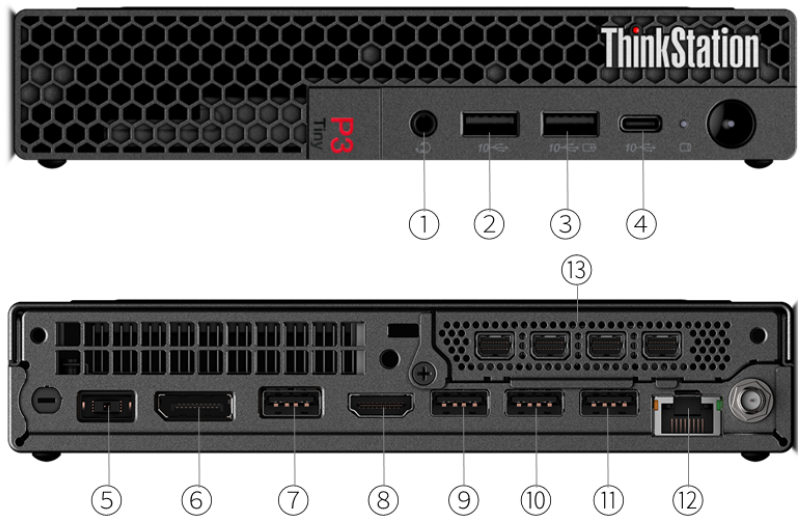


OVERVIEW



1. Headphone / microphone combo jack (3.5mm)	8. HDMI 2.1 TMDs
2. USB-A (USB 10Gbps)	9. USB-A (USB 5Gbps), with Smart Power On
3. USB-A (USB 10Gbps), Always On	10. USB-A (USB 10Gbps)
4. USB-C (USB 10Gbps), data transfer only	11. USB-A (USB 10Gbps)
5. Power connector	12. Ethernet (RJ-45)
6. DisplayPort 1.4	13. 2 Punch out ports or expansion card *
7. USB-A (USB 5Gbps)	

Notes:

- Items with * are only available on selected models

PERFORMANCE

Processor

Processor Family

Up to one Intel® Core™ i3 / i5 / i7 / i9 (13th Gen or 14th Gen) processor; supports up to 24 cores; up to 5.8GHz

Processor**[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i3-13100	4 (4 P-core + 0 E-core)	8	P-core 3.4GHz	P-core 4.5GHz	5MB L2 Cache / 12MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 730
Core i3-13100T	4 (4 P-core + 0 E-core)	8	P-core 2.5GHz	P-core 4.2GHz	5MB L2 Cache / 12MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 730
Core i5-13400	10 (6 P-core + 4 E-core)	16	P-core 2.5GHz / E-core 1.8GHz	P-core 4.6GHz / E-core 3.3GHz	9.5MB L2 Cache / 20MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 730
Core i5-13400T	10 (6 P-core + 4 E-core)	16	P-core 1.3GHz / E-core 1.0GHz	P-core 4.4GHz / E-core 3.0GHz	9.5MB L2 Cache / 20MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 730
Core i5-13500	14 (6 P-core + 8 E-core)	20	P-core 2.5GHz / E-core 1.8GHz	P-core 4.8GHz / E-core 3.5GHz	11.5MB L2 Cache / 24MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 770
Core i5-13500T	14 (6 P-core + 8 E-core)	20	P-core 1.6GHz / E-core 1.2GHz	P-core 4.6GHz / E-core 3.2GHz	11.5MB L2 Cache / 24MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 770
Core i5-13600	14 (6 P-core + 8 E-core)	20	P-core 2.7GHz / E-core 2.0GHz	P-core 5.0GHz / E-core 3.7GHz	11.5MB L2 Cache / 24MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 770
Core i5-13600T	14 (6 P-core + 8 E-core)	20	P-core 1.8GHz / E-core 1.3GHz	P-core 4.8GHz / E-core 3.4GHz	11.5MB L2 Cache / 24MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 770
Core i7-13700	16 (8 P-core + 8 E-core)	24	P-core 2.1GHz / E-core 1.5GHz	Max Turbo up to 5.2GHz / P-core 5.1GHz / E-core 4.1GHz	24MB L2 Cache / 30MB Intel® Smart Cache	DDR5-5600	Intel® UHD Graphics 770
Core i7-13700T	16 (8 P-core + 8 E-core)	24	P-core 1.4GHz / E-core 1.0GHz	Max Turbo up to 4.9GHz / P-core 4.8GHz / E-core 3.6GHz	24MB L2 Cache / 30MB Intel® Smart Cache	DDR5-5600	Intel® UHD Graphics 770
Core i9-13900	24 (8 P-core + 16 E-core)	32	P-core 2.0GHz / E-core 1.5GHz	Max Turbo up to 5.6GHz / P-core 5.2GHz / E-core 4.2GHz	32MB L2 Cache / 36MB Intel® Smart Cache	DDR5-5600	Intel® UHD Graphics 770
Core i9-13900T	24 (8 P-core + 16 E-core)	32	P-core 1.1GHz / E-core 0.8GHz	Max Turbo up to 5.3GHz / P-core 5.1GHz / E-core 3.9GHz	32MB L2 Cache / 36MB Intel® Smart Cache	DDR5-5600	Intel® UHD Graphics 770
Core i3-14100	4 (4 P-core + 0 E-core)	8	P-core 3.5GHz	P-core 4.7GHz	5MB L2 Cache / 12MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 730
Core i3-14100T	4 (4 P-core + 0 E-core)	8	P-core 2.7GHz	P-core 4.4GHz	5MB L2 Cache / 12MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 730
Core i5-14400	10 (6 P-core + 4 E-core)	16	P-core 2.5GHz / E-core 1.8GHz	P-core 4.7GHz / E-core 3.5GHz	9.5MB L2 Cache / 20MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 730
Core i5-14400T	10 (6 P-core + 4 E-core)	16	P-core 1.5GHz / E-core 1.1GHz	P-core 4.5GHz / E-core 3.2GHz	9.5MB L2 Cache / 20MB Intel®	DDR5-4800	Intel® UHD Graphics 730

