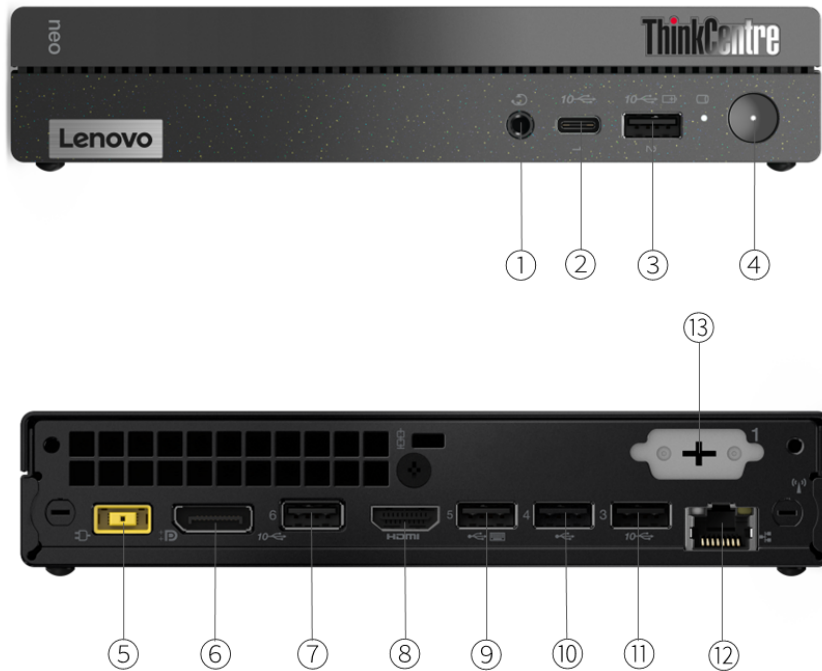


**OVERVIEW**



1. Headphone / microphone combo jack (3.5mm)	8. HDMI 2.1 TMDs
2. USB-C 3.2 Gen 2 (support data transfer and 5V@0.9A charging)	9. USB 2.0
3. USB 3.2 Gen 2 (Always On and 5V@2.1A charging)	10. USB 2.0
4. Power button	11. USB 3.2 Gen 2
5. Power-in	12. Ethernet (RJ-45)
6. DisplayPort 1.4	13. Punch out port *
7. USB 3.2 Gen 2	

Notes:

- Items with \* are only available on selected models

## PERFORMANCE

### Processor

#### Processor Family

12th Generation Intel® Core™ i3, or 13th Generation Intel Core i5 Processor

#### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor 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 <sup>[1]</sup>	10MB	Intel UHD 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 <sup>[2]</sup>	12MB	Intel UHD Graphics

Notes:

[1], [2] 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\*\*

- Ubuntu Linux<sup>[1]</sup>
- Windows® 11 DG Windows 10 Pro 64
- Windows 11 Home
- Windows 11 Home Single Language
- Windows 11 Pro
- No operating system

Notes:

[1] The pre-installed IGEL OS version is 11.08.240  
The device is preload with a free evaluation license. The evaluation license will be valid for a period of 90 days.

### Graphics

#### Graphics

Graphics	Type	Memory	Connector	Max Resolution	Key Features
Intel UHD Graphics	Integrated	Shared	1x DP 1.4, 1x HDMI® 2.1 TMDS, 1x punch out port (1x VGA or 1x DP 1.4)	4096x2160@60Hz(DP), 4096x2160@60Hz(HDMI), 1920x1200@60Hz(VGA)	DirectX® 12.1

### Monitor Support

#### Monitor Support

Supports up to 3 independent displays via (onboard DP, onboard HDMI, punch out port 1 [VGA / DP])

### Chipset

#### Chipset

Intel SoC (System on Chip) platform

### Memory

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

Up to 32GB DDR4-3200

#### Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

#### Memory Type

DDR4-3200

# ThinkCentre neo 50q Gen 4

Notes:

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

## Storage

### Storage Support<sup>[1][2]</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<sup>\*\*\*</sup>

Disk Type	Interface	RPM	Security
2.5" SATA HDD	SATA 6Gb/s	7.2K	-
M.2 2242 SSD	PCIe® NVMe®, PCIe 3.0 x4	-	-
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4	-	Opal 2.0

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

None

### Card Reader

No card reader

## Multi-Media

### Audio Chip

High Definition (HD) Audio, Realtek® ALC256 codec

### Speakers

Single speaker, 2W x1

### Microphone

No microphone

## Power Supply

### Power Supply<sup>\*\*[1]</sup>

Power	Type	Efficiency	Key Features
65W	Adapter	89%	Autosensing
90W	Adapter	89%	Autosensing
135W	Adapter	89%	Autosensing
No power supply	-	-	-

Notes:

[1] The optional 90w adapter may increase performance scores when i5-13420H CPUs are installed.

