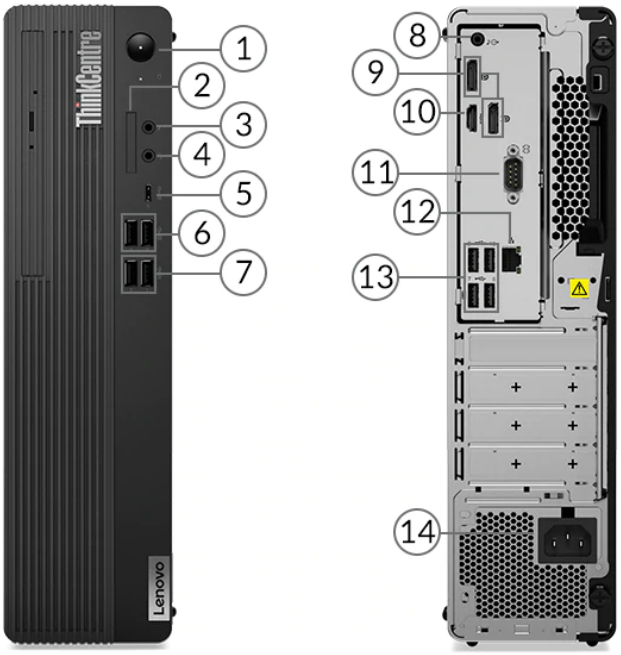
# OVERVIEW




| | |
|---|---|
| 1. Power button | 8. Line-out (3.5mm) |
| 2. Card reader | 9. 2x DisplayPort 1.4 |
| 3. Microphone (3.5mm) | 10. HDMI 1.4b |
| 4. Headphone / microphone combo jack (3.5mm) | 11. Serial |
| 5. USB-C 3.2 Gen 1 | 12. Ethernet (RJ-45) |
| 6. 2x USB 3.2 Gen 1 | 13. 4x USB 2.0 (Note 1) |
| 7. 2x USB 3.2 Gen 2 | 14. Power connector |

Notes:

- 4 rear USB ports are USB 3.2 Gen 1 for selected Brazil models only
- More ports are available through the optional expansion cards (not shown on the sample product above)

# PERFORMANCE

## Processor

**Processor Family**

AMD Athlon™ or AMD Ryzen™ 3 / 5 / 7 / 9 Processor

**Processor**[**]

| Processor Name | Cores | Threads | Base Frequency | Max Frequency | Cache | Memory Support | Processor Graphics |
|---|---|---|---|---|---|---|---|
| AMD Athlon Gold PRO 3150G | 4 | 4 | 3.5GHz | 3.9GHz | 2MB L2 / 4MB L3 | DDR4-2933 | AMD Radeon™ Graphics |
| AMD Athlon Silver 3050GE | 2 | 4 | 3.4GHz | 3.4GHz | 1MB L2 / 4MB L3 | DDR4-2666 | AMD Radeon Graphics |
| AMD Ryzen 3 3200G | 4 | 4 | 3.6GHz | 4.0GHz | 2MB L2 / 4MB L3 | DDR4-2933 | AMD Radeon Vega 8 Graphics |
| AMD Ryzen 3 4300G | 4 | 8 | 3.8GHz | 4.0GHz | 2MB L2 / 4MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 3 5300G | 4 | 8 | 4.0GHz | 4.2GHz | 2MB L2 / 8MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 3 PRO 4350G | 4 | 8 | 3.8GHz | 4.0GHz | 2MB L2 / 4MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 3 PRO 5350G | 4 | 8 | 4.0GHz | 4.2GHz | 2MB L2 / 8MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 5 4600G | 6 | 12 | 3.7GHz | 4.2GHz | 3MB L2 / 8MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 5 5600G | 6 | 12 | 3.9GHz | 4.4GHz | 3MB L2 / 16MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 5 PRO 3350G | 4 | 8 | 3.6GHz | 4.0GHz | 2MB L2 / 4MB L3 | DDR4-2933 | AMD Radeon Vega 11 Graphics |
| AMD Ryzen 5 PRO 3400G | 4 | 8 | 3.7GHz | 4.2GHz | 2MB L2 / 4MB L3 | DDR4-2933 | AMD Radeon Vega 11 Graphics |
| AMD Ryzen 5 PRO 3600 | 6 | 12 | 3.6GHz | 4.2GHz | 3MB L2 / 32MB L3 | DDR4-3200 | - |
| AMD Ryzen 5 PRO 4650G | 6 | 12 | 3.7GHz | 4.2GHz | 3MB L2 / 8MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 5 PRO 5650G | 6 | 12 | 3.9GHz | 4.4GHz | 3MB L2 / 16MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 7 4700G | 8 | 16 | 3.6GHz | 4.4GHz | 4MB L2 / 8MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 7 5700G | 8 | 16 | 3.8GHz | 4.6GHz | 4MB L2 / 16MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 7 PRO 3700 | 8 | 16 | 3.6GHz | 4.4GHz | 4MB L2 / 32MB L3 | DDR4-3200 | - |
| AMD Ryzen 7 PRO 4750G | 8 | 16 | 3.6GHz | 4.4GHz | 4MB L2 / 8MB L3 | DDR4-3200 | AMD Radeon Graphics |
| AMD Ryzen 7 PRO 5750G | 8 | 16 | 3.8GHz | 4.6GHz | 4MB L2 / 16MB L3 | DDR4 3200 | AMD Radeon Graphics |
| AMD Ryzen 9 PRO 3900 | 12 | 24 | 3.1GHz | 4.3GHz | 6MB L2 / 64MB L3 | DDR4-3200 | - |