	core)				Smart Cache		
Core i5-14500	14 (6 P-core + 8 E-core)	20	P-core 2.6GHz / E-core 1.9GHz	P-core 5.0GHz / E-core 3.7GHz	11.5MB L2 Cache / 24MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 770
Core i5-14500T	14 (6 P-core + 8 E-core)	20	P-core 1.7GHz / E-core 1.2GHz	P-core 4.8GHz / E-core 3.4GHz	11.5MB L2 Cache / 24MB Intel® Smart Cache	DDR5-4800	Intel® UHD Graphics 770
Core i5-14600	14 (6 P-core + 8 E-core)	20	P-core 2.7GHz / E-core 2.0GHz	P-core 5.2GHz / E-core 3.9GHz	20MB L2 Cache / 24MB Intel® Smart Cache	DDR5-5600	Intel® UHD Graphics 770
Core i5-14600T	14 (6 P-core + 8 E-core)	20	P-core 1.8GHz / E-core 1.3GHz	P-core 5.1GHz / E-core 3.6GHz	20MB L2 Cache / 24MB Intel® Smart Cache	DDR5-5600	Intel® UHD Graphics 770
Core i7-14700	20 (8 P-core + 12 E-core)	28	P-core 2.1GHz / E-core 1.5GHz	Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz	28MB L2 Cache / 33MB Intel® Smart Cache	DDR5-5600	Intel® UHD Graphics 770
Core i7-14700T	20 (8 P-core + 12 E-core)	28	P-core 1.3GHz / E-core 0.9GHz	Max Turbo up to 5.2GHz / P-core 5.0GHz / E-core 3.7GHz	28MB L2 Cache / 33MB Intel® Smart Cache	DDR5-5600	Intel® UHD Graphics 770
Core i9-14900	24 (8 P-core + 16 E-core)	32	P-core 2.0GHz / E-core 1.5GHz	Max Turbo up to 5.8GHz / P-core 5.4GHz / E-core 4.3GHz	32MB L2 Cache / 36MB Intel® Smart Cache	DDR5-5600	Intel® UHD Graphics 770
Core i9-14900T	24 (8 P-core + 16 E-core)	32	P-core 1.1GHz / E-core 0.8GHz	Max Turbo up to 5.5GHz / P-core 5.1GHz / E-core 4.0GHz	32MB L2 Cache / 36MB Intel® Smart Cache	DDR5-5600	Intel® UHD Graphics 770

Processor Sockets

1x FCLGA1700

Notes:

[1] Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see <http://www.intel.com/technology/turboboost/> for more information.

