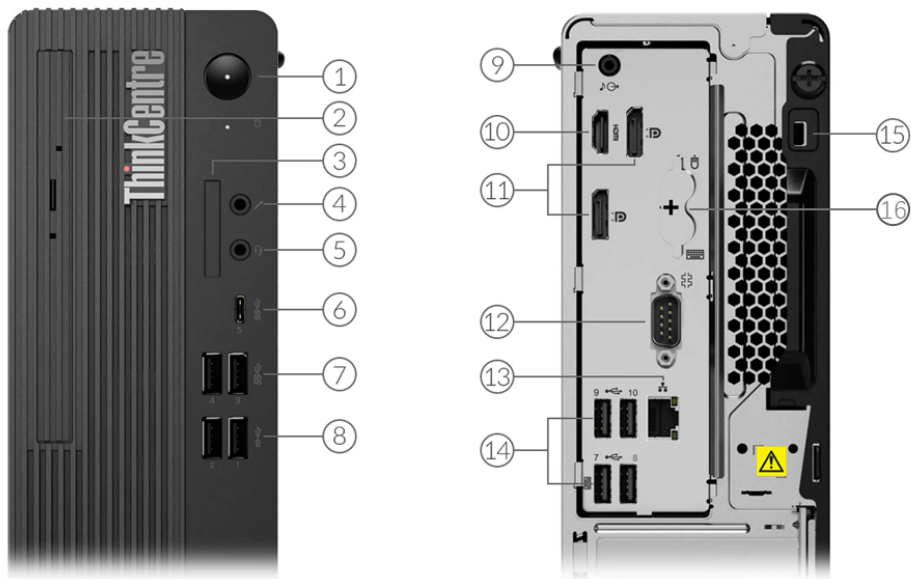


OVERVIEW



|                                              |                                        |
|----------------------------------------------|----------------------------------------|
| 1. Power button                              | 9. Line-out (3.5mm)                    |
| 2. Optical drive *                           | 10. HDMI                               |
| 3. Card reader *                             | 11. 2x DisplayPort                     |
| 4. Microphone (3.5mm)                        | 12. Serial                             |
| 5. Headphone / microphone combo jack (3.5mm) | 13. Ethernet (RJ-45)                   |
| 6. USB-C 3.2 Gen 1                           | 14. 4x USB 2.0                         |
| 7. 2x USB 3.2 Gen 1                          | 15. Kensington Security Slot           |
| 8. 2x USB 3.2 Gen 2                          | 16. 2x PS/2 ports (keyboard / mouse) * |

- Notes:
- Ports with \* are only available on selected models
  - More ports are available through the optional expansion cards (not shown on the sample product above)

PERFORMANCE

Processor

Processor Family

Intel® Celeron®, Intel Pentium®, or 10th Generation Intel Core™ i3 / i5 / i7 / i9 Processor

Processor

| Processor Name     | Cores | Threads | Base Frequency | Max Frequency | Cache | Memory Support | Processor Graphics     |
|--------------------|-------|---------|----------------|---------------|-------|----------------|------------------------|
| Celeron G5900      | 2     | 2       | 3.4GHz         | -             | 2MB   | DDR4-2666      | Intel UHD Graphics 610 |
| Celeron G5905      | 2     | 2       | 3.5GHz         | -             | 4MB   | DDR4-2666      | Intel UHD Graphics 610 |
| Celeron G5920      | 2     | 2       | 3.5GHz         | -             | 2MB   | DDR4-2666      | Intel UHD Graphics 610 |
| Celeron G5925      | 2     | 2       | 3.6GHz         | -             | 4MB   | DDR4-2666      | Intel UHD Graphics 610 |
| Pentium Gold G6400 | 2     | 4       | 4.0GHz         | -             | 4MB   | DDR4-2666      | Intel UHD Graphics 610 |
| Pentium Gold G6500 | 2     | 4       | 4.1GHz         | -             | 4MB   | DDR4-2666      | Intel UHD Graphics 630 |
| Pentium Gold G6600 | 2     | 4       | 4.2GHz         | -             | 4MB   | DDR4-2666      | Intel UHD Graphics 630 |
| Core i3-10100      | 4     | 8       | 3.6GHz         | 4.3GHz        | 6MB   | DDR4-2666      | Intel UHD Graphics 630 |
| Core i3-10300      | 4     | 8       | 3.7GHz         | 4.4GHz        | 8MB   | DDR4-2666      | Intel UHD Graphics 630 |
| Core i3-10320      | 4     | 8       | 3.8GHz         | 4.6GHz        | 8MB   | DDR4-2666      | Intel UHD Graphics 630 |
| Core i5-10400      | 6     | 12      | 2.9GHz         | 4.3GHz        | 12MB  | DDR4-2666      | Intel UHD Graphics 630 |
| Core i5-10400F     | 6     | 12      | 2.9GHz         | 4.3GHz        | 12MB  | DDR4-2666      | -                      |
| Core i5-10500      | 6     | 12      | 3.1GHz         | 4.5GHz        | 12MB  | DDR4-2666      | Intel UHD Graphics 630 |
| Core i5-10600      | 6     | 12      | 3.3GHz         | 4.8GHz        | 12MB  | DDR4-2666      | Intel UHD Graphics 630 |
| Core i7-10700      | 8     | 16      | 2.9GHz         | 4.8GHz        | 16MB  | DDR4-2933      | Intel UHD Graphics 630 |
| Core i7-10700F     | 8     | 16      | 2.9GHz         | 4.8GHz        | 16MB  | DDR4-2933      | -                      |
| Core i9-10900      | 10    | 20      | 2.8GHz         | 5.2GHz        | 20MB  | DDR4-2933      | Intel UHD Graphics 630 |
| Core i9-10900F     | 10    | 20      | 2.8GHz         | 5.2GHz        | 20MB  | DDR4-2933      | -                      |

