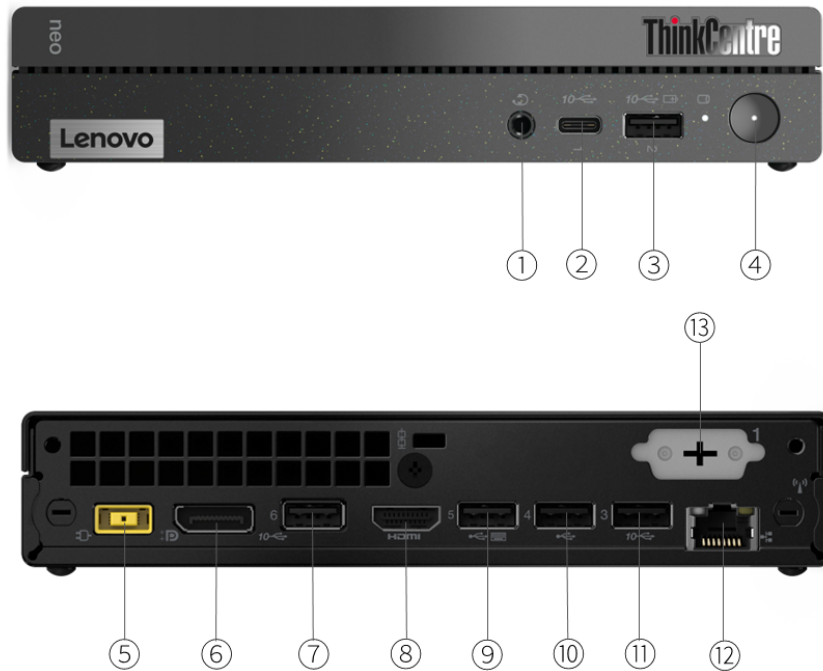


## OVERVIEW



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\*\*

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux<sup>[1]</sup>
- No preload 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	Max Resolution	Connector	Key Features
Intel® UHD Graphics	Integrated	Shared	4096x2160@60Hz(DP), 4096x2160@60Hz(HDMI®), 1920x1200@60Hz(VGA)	1x DP 1.4, 1x HDMI® 2.1 TMDs, 1x optional punch out port (1x VGA or 1x DP 1.4)	DirectX® 12.1

### Monitor Support

#### Monitor Support

Supports up to 3 independent displays via (onboard DP, onboard HDMI®, optional punch out port)

### 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

## 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	-	-
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

- 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 chassis open (toolless chassis screw required)

### Stand

- Vertical stand
- No stand

### Mounting

- Supports VESA mount 100mm
- None

### Cooling System (Fan & Cooler)

1x system fan

### 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®\*\*

- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card<sup>[1]</sup>
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 Card<sup>[2]</sup>
- No WLAN and Bluetooth®

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**Notes:**

[1] Bluetooth® 5.3 requires Windows® 11.

[2] Bluetooth® 5.2 requires Windows® 11.

## 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.

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

#### BIOS Security

- Hard disk password
- Supervisor password
- Boot sequence control
- Cover tamper detected
- Configuration change detection
- Individual USB port disablement
- Intel® BIOS guard
- Secure wipe
- Secure boot
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- More BIOS security features, please visit [BIOS Simulator](#)<sup>[2]</sup>

## Notes:

[1] Chassis intrusion switch is hardware ready function and needs to be special bid or manually enabled in BIOS.

[2] 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

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://support.lenovo.com/warrantylookup/warrantypolicy>.

## ACCESSORIES

### Bundled Accessories

#### Bundled Accessories\*\*\*

- DP to DVI dongle
- DP to VGA dongle

## OPERATING REQUIREMENTS

### Operating Environment

#### Temperature

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

#### Relative 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 3/7
- 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. For ESG & regulatory compliance documents, please visit <https://compliance.lenovo.com>.

[2] EPEAT™ is registered where applicable, please visit [epeat.net](https://epeat.net) for registration status by country.

## Other Certifications

### Other Certifications

(Optional) TÜV Rheinland® Ultra Low Noise

- 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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