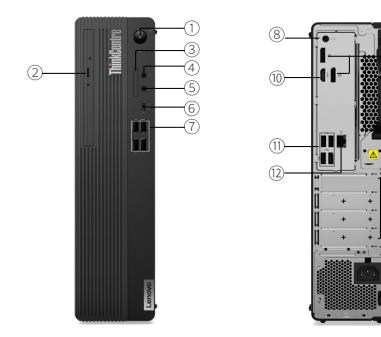
9

(13)

(14)

OVERVIEW



1. Power button	8. Line-out (3.5mm)
2. Optical drive *	9. 2x DisplayPort 1.4a (HBR2, DSC)
3. Card reader *	10. HDMI 2.1 TMDS
4. Microphone (3.5mm)	11. 4x USB-A (Hi-Speed USB)
5. Headphone / microphone combo jack (3.5mm)	12. Ethernet (RJ-45)
6. USB-C (USB 5Gbps), with 15W charging	13. Optional ports on expansion cards *
7. 4x USB-A (USB 5Gbps)	14. Power connector

Notes:

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

PSREF Product Specifications Reference

PERFORMANCE

Processor

Processor Family

AMD Ryzen[™] 3 / 5 / 7 8000 or Ryzen[™] 3 / 5 / 7 PRO 8000 Series Processor

Operating System

Operating System**

- Windows® 11 Pro
- Windows[®] 11 Home
- Windows[®] 11 Home Single Language
- Windows® 11 IoT Enterprise LTSC 2024
- Windows[®] 11 DG Windows[®] 10 Pro 64
- Ubuntu Linux
- No preload operating system

Monitor Support

Monitor Support

Supports up to 3 independent displays via onboard ports (2x DisplayPort[™] and 1x HDMI[®]), more displays support via discrete graphics

Chipset

Chipset

AMD PRO665 Chipset

Memory

Max Memory^[1]

Up to 64GB DDR5-5200

Memory Slots

Two DDR5 UDIMM slots, dual-channel capable

Memory Type^[2]

DDR5-5200

Notes:

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

[2] Installed memory is actually DDR5-5600 but may run as DDR5-5200 due to the memory support capability of processor.

Storage

Storage Support^[1]

Up to three drives, 1x 3.5" HDD + 2x M.2 SSD

• 3.5" HDD up to 2TB

• M.2 SSD up to 2TB each

Storage Type***

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

RAID

RAID 0/1 support for M.2 SSDs (RAID preset only available via special bid models)^[2]

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

[2] Coming soon.

Removable Storage

Optical

- DVD burner (DVD±RW), SATA connector, 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	Туре	Efficiency	Key Features
180W	Fixed	85%	100-240V, 50-60Hz
260W	Fixed	90%	100-240V, 50-60Hz
310W	Fixed	92%	100-240V, 50-60Hz

DESIGN

Input Device

Keyboard**

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

Mouse

- Lenovo® Calliope Mouse (USB connector), black
- 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)

Packaging Dimensions (WxDxH)

195 x 395 x 530 mm (7.68 x 15.55 x 20.87 inches)

Weight^[2]

Around 4.6 kg (10.1 lbs)

Packaging Weight

Around 7.5 kg (16.5 lbs)

Case Color

Black

Bays

- 1x 3.5" disk bay
- 1x slim ODD bay

Expansion Slots

- One PCIe[®] 3.0 x16, low-profile, length \leq 155mm, height \leq 70mm
- One PCIe $^{\circ}$ 3.0 x1, low-profile, length \leq 155mm, height \leq 70mm
- Three M.2 slots (one for WLAN, two for SSD)

EOU

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Toolless cover, disk, optical, extension card assembly / removal

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

Onboard Ethernet

Gigabit Ethernet, Realtek® RTL8111FP, 1x RJ-45, supports DASH and Wake-on-LAN

Optional Ethernet

- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, PCIe® x1
- No optional Ethernet

WLAN + Bluetooth®**

- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.3, M.2 card^[1]
- AMD Wi-Fi[®] 6E RZ616, 802.11ax 2x2 Wi-Fi[®] + Bluetooth[®] 5.3, M.2 Card^[2]
- No WLAN and Bluetooth[®]

Notes:

[1], [2] Coming soon in July 2024.

Ports^{III}

Front Ports

- 1x USB-C[®] (USB 5Gbps / USB 3.2 Gen 1), with 15W charging
- 4x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x headphone (3.5mm)
- 1x headphone / microphone combo jack (3.5mm)

Optional Front Ports

1x card reader

Rear Ports^[2]

- 4x USB-A (Hi-Speed USB / USB 2.0)
- 1x HDMI® 2.1 TMDS
- 2x DisplayPort[™] 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

Optional Rear Ports***

- 1x USB-C° (USB 20Gbps / USB 3.2 Gen 2x2), support data transfer, via PCIe° x4 card
- 2x USB-C[®] (USB 10Gbps / USB 3.2 Gen 2), support data transfer, via PCIe[®] x4 card
- 2x USB-A (Hi-Speed USB / USB 2.0), via 2-port adapter
- + 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), via 2-port USB expansion card, PCIe $^{\circ}$ x1
- 1x parallel
- 1x 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;

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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.

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified, FIPS 140-2 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

No fingerprint reader

Other Security

Pluton security processor

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

- DASH 1.1 / 1.2
- Non-DASH

SERVICE

Warranty^{III}

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 <u>https://smartfind.lenovo.com/</u>. To learn more details of warranty policy, please access <u>https://pcsupport.lenovo.com/warranty</u>.

ACCESSORIES

Bundled Accessories***

- DP to DVI dongle
- DP to HDMI® dongle
- DP to VGA dongle
- HDMI[®] to VGA dongle
- Smart Cable (USB-A to USB-C[®])^[1]
- None

Notes:

[1] Coming soon in July 2024.

OPERATING REQUIREMENTS

Operating Environment

Temperature

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

Relative 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^{III}

Green Certifications

- (Optional) ENERGY STAR[®] 8.0
- (Optional) EPEAT™ Silver Registered
- (Optional) EPEAT[™] Gold Registered
- ErP Lot 3
- GREENGUARD[®]
- 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 <u>https://compliance.lenovo.com</u>.

Other Certifications

Other Certifications

(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, Contamination by Fluids, Salt Fog)

- 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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