When work with TIO monitor, an appropriate power adapter is needed. Customer may need to:

- Order a Tiny for TIO MT (12LQ, 12LR) models
- Or for Intel Core i5 models order an additional 135W power adapter, for Intel Core i3 models order an additional 90W power adapter. If original power adapter is less than 135W (i5 models) or 90W (i3 models).

## DESIGN

## Input Device

### Keyboard

# ThinkCentre neo 50q Gen 4

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

## Mouse

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

## Mechanical

### Form Factor

Tiny (1L)

### Dimensions (WxDxH)<sup>[1]</sup>

179 x 182.9 x 36.5 mm (7.05 x 7.2 x 1.44 inches)

### Packaging Dimensions (WxDxH)<sup>[2]</sup>

494 x 250 x 130 mm (19.45 x 9.84 x 5.12 inches)

### Weight<sup>[3]</sup>

Around 1.11 kg (2.45 lbs)

### Packaging Weight<sup>[4]</sup>

Around 3.2 kg (7.05 lbs)

### Case Color

Black

### Bays

1x 2.5" disk bay (optional, or bay comes with disk)

### Expansion Slots

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

### EOU

(Optional) Toolless cover (toolless chassis screw required), stand, optional 2.5" HDD bracket assembly / removal

### Stand

- Vertical stand
- No stand

### Mounting

- Supports VESA mount 100mm
- None

### Others

(Optional) Power adapter cage

### Notes:

[1] The system dimensions may vary depending on configurations.

[2] The new package takes effect from November 2023. The old package is:  
140 x 262 x 500 mm (5.51 x 10.31 x 19.69 inches)

[3] 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.

[4] The new package takes effect from November 2023. The old package is:  
Around 5.18 kg (11.42 lbs)

## CONNECTIVITY

### Network

#### Onboard Ethernet

Gigabit Ethernet, Realtek RTL8111K-CG, 1x RJ-45

#### WLAN + Bluetooth<sup>\*\*</sup>

- Realtek Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi + Bluetooth 5.1, M.2 card<sup>[1]</sup>
- Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card<sup>[2]</sup>
- No WLAN and Bluetooth

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## Notes:

[1], [2] Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitations.

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

### Front Ports

- 1x USB-C® 3.2 Gen 2 (support data transfer and 5V@0.9A charging)
- 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
- 1x headphone / microphone combo jack (3.5mm)

### Optional Front Ports

None

### Rear Ports

- 2x USB 2.0
- 2x USB 3.2 Gen 2
- 1x HDMI 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

### Optional Rear Ports

Punch out port (one of VGA / DisplayPort 1.4 / serial)

## 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.

## Monitor Cable

### Monitor Cable\*\*

- DP to VGA dongle
- DP to DVI dongle
- No monitor cable

## SECURITY & PRIVACY

### Security

#### Security Chip

Firmware TPM 2.0 integrated in SoC

#### Physical Locks

Kensington® Security Slot™, 3 x 7 mm

#### Chassis Intrusion Switch

Chassis intrusion switch

#### BIOS Security

- Administrator password
- Supervisor password
- Hard disk password
- Boot sequence control
- Cover presence switch
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- Intel BIOS guard

## MANAGEABILITY

### System Management

**System Management**

None

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

- 1-year courier or carry-in service
- 1-year limited onsite service
- No base warranty

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: 10°C (50°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

**Humidity**

- Operating: 20% to 80%
- Storage: 20% to 90%

**Altitude**

- Operating: -15.2 m (-50 ft) to 3048 m (10,000 ft)
- Storage: -15.2 m (-50 ft) to 10668 m (35,000 ft)

**CERTIFICATIONS****Green Certifications**<sup>[1]</sup>**Green Certifications**

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered<sup>[2]</sup>
- ErP Lot 3 and Lot 7
- RoHS compliant
- TCO Certified 9.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration.

[2] EPEAT is registered where applicable, please see <https://www.epeat.net> for registration status by country.

**Other Certifications****Other Certifications**

(Optional) 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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