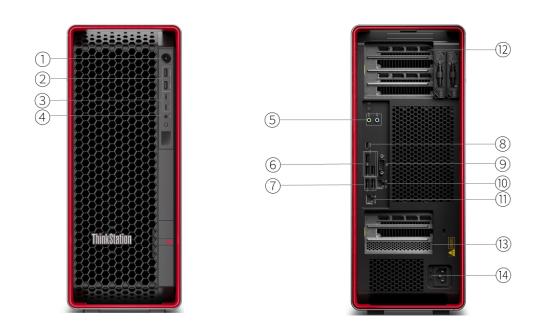
OVERVIEW



1. Power button	8. USB-C (USB 20Gbps / USB 3.2 Gen 2x2)
2. 2x USB-A (USB 10Gbps) *	9. Serial (9-pin) *
3. 2x USB-C (USB 10Gbps), data transfer only *	10. Ethernet (GbE RJ-45)
4. Headphone (3.5mm)	11. Ethernet (10GbE RJ-45)
5. 2x Audio ports (line-out and line-in)	12. Upper PCIe slots (slots 1-4)
6. 3x USB-A (USB 10Gbps)	13. Lower PCIe slots (slots 5-7)
7. 2x USB-A (Hi-Speed USB)	14. Power supply

Notes:

- Items with * are only available on selected models
- Expansion cards are optional. More ports are available through the optional expansion cards

PERFORMANCE

ThinkStation P8

Processor

Processor Family

Up to one AMD Ryzen™ Threadripper PRO 7000 WX Series processor, supports up to 96 cores; up to 5.3GHz; up to 350W TDP

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support
AMD Ryzen Threadripper PRO 7945WX	12	24	4.7GHz	5.3GHz	12MB L2 / 64MB L3	DDR5-5200
AMD Ryzen Threadripper PRO 7955WX	16	32	4.5GHz	5.3GHz	16MB L2 / 64MB L3	DDR5-5200
AMD Ryzen Threadripper PRO 7965WX	24	48	4.2GHz	5.3GHz	24MB L2 / 128MB L3	DDR5-5200
AMD Ryzen Threadripper PRO 7975WX	32	64	4.0GHz	5.3GHz	32MB L2 / 128MB L3	DDR5-5200
AMD Ryzen Threadripper PRO 7985WX	64	128	3.2GHz	5.1GHz	64MB L2 / 256MB L3	DDR5-5200
AMD Ryzen Threadripper PRO 7995WX	96	192	2.5GHz	5.1GHz	96MB L2 / 384MB L3	DDR5-5200

Processor Sockets

1x sTR5

Operating System

Operating System**

- Windows® 11 DG Windows 10 Pro 64
- Windows 11 Pro
- No operating system

Graphics

Discrete Graphics Support^[1]

Supports up to three NVIDIA® RTX 6000 Ada Generation

Discrete Graphics Offering***

Graphics	Memory	Power	Connector	Form Factor	SLI / NVLink
NVIDIA T400 4GB	4GB GDDR6	40W	3x miniDP 1.4	Single slot	None
NVIDIA T1000 8GB	8GB GDDR6	50W	4x miniDP 1.4	Single slot	None
NVIDIA RTX A4000	16GB GDDR6 with ECC	140W	4x DP 1.4a	Single slot	None
NVIDIA RTX A6000 ^[2]	48GB GDDR6 with ECC	300W	4x DP 1.4a	Dual slot	NVLink
NVIDIA RTX 4000 Ada Generation ^[3]	20GB GDDR6 with ECC	130W	4x DP 1.4a	Single slot	-
NVIDIA RTX 4500 Ada Generation ^[4]	24GB GDDR6 with ECC	210W	4x DP 1.4a	Dual slot	-
NVIDIA RTX 5000 Ada Generation	32GB GDDR6 with ECC	250W	4x DP 1.4a	Dual slot	-
NVIDIA RTX 6000 Ada Generation ^[5]	48GB GDDR6 with ECC	300W	4x DP 1.4a	Dual slot	-
AMD Radeon™ PRO W6400	4GB GDDR6	50W	2x DP 1.4	Single slot	-
AMD Radeon PRO W7600	8GB GDDR6	130W	4x DP 2.1	Single slot	-
AMD Radeon PRO W7900	48GB GDDR6 with ECC	295W	3x DP 2.1, 1x miniDP 2.1	Triple slot	-

