770	Integrated	Shared	1x HDMI 1.4b, 1x VGA, 1x DP 1.4	3840x2160@30Hz(HDMI), 1920x1200@60Hz(VGA), 4096x2304@60Hz(DP)	DirectX 12
Intel Iris® Xe MAX 100 Graphics	Discrete	2GB LPDDR4X	1x VGA, 1x HDMI 1.4	3840x2160@30Hz(HDMI), 1920x1080@60Hz(VGA)	DirectX 12, OpenGL 4.6

#### Notes:

1. The information of integrated graphics are not applicable for the models without integrated graphics (for the details, please refer to processor section)

### Monitor Support

## Monitor Support

Supports up to 3 independent displays via (HDMI, DP and VGA), more displays support via discrete graphics

## Chipset

### Chipset

Intel B660 chipset

## Memory

### Max Memory<sup>[1]</sup>

Up to 64GB DDR4-3200

### Memory Slots

Two DDR4 UDIMM slots, dual-channel capable

### Memory Type

DDR4-3200

#### Notes:

1. The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.

## Storage

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

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<sup>\*\*\*</sup>

Disk Type	Interface	RPM	Security
3.5" SATA HDD	SATA 6Gb/s	7.2K	-
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 3.0 x4	-	Opal2
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4	-	Opal2

### RAID

No support

#### Notes:

1. The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.

## Removable Storage

### Optical<sup>\*\*</sup>

- DVD-ROM, SATA 1.5Gb/s, slim (9.0mm)
- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

### Card Reader

- 3-in-1 card reader (SD, SDHC, SDXC)
- No card reader

## Multi-Media

### Audio Chip

High Definition (HD) Audio, Realtek® ALC222-CG codec

### Speakers

- Single speaker, 2W x1
- No speakers

## Power Supply

### Power Supply\*\*

Power	Type	Efficiency
180W	Fixed	85%
260W	Fixed	90%
310W	Fixed	92%
380W	Fixed	92%

## DESIGN

### Input Device

#### Keyboard\*\*

- Euterpe Wireless Keyboard, grey
- Lenovo Calliope Keyboard (USB connector), black
- Lenovo Traditional Keyboard (USB connector), black
- No keyboard

#### Mouse\*\*

- Lenovo Calliope Mouse (USB connector), black
- Lenovo Fingerprint Mouse (USB connector), black
- Euterpe Wireless Mouse, grey
- No mouse

### Mechanical

#### Form Factor

Tower (13.6L)

#### Dimensions (WxDxH)

145 x 294 x 340 mm (5.71 x 11.57 x 13.39 inches)

#### Packaging Dimensions (WxDxH)

All models: 245 x 395 x 530 mm (9.65 x 15.55 x 20.87 inches)

#### Weight

Around 5.5 kg (12.1 lbs)

#### Packaging Weight

All models: 7.5 kg (16.53 lbs)

#### Case Color

Black (chassis), grey (bezel)

#### Bays

- 1x 3.5" disk bay
- 1x slim ODD bay

#### Expansion Slots

- One PCIe 4.0 x16, full-height, half-length
- Two PCIe 3.0 x1, full-height, half-length
- Two M.2 slots (one for WLAN, one for SSD)

#### EOU

No support

#### Stand

No stand

#### Cooling System (Fan & Cooler)\*\*\*

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

## CONNECTIVITY

### Network

#### Onboard Ethernet

Gigabit Ethernet, Intel Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN

#### Optional Ethernet

No optional Ethernet

#### WLAN + Bluetooth<sup>®</sup>\*\*<sup>[1]</sup>

- Realtek RTL8822CE, 802.11ac Dual Band 2x2 Wi-Fi<sup>®</sup> + Bluetooth 5.0, M.2 card
- Realtek Wi-Fi 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi + Bluetooth 5.2, M.2 card
- Intel Wireless-AC 9560, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.0, M.2 card
- Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2, M.2 Card
- No WLAN and Bluetooth

#### Notes:

1. Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitation

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

#### Front Ports

- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x USB-C<sup>®</sup> 3.2 Gen 1 (support data transfer and 5V@3A charging)
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

#### Optional Front Ports

- 1x card reader
- None

#### Rear Ports<sup>[2]</sup>

- 4x USB 2.0
- 1x VGA
- 1x HDMI 1.4b
- 1x DisplayPort<sup>™</sup> 1.4
- 1x serial (9-pin)
- 1x Ethernet (RJ-45)
- 1x headphone (3.5mm)

#### Optional Rear Ports<sup>\*\*\*</sup>

- 1x serial
- 1x parallel
- 2x PS/2

#### 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;  
USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;  
Thunderbolt<sup>™</sup> 3/4: 40 Gbit/s
2. For video ports on discrete graphics, please see graphics section

### Monitor Cable

#### Monitor Cable<sup>\*\*\*</sup>

- DP to DVI-D dongle
- HDMI to DVI dongle
- USB-A to USB-C cable
- No monitor cable

## SECURITY & PRIVACY

## Security

### Security Chip

Discrete TPM 2.0, TCG certified

### Physical Locks

- (Optional) Smart Cable Clip
- Kensington® Security Slot, 3 x 7 mm
- Padlock Loop

### Chassis Intrusion Switch

- Chassis intrusion switch
- No chassis intrusion switch

### Fingerprint Reader

- Touch style fingerprint reader on mouse
- No fingerprint reader

### BIOS Security

- Administrator password
- Power-on password
- Hard disk password
- Cover presence switch
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- Individual USB port disablement

## MANAGEABILITY

### System Management

#### System Management

Non-vPro

## SERVICE

### Warranty

#### Base Warranty\*\*<sup>[1]</sup>

- 1-year depot service
- 1-year limited onsite service

Notes:

1. More information 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: -40°C (-40°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

## Green Certifications

- (Optional) EPEAT™ Gold
- (Optional) EPEAT Silver
- (Optional) ENERGY STAR® 8.0
- TCO Certified 9.0
- RoHS compliant
- REACH
- WEEE

## Other Certifications

### Other Certifications

TÜV Rheinland® Ultra Low Noise

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