AI (Artificial Intelligence)

AI PC Category^[1]

AI-Ready Workstations

Notes:

[1] With scalable configurations of higher-performance CPUs and professional NVIDIA® RTX GPUs, in addition to advantage of the same modern AI PC technology, AI-Ready workstation power the demanding AI consumption & development workflows.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 DG Windows® 10 Pro 64
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 9.4 (certified only, for detailed and latest information, please visit [Red Hat Certified Hardware](#))
- No preload operating system

Graphics

Integrated Graphics**

- Intel® UHD Graphics 730
- Intel® UHD Graphics 770

Discrete Graphics Support

Supports up to one NVIDIA® T1000 8GB

Discrete Graphics Offering

Graphics	Memory	Power	Connector	SLI / NVLink
NVIDIA® RTX A400	4GB GDDR6	50W	4x miniDP 1.4a	None
NVIDIA® RTX A1000	8GB GDDR6	50W	4x miniDP 1.4a	None
NVIDIA® T1000 8GB	8GB GDDR6	50W	4x miniDP 1.4	None
NVIDIA® T1000	4GB GDDR6	50W	4x miniDP 1.4	None
NVIDIA® T400 4GB	4GB GDDR6	40W	3x miniDP 1.4	None

Monitor Support

Monitor Support

Onboard graphics supports up to 4 independent displays via (onboard DP, onboard HDMI®, punch out port 1 [VGA / HDMI® / DP / USB-C®], and punch out port 2 [VGA / HDMI® / DP]); the number of maximum monitors also depends on the discrete graphic card in use

Chipset

Chipset

Intel® Q670 chipset

Memory

Max Memory^[1]

Up to 96GB (2x 48GB DDR5 SODIMM)

Memory Type**

- DDR5-4800 SODIMM non-ECC, maximum transfer speeds of up to 4800 MT/s
- DDR5-5600 SODIMM non-ECC, maximum transfer speeds of up to 5200 MT/s^[2]

Memory Slots

Two DDR5 SODIMM slots, dual-channel capable

Notes:

- [1] The max memory is based on the test results with current Lenovo® memory offerings.
- [2] System comes with DDR5-5600 memory and some configurations will run at 5200 MT/s due to the memory support capability of processor.

Storage

Max Storage Support^[1]

Up to two drives, 2x M.2 SSD, up to 2TB each

Storage Type

Disk Type	Interface	Offering	Security
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	256GB	Opal 2.0
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4 Performance	512GB / 1TB / 2TB	Opal 2.0

Storage Controllers

Storage Controller	Type	Interface	RAID	Cache
Integrated NVMe® controller	Standard	PCIe® NVMe®	0/1	None

Notes:

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

Removable Storage

Optical Support

No optical support

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC256VB codec

Speakers**

- Single speaker
- Single speaker, premium

Power Supply

Power Supply**^[1]

Power	Type	Efficiency	Key Features
170W	Adapter	90%	100V - 240V
230W	Adapter	90%	100V - 240V
300W	Adapter	90%	100V - 240V

Notes:

^[1] When using Tiny together with a TIO monitor, the power adapter must meet the minimum requirements. For detailed information, please refer to [ThinkStation® P3 Tiny Minimum PSU Requirement Matrix](#)

DESIGN

Mechanical^[1]

Form Factor

Tiny (1L)

Dimensions (WxDxH)^[2]

Models	Dimensions
Tiny only	179 x 182.9 x 37mm with rubber feet (7.0 x 7.2 x 1.5 inches with rubber feet)
Tiny & ODD	204.2 x 186.6 x 64 mm with rubber feet (8.04 x 7.35 x 2.52 inches with rubber feet)

Weight^[3]

Models	Weight
Tiny only	1.4 kg (3 lbs, maximum configuration)

Bays

No bays

M.2 Slots

- Two M.2 PCIe® Gen 4x4 slots (for SSD)
- One M.2 slot (for WLAN)

Expansion Slots

One PCIe® 4.0 x8, low-profile^[4]

EOU

Tool-less design for side cover and memory

Notes:

^[1] The actual data transfer rate of the following PCIe® interface also depends on the capabilities of the connected PCIe® device. The listed values represent theoretical maximums.
PCIe® 3.0 (x1 / x2 / x4 / x8 / x16): 1 GB/s (8 Gbps) / 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps);
PCIe® 4.0 (x1 / x2 / x4 / x8 / x16): 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps) / 32 GB/s (256 Gbps);
PCIe® 5.0 (x1 / x2 / x4 / x8 / x16): 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps) / 32 GB/s (256 Gbps) / 64 GB/s (512 Gbps).

^[2] The system dimensions may vary depending on configurations.

^[3] 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.

[4] Supports discrete graphic card by x16 riser card (x8 signal), and supports Ethernet card / Thunderbolt 4 / serial card by x4 riser card. Riser card comes with the expansion cards.

