ThinkCentre M90a Gen 5 12SH002NMZ

Lenovo PSREF Product Specifications Reference

PERFORMANCE

Processor

Intel® Core™ i7-14700, 20C (8P + 12E) / 28T, Max Turbo up to 5.4GHz. P-core 2.1 / 5.3GHz. E-core 1.5 / 4.2GHz. 33MB

Graphics

Integrated Intel® UHD Graphics 770

Chipset

Intel® Q670 Chipset

Memory

2x 16GB SO-DIMM DDR5-5600

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Max Memory[1]

- Models with Core i3/i5: Up to 64GB DDR5-4800
- Models with Core i7: Up to 64GB DDR5-5200

Storage

1TB SSD M.2 2280 PCIe® 4.0x4 Performance NVMe® Opal 2.0

Storage Support[2]

Models with Intel® UHD graphics:

Up to two drives, 2x M,2 SSD

• M.2 SSD up to 2TB each

Card Reader

3-in-1 Card Reader

Audio Chip

High Definition (HD) Audio, Realtek® ALC233NL-VB2-CG codec

Speakers

3Wx2

Camera

5.0MP + IR Hybrid

Microphone

2x, Array

Power Supply

180W 90%

DESIGN

Display^[3]

23.8" FHD (1920x1080) IPS Anti-glare 250nits, 60Hz, 72% NTSC, software low blue light, flick free, touch

Touchscreen

10-point Multi-touch

Keyboard

USB Traditional Keyboard, Black, Swiss

Mouse

USB Calliope Mouse, Black

Expansion Slots

Models with Intel® UHD graphics: Three M.2 slots (one for WLAN, two for SSD)

Case Color

Black

Stand

Full Function Monitor Stand

Mounting

VESA mount

Form Factor

AIO (23.8 inches)

Dimensions (WxDxH)[4]

 $539.6 \times 217.31 \times 393.66-501.85 \text{ mm}$ (21.24 x 8.56 x 15.50-19.76 inches)

Weight^[5]

Around 8.13 kg (17.9 lbs)

CONNECTIVITY

Ethernet

Integrated 100/1000M

WLAN + Bluetooth®

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

Rear Por

- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with data transfer and 15W charging
- 3x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x HDMI® (HDMI® in 1.4 / HDMI® out 2.1 TMDS combo port)
- 1x DisplayPort[™] 1.4
- 1x Ethernet (RJ-45)

Optional Rear Ports (configured)

1x serial

Right Ports

- 3x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)

Optional Right Ports (configured)

1x card reader

Optional Ports (configured)

1x Serial

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

Chassis Intrusion Switch

Chassis Intrusion Switch

Other Security

ThinkShutter camera cover (camera models)

MANAGEABILITY

System Management^[6]

Intel® vPro® Enterprise

SERVICE

Base Warranty

3-year, Onsite

Included Upgrade

3Y Premier Support upgrade from 3Y Onsite

CERTIFICATIONS

Green Certifications

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 3
- GREENGUARD®
- RoHS compliant
- TCO Certified 9.0
- TCO edge

Other Certifications

- TÜV Rheinland® Low Blue Light (Software Solution)
- TÜV Rheinland® Flicker Free
- UL Anti-dust

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)

MODEL

 TopSeller
 : Yes
 Announce Date
 : 2024-08-06

 EAN / UPC / JAN
 : 0198154954574
 End of Support
 : 2030-08-16

Nota.

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

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

[3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA,

[4] The system dimensions may vary depending on configurations.

[5] 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.

[61 Intel vPro offers a superset of DASH's defined capabilities.

· Lenovo reserves the right to change specifications without notice.

To see more note information, please link to

https://psref.lenovo.com/Detail/2409?M=12SH002NMZ

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



Kensington MicroSaver 2.0 Cable Lock from Lenovo

4XE0N80914

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	5Y Premier Support upgrade from 3Y Premier Support (5WSOW86712)
BETTER	4Y Premier Support upgrade from 3Y Premier Support (5WS0W86757)

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