Operating System

Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- Windows 10 IoT Enterprise
- Ubuntu Linux
- No operating system

Graphics

Graphics<sup>[1]</sup>

| Graphics               | Type       | Memory    | Connector              | Max Resolution                           | Key Features |
|------------------------|------------|-----------|------------------------|------------------------------------------|--------------|
| Intel UHD graphics 610 | Integrated | Shared    | 1x HDMI®, 2x DP        | 1920x1080@60Hz(HDMI), 4096x2304@60Hz(DP) | DirectX® 12  |
| Intel UHD graphics 630 | Integrated | Shared    | 1x HDMI, 2x DP         | 1920x1080@60Hz(HDMI), 4096x2304@60Hz(DP) | DirectX 12   |
| AMD Radeon™ 520        | Discrete   | 2GB GDDR5 | 2x DP 1.2              | 4096x2160@60Hz(DP)                       | DirectX 12   |
| AMD Radeon RX 550X     | Discrete   | 4GB GDDR5 | 1x HDMI 2.0, 1x DP 1.4 | 4096x2160@60Hz(HDMI), 3840x2160@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<sup>[1]</sup>

Supports up to 3 independent displays via onboard ports\*\* (2x DisplayPort™ + 1x HDMI), more displays support via discrete graphics

Notes:

- 1. Onboard video ports are only available for the models with integrated graphics

Chipset

Chipset

Intel H470 chipset

Memory

Memory Type

- DDR4-2666
- DDR4-2933

Memory Slots

Four DDR4 DIMM slots, dual-channel capable

Memory Protection

Non-ECC

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

Up to 128GB DDR4-2933

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

Up to three drives, 1x 2.5"/3.5" HDD + 1x 2.5" HDD + 1x M.2 2242/2280 SSD

- 2.5" HDD up to 1TB each
- 3.5" HDD up to 2TB
- M.2 SSD up to 2TB
- Optional Intel Optane™ Memory, M.2

RAID

Not support

Storage Type

| Disk Type               | Interface              | RPM  | Security |
|-------------------------|------------------------|------|----------|
| M.2 2280 SSD            | PCIe NVMe, PCIe 3.0 x4 | -    | Opal     |
| 3.5" SATA HDD           | SATA 6Gb/s             | 7.2K | -        |
| 2.5" SATA HDD           | SATA 6Gb/s             | 7.2K | -        |
| M.2 2242 SSD            | PCIe NVMe, PCIe 3.0 x2 | -    | -        |
| Intel Optane Memory M10 | PCIe NVMe, PCIe 3.0 x2 | -    | -        |

Removable Storage

Optical

- 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® ALC623-CG codec

Speakers

Single speaker, 1W x1

Power Supply

Power Supply

| Power | Type  | Efficiency | Key Features |
|-------|-------|------------|--------------|
| 180W  | Fixed | 85%        | -            |
| 260W  | Fixed | 85%        | -            |
| 310W  | Fixed | 92%        | -            |
| 380W  | Fixed | 92%        | -            |