Notes:

- [1] Discrete graphics support may vary by configurations such as processor selection or power supply wattage.
- [2], [5] Available in specific countries and regions.
- [3], [4] Available after March 2024.

Monitor Support

Monitor Support

Supports multiple displays via discrete graphics, the number of maximum monitors supported depends on the graphic card in use

Chipset

Chipset

AMD WRX90 chipset

Memory

Max Memory^[1]

Up to 1TB (8x 128GB 3DS-RDIMM)

Memory Type**

- DDR5-4800 3DS-RDIMM ECC
- DDR5-4800 RDIMM ECC

Memory Slots

8 DDR5 DIMM slots, 8 channels capable

Memory Protection

ECC

Notes:

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

Storage

Storage Support^{[1][2]}

Up to 7 drives (HDD maximum, 3x 3.5" HDD + 4x M.2 SSD); or 8 drives (M.2 SSD maximum, 8x M.2 SSD); or 6 drives (U.3 SSD maximum, 2x U.3 SSD + 4x M.2 SSD)

• 3.5" HDD up to 12TB each

- M.2 SSD up to 4TB each
- U.3 SSD up to 15.36TB each

Storage Type***

Disk Type	Interface	RPM	Offering	Security
3.5" SATA HDD	SATA 6Gb/s	7.2K	2TB / 6TB / 12TB	-
M.2 2280 SSD for Onboard / HDD Bay / Front access M.2	PCIe® NVMe®, PCIe 4.0 x4 Performance	-	512GB / 1TB / 2TB / 4TB	Opal 2.0
U.3 2.5" 15mm SSD for HDD Bay	PCIe NVMe, PCIe 4.0	-	15.36TB	Opal 2.0

Storage Controllers

Storage Controller	Туре	Interface	Cache
Integrated NVMe controller	Standard	PCIe NVMe	None
Integrated SATA controller	Standard	SATA 6.0Gb/s	None

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo storage offerings.

[2] For detailed storage bays infomation and how to upgrade optional drives for ThinkStation[®] products, please visit <u>ThinkStation Storage Upgrade Guide</u>

Removable Storage

Card Reader

- 15-in-1 card reader
- No card reader

Lenovo

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC897-Q codec

Speakers

Single speaker

Power Supply

Power Supply**

Power	Туре	Efficiency	Key Features
1000W	Fixed	92%	Autosensing, 80 PLUS Platinum qualified
1400W	Fixed	92%	Autosensing, 80 PLUS Platinum qualified

DESIGN

Mechanical

Form Factor

Tower (39L) or 4U rack, optional rack rail kit needed

Dimensions (WxDxH)^[1]

175 x 508 x 434.4 mm (6.9 x 20 x 17.1 inches, with feet)

Weight^[2]

22.7 kg (50.0 lbs, maximum configuration)

Bays

Three internal disk bays plus one front access M.2 bay:

- Bay 1 supports one 3.5" HDD, standard, optional support for two M.2 SSD or one U.3 SSD
- Bay 2 supports one 3.5" HDD, standard, optional support for two M.2 SSD or one U.3 SSD
- Bay 3 supports one 3.5" HDD, optional
- Front access M.2 bay supports one M.2 SSD, optional

M.2 Slots

Up to 8x M.2 SSD slots:

- 3 via onboard slots, PCIe 4.0 x4
- 4 via HDD bay, PCIe 4.0 x4
- 1 via front access M.2 bay, PCIe 4.0 $x4^{\scriptscriptstyle [3]}$

Expansion Slots

Supports 7 PCIe slots with 6x PCIe 5.0 slots and 1x PCIe 4.0 slot.