CONNECTIVITY

Network

WLAN + Bluetooth®**[1]

- Realtek® Wi-Fi® 6 RTL8852BE, 802.11ax Dual Band 2x2 Wi-Fi® + Bluetooth® 5.1
- Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.2 hardware ready)
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1 (Bluetooth® 5.3 hardware ready), Intel® vPro® technology support^[2]
- No WLAN and Bluetooth®

Onboard Ethernet

Gigabit Ethernet, Intel® Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

Optional Ethernet

One additional ethernet adapter support, up to one additional 2.5GbE port

- Gigabit Ethernet, Intel® I350-T2, 2x RJ-45, PCIe® x4
- Gigabit Ethernet, Intel® I350-T4, 4x RJ-45, PCIe® x4
- Gigabit Ethernet, Broadcom BCM5720, 2x RJ-45, PCIe® x1
- Gigabit Ethernet, Broadcom BCM5719, 4x RJ-45, PCIe® x4
- 2.5 Gigabit Ethernet, Realtek® RTL8125BGS, 1x RJ-45, BTB

Notes:

[1] Wi-Fi® operation (including Wi-Fi® 6, Wi-Fi® 6E, Wi-Fi® 7, etc.) is subject to the regulatory requirements of each country. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] Bluetooth® 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi® 6E is only enabled on Windows® 11 and operates as Wi-Fi® 6 with Windows® 10.

Ports^[1]

Front Ports

- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), data transfer only
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)

Rear Ports

- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), one supports Smart Power On
- 1x HDMI® 2.1 TMDS
- 1x DisplayPort™ 1.4
- 1x Ethernet (GbE RJ-45)

Optional Rear Ports

- Punch out port 1 (one of VGA / DisplayPort™ / HDMI® / serial / USB-C® 5Gbps with DisplayPort™ and PD 3.0 functions)
- Punch out port 2 (one of VGA / DisplayPort™ / HDMI® / serial / RJ-45)
- 1x Thunderbolt™ 4 (via additional PCIe® adapter)
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1), occupies port 1 and 2
- 4x USB-A (USB 5Gbps / USB 3.2 Gen 1), share 5Gbps bandwidth, occupy port 1 and 2
- 2x GbE RJ-45, via additional PCIe® adapter
- 4x GbE RJ-45, via additional PCIe® adapter
- 4x serial (via 4-port serial expansion card, PCIe® x1)

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.

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks

- (Optional) Cable lock
- Kensington® Security Slot™, 3 x 7 mm

Chassis Intrusion Switch

Chassis intrusion switch

BIOS Security

- Administrator password
- Hard disk password
- Power-on password
- Boot sequence control
- Boot without keyboard and mouse
- Certificate based BIOS management
- Cover presence switch
- Individual USB port disablement
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

System Management

System Management^{[1][2]}

- Intel® vPro® Enterprise with Intel® AMT 16
- Non-vPro®

Notes:

[1] Intel® vPro® offers a superset of DASH's defined capabilities.

[2] Intel® vPro® platform require an eligible Intel® processor, a supported operating system, Intel® LAN and/or WLAN silicon, firmware enhancements, and other hardware and software necessary to deliver the manageability use cases, security features, system performance, and stability that define the platform. See [Intel® vPro® Platform](#) for details.

SERVICE

Warranty^[1]

Base Warranty**

- 1-year limited onsite service
- 2-year limited onsite service
- 3-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 <https://smartfind.lenovo.com/>. To learn more details of warranty policy, please access <https://support.lenovo.com/warrantylookup/warrantypolicy>.

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)

Altitude

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

Relative Humidity

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

ENVIRONMENTAL**Sustainability****Material^[1]**

- 65% PCC ABS bezel
- 95% PCC ABS wired USB keyboard/mouse top/bottom cover
- 95% PCC thermal shell with OBP
- 90% PIC recycled plastic EPE cushion
- 30% OBP used in bag
- FSC certified paper in packaging

Notes:

[1] PCC: Post Consumer Content, recycled materials from customers.

PIC: Post Industry Content, recycled materials from internal factories.

EPE: Expanded Polyethylene.

OBP: Ocean Bound Plastic, reducing plastic spill into the sea.

FSC: Forest Stewardship Council.

CERTIFICATIONS**Green Certifications^[1]****Green Certifications**

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered^[2]
- ErP Lot 3
- 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 <https://compliance.lenovo.com>.

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

Other Certifications**Mil-Spec Test**

MIL-STD-810H military test passed

ISV Certifications**ISV Certifications**

Please visit [ISV certifications for Lenovo® Workstations](#)

- Feature with ** means that only one option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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