## Operating System

**Operating System**[**]

- Ubuntu Linux[1]
- Windows® 10 Home 64

- Windows 10 Home 64 Single Language
- Windows 10 IoT Enterprise
- Windows 10 Pro 64
- Windows 11 DG Windows 10 Pro 64
- Windows 11 Home
- Windows 11 Home Single Language
- Windows 11 Pro
- No operating system

Notes:

[1] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, Human Presence Detection, etc.

## Graphics

**Graphics**[**][1][2]

| Graphics | Type | Memory | Connector | Max Resolution | Key Features |
|---|---|---|---|---|---|
| AMD Radeon Graphics | Integrated | Shared | 2x DisplayPort™ 1.4, 1x HDMI® 1.4 | 4096x2160@60Hz(DP), 4096x2160@24Hz(HDMI) | DirectX® 12 |
| AMD Radeon Vega 11 Graphics | Integrated | Shared | 2x DisplayPort 1.4, 1x HDMI 1.4 | 4096x2160@60Hz(DP), 4096x2160@24Hz(HDMI) | DirectX 12 |
| AMD Radeon Vega 8 Graphics | Integrated | Shared | 2x DisplayPort 1.4, 1x HDMI 1.4 | 4096x2160@60Hz(DP), 4096x2160@24Hz(HDMI) | 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, OpenGL 4.5 |
| AMD Radeon RX 6400 | Discrete | 4GB GDDR6 | 1x HDMI 2.1 FRL, 1x DP 1.4a | 7680x4320@60Hz(HDMI), 7680x4320@60Hz(DP) | DirectX 12, OpenGL 4.6 |

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).
[2] AMD Radeon 520 is not available for MT 11R7 / 11R8 / 11R9 / 11RA.

## Monitor Support

**Monitor Support**

Supports up to 3 independent displays via onboard ports (HDMI and 2x DisplayPort), more displays support via discrete graphics

## Chipset

**Chipset**

AMD PRO 565 chipset

## Memory[1]

**Max Memory**[2]

Up to 128GB DDR4-3200

**Memory Slots**

Four DDR4 DIMM slots, dual-channel capable

**Memory Type**[**][3]

- DDR4-1866
- DDR4-2133
- DDR4-2400
- DDR4-2666
- DDR4-3200

Notes:

[1] Recommend to choose the models with more than 4GB for better performance and experience.
[2] The max memory is based on the test results with current Lenovo® memory offerings.
[3] Installed memory is actually 3200MHz, but may run at 1866MHz, 2133MHz, 2400MHz or 2666MHz depending on the memory support capability of processor.

## Storage

**Storage Support**[1]

Up to three drives, 1x 2.5"/3.5" HDD + 1x 2.5" HDD + 1x M.2 SSD
• 2.5" HDD up to 1TB each
• 3.5" HDD up to 2TB
• M.2 SSD up to 2TB

**Storage Type*****

| Disk Type | Interface | RPM | Security |
|---|---|---|---|
| 2.5" SATA HDD | SATA 6Gb/s | 7.2K | - |
| 3.5" SATA HDD | SATA 6Gb/s | 7.2K | - |
| M.2 2242 SSD | PCIe® NVMe®, PCIe 3.0 x2 | - | - |
| M.2 2242 SSD | PCIe NVMe, PCIe 3.0 x4 | - | - |
| M.2 2280 SSD | PCIe NVMe, PCIe 3.0 x4 | - | Opal |
| M.2 2280 SSD | PCIe NVMe, PCIe 4.0 x4 Value[2] | - | Opal 2.0 |
| M.2 2280 SSD[3] | PCIe NVMe, PCIe x4 | - | Opal 2.0 |

**RAID**

RAID 0/1 support for HDDs (RAID preset only available via special bid models)

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo storage offerings.
[2] M.2 PCIe Gen 4 SSD in the M.2 PCIe Gen 3 slot is downgraded to PCIe Gen 3 performance.
[3] PCIe x4 SSD may be PCIe 3.0 x4 or PCIe 4.0 x4 as substitution. M.2 PCIe Gen 4 SSD in the M.2 PCIe Gen 3 slot is downgraded to PCIe Gen 3 performance.