DESIGN

Input Device

Keyboard

- Lenovo Calliope Keyboard (USB connector), black
- Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo Traditional Keyboard (USB connector), black
- No keyboard

Mouse

- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo Calliope Mouse (USB connector), black
- Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black
- No mouse

Mechanical

Form Factor

SFF (8.2L)

Dimensions (WxDxH)

93 x 298 x 340 mm (3.6 x 11.7 x 13.4 inches)

Weight

5.3 kg (11.7 lbs)

Case Color

Black

Bays

- 1x slim ODD bay
- 1x 2.5" disk bay (optional bay, or bay comes with disk)
- 1x 3.5" disk bay

Expansion Slots

- One PCIe 3.0 x16, low-profile (length < 155mm, height < 68mm)
- One PCIe 3.0 x1, low-profile (length < 155mm, height < 68mm)
- Two dummy slots, only bracket for optional port extension
- Two M.2 slots (one for WLAN, one for SSD)

Stand

- Vertical stand
- No stand

Others

- (Optional) Dust Filter
- Supports Smart Power On

CONNECTIVITY

## Network

### Onboard Ethernet

Gigabit Ethernet, Intel Ethernet Connection I219-V, 1x RJ45, supports Wake-on-LAN

### Optional Ethernet

- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe x1
- Gigabit Ethernet, Intel Ethernet Server Adapter I350-T4, 4x RJ-45, PCIe x4
- No optional Ethernet

### WLAN + Bluetooth™

- Realtek RTL8822CE, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.0, M.2 card
- Intel Wireless-AC 9462, 802.11ac Dual Band 1x1 Wi-Fi + Bluetooth 5.0, 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 5.1, M.2 Card
- No WLAN and Bluetooth

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

### Front Ports

- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x USB-C 3.2 Gen 1
- 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 serial (9-pin)
- 1x Ethernet (RJ-45)
- 1x HDMI
- 1x line-out (3.5mm)
- 2x DisplayPort

### Optional Rear Ports

- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe x1)
- 2x USB-C 3.2 Gen 2 (via 2-port USB-C expansion card, PCIe x4)
- 1x serial
- 4x serial (via 4-port serial expansion card, PCIe x1)
- 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™ 3: 40 Gbit/s;  
FireWire 400: 400 Mbit/s;  
FireWire 800: 800 Mbit/s
2. For video ports on discrete graphics, please see graphics section

## Monitor Cable

### Monitor Cable

- DP to VGA dongle
- DP to dual DP dongle
- HDMI to HDMI Cable
- HDMI to VGA Dongle
- DP to DVI-D dongle
- DP to HDMI 1.4 dongle
- DP to VGA Cable (1.5M)

- No monitor cable

## SECURITY & PRIVACY

### Security

#### Security Chip

Discrete TPM 2.0, TCG certified

#### Physical Locks

- (Optional) E-lock
- Kensington® Security Slot
- Padlock Loop
- (Optional) Smart Cable Clip

#### Chassis Intrusion Switch

- Chassis intrusion switch
- No chassis intrusion switch

#### Fingerprint Reader

- Touch style fingerprint reader on mouse
- No fingerprint reader

#### BIOS Security

- Power-on password
- Administrator 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

None

## SERVICE

### Warranty

#### Base Warranty

- 1-year depot service
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

## ENVIRONMENTAL

### Operating Environment

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

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

#### Humidity

- Storage: 20% to 90% (non-condensing)
- Operating: 20% to 80% (non-condensing)

#### 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)

**Notes:**

1. If your computer is stored or transported in temperatures less than 10°C (50°F), allow the computer to rise slowly to an optimal operating temperature before use. This process might take up to two hours. Using the computer in a lower operating temperature might result in irreparable damage to your computer.

## CERTIFICATIONS

### Green Certifications

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

- (Optional) EPEAT™ Gold
- (Optional) EPEAT Silver
- (Optional) ENERGY STAR® 8.0
- ErP Lot 3
- TCO Certified 8.0
- RoHS compliant

**Notes:**

1. ENERGY STAR 8.0 and EPEAT are only available for MT 11DB/11DC

### Other Certifications

**Other Certifications**

- (Optional) TÜV Low Noise certified
- (Optional) TÜV Ultra Low Noise certified
- None

**Mil-Spec Test**

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