- Slot 1: PCIe 5.0 x16, full height, full length, 75W, double-width
- Slot 2: PCIe 5.0 x8, full height, full length, 25W
- Slot 3: PCIe 5.0 x16, full height, full length, 75W, double-width
- Slot 4: PCIe 5.0 x8, full height, full length, 25W
- Slot 5: PCIe 5.0 x16, full height, full length, 75W, double-width
- Slot 6: PCIe 5.0 x16, full height, full length, 75W
- Slot 7: PCIe 4.0 x8, full height, half length, 25W

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.

[3] Onboard M.2 slots for ThinkStation P8 are PCIe 5.0 compatible, and currently Lenovo provides M.2 PCIe 4.0 SSD.

CONNECTIVITY

Network

Onboard Ethernet

Two Ethernet, GbE + 10GbE, Realtek RTL8111EP and Marvell AQtion AQC-113, 2x RJ-45, supports Wake-on-LAN

Lenovo

Optional Ethernet

- One additional Ethernet adapter support, up to four additional 10 GbE ports
- Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe x4
- Gigabit Ethernet, Intel I350-T4, 4x RJ-45, PCIe x4
- Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe x4
- Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe x1
- 10 Gigabit Ethernet, Intel X550-T2, 2x RJ-45, PCIe x4

WLAN + Bluetooth®

- AMD Wi-Fi® 6E RZ616, 802.11ax 2x2 Wi-Fi + Bluetooth 5.3^[1]
- No WLAN and Bluetooth

Notes:

[1] Wi-Fi 6E full features might be limited by country-level restrictions.

Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

6GHz Wi-Fi 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi 6E, and the regional regulatory certifications & spectrum allocation.

Bluetooth 5.3 operation requires Windows 11. For more information please see <u>General Bluetooth Support Information on</u> <u>Microsoft®</u>.

Ports⁽¹⁾

Front Ports

1x headphone / microphone combo jack (3.5mm)

Optional Front Ports

- 2x USB-C[®] (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2), one Always On

Rear Ports^[2]

- 1x USB-C (USB 20Gbps / USB 3.2 Gen 2x2), data transfer only
- 3x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x Ethernet (10GbE RJ-45)
- 1x Ethernet (GbE RJ-45)
- 1x line-in (3.5mm)
- 1x line-out (3.5mm)
- 2x USB-A (Hi-Speed USB / USB 2.0)

Optional Rear Ports

- 1x serial (via cable)
- 2x PS/2 (via cable)

Notes:

[1] The transfer speed of the 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 the theoretical speed.

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

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified

Physical Locks

- (Optional) Access panel lock kit with common key
- (Optional) Access panel lock kit with unique key
- Kensington[®] Security Slot[™], 3 x 7 mm

Chassis Intrusion Switch

Chassis intrusion switch

BIOS Security

- Administrator password
- Power-on password

Lenovo

- UEFI Secure Boot
- Self-healing BIOS

MANAGEABILITY

System Management

System Management

AMD PRO Manageability

Diagnostic

Diagnostic

- ThinkStation Diagnostics
- Front diagnostic panel with QR code

SERVICE

Warranty

Base Warranty**

- 1-year limited onsite service
- 2-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>.

ENVIRONMENTAL

Operating Environment

Temperature

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

Altitude

- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

Humidity

- Operating: 20% to 80%
- Storage: 10% to 90%

CERTIFICATIONS

Green Certifications^{III}

Green Certifications

- (Optional) ENERGY STAR[®] 8.0
- (Optional) EPEAT[™] Gold Registered^[2]
- (Optional) TCO Certified 9.0
- GREENGUARD®
- RoHS compliant

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or selfdeclaration.

[2] EPEAT is registered where applicable, please see epeat.net for registration status by country.

ISV Certifications

ISV Certifications

Please visit ISV certifications for Lenovo Workstations

- 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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