ThinkCentre M90s Gen 4 12HQ000HMZ

PSREF
Product Specifications Reference

PERFORMANCE

Processor[1]
Intel® Core™ i7-13700, 16C (8P + 8E) / 24T, Max Turbo up to 5.2GHz, P-core 2.1 / 5.1GHz, E-core 1.5 / 4.1GHz, 30MB

Graphics
Integrated Intel® UHD Graphics 770

Chipset
Intel® Q670 Chipset

Memory
2x 16GB UDIMM DDR5-4400

Memory Slots
Four DDR5 UDIMM slots, dual-channel capable

Max Memory[2]
Up to 128GB DDR5

Storage
512GB SSD M.2 2280 PCIe® 4.0x4 Performance NVMe® Opal 2.0

Storage Support[3]
Up to four drives, 1x 2.5"/3.5" HDD + 1x 2.5" HDD + 2x M.2 SSD
• 2.5" HDD up to 1TB
• 3.5" HDD up to 2TB
• M.2 SSD up to 2TB each

Card Reader
3-in-1 Card Reader

Optical
DVD±RW

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

Speakers
1Wx1

Power Supply
310W 92%

DESIGN

Keyboard
USB Traditional Keyboard, Black, Swiss

Mouse
USB Calliope Mouse, Black

Optional Bay
Optional 2.5" Bay

Expansion Slots
- One PCIe® 4.0 x16 (x4 signal), low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe® 4.0 x16, low-profile, length ≤ 155mm, height ≤ 70mm
- One PCIe® 3.0 x1, low-profile, length ≤ 155mm, height ≤ 70mm
- Three M.2 slots (one for WLAN, two for SSD)

Case Color
Black

Stand
None

Dust Filter
None

Form Factor
SFF (8.2L)

Dimensions (WxDxH)[4]
92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)

Weight[5]
Around 5.3 kg (11.7 lbs)

CONNECTIVITY

Ethernet
Integrated 100/1000M

WLAN + Bluetooth®[6]
Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 + BT5.1, vPro®

Front Ports
- 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
- 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 (configured)
1x card reader

Rear Ports
- 4x USB 3.2 Gen 1
- 1x HDMI® 2.1 TMDS
- 2x DisplayPort™ 1.4a (HBR2, DSC)
- 1x Ethernet (RJ-45)
- 1x line-out (3.5mm)

Optional Rear Ports (configured)
None

SECURITY & PRIVACY

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

Fingerprint Reader
No fingerprint reader

Physical Locks
- Kensington® Security Slot™, 3 x 7 mm
- Padlock Loop

Smart Cable Clip
None

Chassis E-Lock
None

Chassis Intrusion Switch
Chassis Intrusion Switch

MANAGEABILITY

System Management[7][8]
Intel® vPro® Enterprise

SERVICE

Base Warranty
3-year, Onsite

Included Upgrade
1Y Premier Support from 3Y Onsite WHB (CPN)

CERTIFICATIONS

Green Certifications[9]
- ENERGY STAR® 8.0
- EPEAT™ Silver Registered
- ErP Lot 3
- 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, Fungus, Solar Radiation, Contamination by Fluids, Salt Fog)

SOFTWARE

Operating System
Windows® 11 Pro, WE (EN/FR/DE/NL/IT)

Bundled Software
None

ACCESSORIES

Bundled Accessories
None

MODEL

TopSeller	: Yes	**Announce Date**	: 2024-04-09
EAN / UPC / JAN	: 0198153609185	**End of Support**	: 2029-11-27

Note:
[1] Intel Max Turbo frequency will vary depending on.....

· Lenovo reserves the right to change specifications without notice.

To see more note information, please link to
https://psref.lenovo.com/Detail/2325?M=12HQ000HMZ

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

- Advanced technical support, 24x7x365, in more than 100 markets
- Technical Account Managers for proactive relationship and escalation management
- Comprehensive hardware & OEM software support
- Priority on service delivery and repair parts
- Single point of contact for simplified end-to-end case management
- 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
- Onsite Support
- Technician Installed Customer
- Replaceable Unit Service
- International Warranty Upgrade

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Recommended Accessories



Lenovo USB Soundbar

0A36190

The Lenovo USB Soundbar allows you to add stereo sound to your compatible Lenovo ThinkVision Monitor without having to sacrifice valuable desk space. The stylish Lenovo USB Soundbar is an excellent choice for adding ...

Recommended Services

BEST	5Y Lenovo Support (Premier Support + KYD + International Upg) (5PS1J31179)
BETTER	4Y Lenovo Support (Premier Support + KYD + International Upg) (5PS1J31175)
GOOD	3Y Premier Support upgrade from 1Y Premier Support (5WS1C83305)

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

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