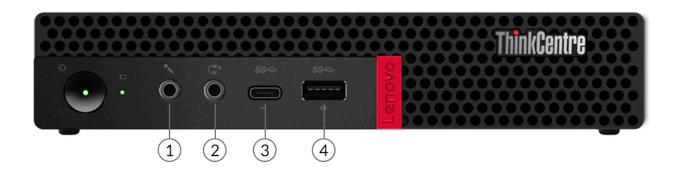
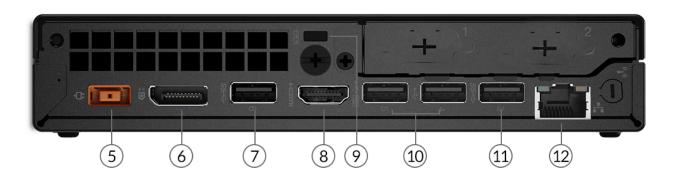


# **OVERVIEW**





1. Microphone (3.5mm)	7. USB 3.1 Gen 1
2. Headphone / microphone combo jack (3.5mm)	8. HDMI
3. USB-C 3.1 Gen 1	9. Kensington Security Slot
4. USB 3.1 Gen 1	10. 2x USB 2.0
5. Power connector	11. USB 3.1 Gen 1
6. DisplayPort	12. Ethernet (RJ-45)



## **PERFORMANCE**

### **Processor**

#### **Processor Family**

Intel® Pentium® or 8th Generation Intel Core™ i3 / i5 Processor

#### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Pentium Gold 5405U	2	4	2.3GHz	-	2MB	DDR4-2133	Intel UHD Graphics
Core i3-8145U	2	4	2.1GHz	3.9GHz	4MB	DDR4-2400	Intel UHD Graphics
Core i5-8265U	4	8	1.6GHz	3.9GHz	6MB	DDR4-2400	Intel UHD Graphics

## **Operating System**

## Operating System\*\*

- Windows® 10 Pro 64
- Windows 10 Home 64
- Windows 10 Home 64 Single Language
- Ubuntu Linux
- No operating system

### **Graphics**

### Graphics[1]

Graphics	Туре	Memory	Connector	Max Resolution	Key Features
Intel UHD graphics	Integrated	Shared	· '	4096x2304@24Hz(HDMI), 4096x2304@60Hz(DP)	DirectX® 12

# 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 2 independent displays via onboard ports (DisplayPort™ and HDMI)

### Chipset

### Chipset

Intel SoC (System on Chip) platform

### **Memory**

## Max Memory[1]

Up to 16GB DDR4-2666

#### **Memory Slots**

One DDR4 SO-DIMM slot

#### Memory Type<sup>[2]</sup>

DDR4-2666

### 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.
- 2. System automatically clocks down for the processors with lower memory controller

### **Storage**

### Storage Support[1]

Up to two drives, 1x 2.5" HDD/SSD + 1x M.2 SSD

• 2.5" HDD up to 1TB



• M.2 SSD up to 512GB

### Storage Type\*\*\*

Disk Type	Interface	RPM	Security
2.5" SATA SSD	SATA 6Gb/s	-	-
2.5" SATA HDD	SATA 6Gb/s	5.4K	-
2.5" SATA HDD	SATA 6Gb/s	7.2K	-
M.2 2242 SSD	PCIe® NVMe®, PCIe 3.0 x2	-	-
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	Opal

### RAID

No support

Notes:

## **Removable Storage**

**Optical** 

None

**Card Reader** 

No card reader

#### Multi-Media

### **Audio Chip**

High Definition (HD) Audio, Realtek® ALC233VB codec

#### **Speakers**

Single speaker, 1.5W x1

## **Power Supply**

### **Power Supply**

Power	Type	Efficiency	Key Features
65W	Adapter	88%	Autosensing
No power supply	-	-	-

## **DESIGN**

### **Input Device**

### Keyboard\*\*

- Lenovo Calliope Keyboard (USB connector), black
- · Lenovo Traditional Keyboard (USB connector), black

#### Mouse

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

### **Mechanical**

### **Form Factor**

Tiny (1L)

## Dimensions (WxDxH)[1]

179 x 183 x 34.5 / 37 mm with rubber feet (7.05 x 7.2 x 1.36 / 1.5 inches with rubber feet)

Weight<sup>[2]</sup>

Around 1.32 kg (2.91 lbs)

Case Color

<sup>1.</sup> 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.



Black

#### Bays

1x 2.5" disk bay

#### **Expansion Slots**

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

#### EOU

No support

#### Stand

- · Vertical stand
- No stand

#### Mounting

- VESA mount bracket kit, supports VESA mount 75mm and 100mm
- None

#### **Others**

- · (Optional) Dust filter
- (Optional) Power adapter cage

#### Notes:

- 1. The system dimensions 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

### **Onboard Ethernet**

Gigabit Ethernet, Realtek RTL8111HN-CG, 1x RJ-45, supports Wake-on-LAN

### **Optional Ethernet**

No optional Ethernet

### WLAN + Bluetooth®\*\*[1]

- Intel Dual Band Wireless-AC 8265, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth 4.2, M.2 Card
- Realtek RTL8821CE, 802.11ac Dual Band 1x1 Wi-Fi + Bluetooth 4.2, M.2 card
- Realtek RTL8822BE, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 4.2, M.2 card
- Intel Dual Band Wireless-AC 3165, 802.11ac Dual Band 1x1 Wi-Fi + Bluetooth 4.2, M.2 Card
- No WLAN and Bluetooth

### **WWAN**

No support

#### 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**

- 1x USB 3.1 Gen 1
- 1x USB-C® 3.1 Gen 1
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

#### **Optional Front Ports**

None

#### Rear Ports[2]

- 1x HDMI
- 1x DisplayPort
- 2x USB 2.0
- 2x USB 3.1 Gen 1
- 1x Ethernet (RJ-45)



#### **Optional Rear Ports**

1x parallel (external USB to parallel dongle)

#### 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™ 3/4: 40 Gbit/s
- 2. For video ports on discrete graphics, please see graphics section

#### **Monitor Cable**

#### Monitor Cable\*\*

- DP to VGA dongle
- DP to VGA cable (1.5M)
- DP to HDMI 1.4 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
- Power-on password
- · Hard disk password
- · Boot sequence control
- Boot without keyboard and mouse
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- Individual USB port disablement

### MANAGEABILITY

### **System Management**

### **System Management**

Non-DASH

### **SERVICE**

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

#### Base Warranty\*\*

- 1-year courier or carry-in service
- 1-year limited onsite 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 <a href="https://smartfind.lenovo.com/">https://smartfind.lenovo.com/</a>. To learn more details of warranty policy, please access <a href="https://pcsupport.lenovo.com/warranty">https://pcsupport.lenovo.com/warranty</a>.

### **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**

- EPEAT™ Silver
- ENERGY STAR® 8.0
- ErP Lot 3
- TCO Certified
- RoHS compliant
- REACH
- WEEE

#### **Other Certifications**

#### Mil-Spec Test

MIL-STD-810G military test passed (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation)

- 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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