## ThinkCentre M90s Gen 5 12V4000SUS

## PERFORMANCE

Processor Intel® Core™ i5-14500, 14C (6P + 8E) / 20T, P-core 2.6 / 5.0GHz, E-core 1.9 / 3.7GHz, 24MB

**Graphics** Intel® Arc<sup>™</sup> A310 LP 4GB GDDR6

Chipset Intel® Q670 Chipset

Memory<sup>[1]</sup> 2x 16GB UDIMM DDR5-4400

Memory Slots Four DDR5 UDIMM slots, dual-channel capable

Max Memory<sup>[2]</sup> Up to 128GB DDR5

Storage 512GB SSD M.2 2280 PCIe<sup>®</sup> 4.0x4 NVMe<sup>®</sup> Opal 2.0

#### Storage Support<sup>[3][4]</sup>

- Up to four drives, 1x 3.5" HDD + 1x 2.5" HDD + 2x M.2 SSD • 3.5" HDD up to 2TB
- $\bullet$  2.5" HDD bay is only for customer self upgrade
- M.2 SSD up to 2TB each

### Card Reader

None

#### Optical

DVD±RW

#### Audio Chip

High Definition (HD) Audio, Realtek® ALC897Q-CG codec

Speakers

## Power Supply

310W 92%

## DESIGN

## Keyboard

USB Traditional Keyboard, Black, English

Mouse

USB Calliope Mouse, Black

#### **Optional Bay**

None

#### **Expansion Slots**

- One PCIe<sup>®</sup> 4.0 x16 (x4 signal), low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe\* 4.0 x16, low-profile, length  $\leq$  155mm, height  $\leq$  70mm
- One PCIe<sup>®</sup> 3.0 x1, low-profile, length  $\leq$  155mm, height  $\leq$  70mm
- Three M.2 slots (one for WLAN, two for SSD)

#### Case Color Black Stand

None **Dust Filter** None **Pen** Pen Not Supported

Form Factor

#### Dimensions (WxDxH)<sup>[5]</sup>

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

Weight<sup>[6]</sup> Around 5.3 kg (11.7 lbs)

## CONNECTIVITY

Ethernet

Integrated 100/1000M

#### WLAN + Bluetooth®

Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 + BT5.3, vPro®

#### WWAN

Non-WWAN

#### Front Ports

- 1x USB-C\* (USB 10Gbps / USB 3.2 Gen 2), with 15W charging
- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 2x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)
- 1x microphone (3.5mm)

#### **Rear Ports**

- 4x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x HDMI<sup>®</sup> 2.1 TMDS
- 2x DisplayPort<sup>™</sup> 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

#### **Optional Rear Ports (configured)**

2x DisplayPort<sup>™</sup> 1.4a on Intel<sup>®</sup> Arc<sup>™</sup> A310 LP Graphics

#### **SECURITY & PRIVACY**

#### Security Chip

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

#### Fingerprint Reader

No fingerprint reader

#### Physical Locks

Kensington<sup>®</sup> Security Slot<sup>™</sup>, 3 x 7 mm
Padlock Loop

#### Smart Cable Clip

None

Chassis E-Lock None

Chassis Intrusion Switch None

## MANAGEABILITY

System Management<sup>[7]</sup> Intel<sup>®</sup> vPro<sup>®</sup> Enterprise

### SERVICE

Base Warranty 3-year, Onsite

Included Upgrade None

## **CERTIFICATIONS**

#### **Green Certifications**

- ENERGY STAR® 8.0
- EPEAT<sup>™</sup> Gold Registered
- ErP Lot 3
- GREENGUARD<sup>®</sup>
- RoHS compliant
- TCO Certified 9.0

#### Mil-Spec Test

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

Lenovo

PSRFF

Reference

Product Specifications

## SOFTWARE

#### **Operating System**

Windows® 11 Pro, English

#### **Bundled Software**

None

#### ACCESSORIES

Bundled Accessories

#### MODEL

TopSeller	: Yes	Announce Date	: 2024-08-01
EAN / UPC / JAN	: 198154900311	End of Support	: 2030-11-15

Note:

[1] Installed memory is actually DDR5-5600 but may run as DDR5-4400

depending on the memory support capability of Intel. [2] The max memory is based on the test results with current Lenovo

[2] The max capacity of each disk type is based on the test.....

· Lenovo reserves the right to change specifications without notice.

To see more note information, please link to

https://psref.lenovo.com/Detail/2449?M=12V4000SUS

## Premier Support - A direct 24x7x365 line to our most elite technicians.



Advanced technical support, 24x7x365, in more than 100 markets



Comprehensive hardware & OEM software support



Single point of contact for simplified end-to-end case management



**Technical Account Managers for** proactive relationship and escalation management

Priority on service delivery and repair parts



Lenovo Service Connect Portal for customized reporting and product support

# Accidental Damage Protection - Protection of your PC from the unexpected.

Experience shows that a significant portion of devices may be damaged (and not covered under warranty) in the first three years. Lenovo's Accidental Damage Protection service covers accidents beyond the system warranty such as drops, spills, bumps and even electrical surges. Make sure your new device has maximum protection, avoid unplanned costs and get peace of mind.

## Base Warranty - Included with the systems you purchase, default 1- or 3-year coverage window.

## Warranty Extensions & Upgrades - Service and protection that's right for your circumstances.

Pick Up & Return Courier

Technician Installed Customer

Onsite Support

- Replaceable Unit Service
- International Warranty Upgrade

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# **Recommended** Accessories



## Kensington MicroSaver 2.0 Cable Lock from Lenovo

Protect your device. Lenovo offers the latest standard in device security - the MicroSaver 2.0 Cable Lock From Lenovo. Engineered to be the smallest, strongest lock for laptops and other devices, the MicroSaver 2.0 re...

# **Recommended Services**

BEST	4Y Premier Support Plus upgrade from 3Y Onsite (5WS1L39206)	
BETTER	3Y Premier Support Plus upgrade from 3Y Onsite (5WS1L39278)	
GOOD	3Y Premier Support Upgrade from 3Y Onsite (5WSOV07841)	

For a full list of accessories and services, please visit: https://smartfind.Lenovo.com