## 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**

- No speakers
- Single speaker, 1W x1

## Power Supply

**Power Supply**

| Power | Type | Efficiency | Key Features |
|---|---|---|---|
| 180W | Fixed | 85% | - |
| 260W | Fixed | 85% | 100-240V, 50-60Hz |
| 310W | Fixed | 92% | 100-240V, 50-60Hz |

## 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 Mouse (USB connector), black
- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black (EOL on Jan, 2023)
- No mouse

## Mechanical

**Form Factor**

SFF (8.2L)

**Dimensions (WxDxH)**[1]

92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

**Weight**[2]

Around 5.3 kg (11.7 lbs)

**Case Color**

Black

**Bays**

- 1x 2.5" disk bay (bay comes with disk)
- 1x 3.5" disk bay
- 1x slim ODD 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 M.2 slots (one for WLAN, one for SSD)
- Two dummy slots, only brackets for optional port extension

**EOU**

EOU design for chassis open, M.2 SSD, HDD, ODD, memory, and PCIe extension card

**Stand**

- Vertical stand
- No stand

**Others**

- (Optional) Dust filter
- Supports Smart Power On

Notes:

[1] The system dimensions may 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[1]

**Onboard Ethernet****

- Gigabit Ethernet, Realtek RTL8111EPV, 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Realtek RTL8111HN, 1x RJ-45, supports Wake-on-LAN

**Optional Ethernet****[2]

- Gigabit Ethernet, Bitland BN8E88, 1x RJ-45, PCIe x1
- Gigabit Ethernet, Bitland RTL8111FP, 1x RJ-45, PCIe x1

- No optional Ethernet

**WLAN + Bluetooth®****

- Realtek RTL8822CE, 802.11ac Dual Band 2x2 Wi-Fi® + Bluetooth 5.0, M.2 card
- Intel Wireless-AC 9260, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.0, M.2 card
- Intel Wi-Fi 6 AX200, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card[3]
- MediaTek Wi-Fi 6 MT7921, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card[4]
- Realtek Wi-Fi 6 RTL8852AE, 802.11ax Dual Band 2x2 Wi-Fi + Bluetooth 5.1, M.2 card[5]
- No WLAN and Bluetooth

Notes:

[1] This system does not support Power Over Ethernet (PoE). If the system is used in a PoE environment, then a Network Isolator is required to prevent possible damage to the system, PoE equipment, or both.
[2] RTL8111FP is not available for AP countries.
[3], [4], [5] Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitations.

## Ports[1]

**Front Ports**

- 1x USB-C® 3.2 Gen 1
- 2x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

**Optional Front Ports**

- 1x card reader
- None

**Rear Ports[2]**

- 4x USB 2.0
- 1x HDMI 1.4b
- 2x DisplayPort 1.4
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)
- 1x serial (9-pin)

**Optional Rear Ports*****

- 2x USB-C 3.2 Gen 2 (support data transfer, via 2-port USB-C expansion card, PCIe x4)
- 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCIe x1)
- 2x USB 2.0 (via 2-port adapter)
- 1x parallel
- 1x serial
- 4x serial (via 4-port serial expansion card, PCIe x1)

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.
[2] For video ports on discrete graphics, please see graphics section.

## Monitor Cable

**Monitor Cable*****

- HDMI to HDMI cable (1.5m)
- HDMI to VGA dongle
- DP to VGA dongle
- DP to VGA cable (1.5M)
- DP to dual DP dongle
- DP to DVI-D dongle

- DP to HDMI dongle
- No monitor cable

# SECURITY & PRIVACY

## Security

**Security Chip**

Discrete TPM 2.0, TCG certified

**Physical Locks**

- (Optional) E-lock
- (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 (EOL on Jan, 2023)
- No fingerprint reader

**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**[1]

- DASH 1.2
- Non-DASH

Notes:

[1] DASH 1.2 is an optional feature for the selected MTs, MT 11W1 / 11W2 / 11W3 / 11W4 do not support DASH.

# SERVICE

## Warranty[1]

**Base Warranty****

- 1-year courier or carry-in service
- 1-year limited onsite service
- 3-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: 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[1]

**Green Certifications[2]**

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered[3]
- (Optional) EPEAT Silver Registered[4]
- ErP Lot 3
- RoHS compliant
- TCO Certified 8.0

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration.
[2] ENERGY STAR 8.0 and EPEAT are only available for selected MTs.
[3], [4] EPEAT is registered where applicable, please see https://www.epeat.net for registration status by country.

## Other Certifications

**Other Certifications**

- (Optional) TÜV Rheinland® Low Noise
- (Optional) TÜV Rheinland Ultra Low Noise

**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)

- 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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