ThinkCentre M90a Gen 5

PSREF

Product Specifications Reference

PERFORMANCE

Processor

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

Graphics

Integrated Intel® UHD Graphics 770

Chipset

Intel® Q670 Chipset

Memory^[1]

1x 8GB SO-DIMM DDR5-4800

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Max Memory[2]

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

Storage

256GB SSD M.2 2280 PCIe® 4.0x4 NVMe® Opal 2.0

Storage Support[3]

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[4]

23.8" FHD (1920x1080) IPS Anti-glare 250nits, 60Hz, 99% sRGB, hardware low blue light, flicker free, eyesafe, non-touch

Kevboard

USB Traditional Keyboard, Black, English

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

UltraFlex V Stand

Mounting

VESA mount

Pen

Pen Not Supported

Form Factor

AIO (23.8 inches)

Dimensions (WxDxH)[5]

Lowest in flat mode: $539.6 \times 344.19 \times 227.54 \text{ mm}$ (21.24 x $13.55 \times 8.96 \text{ inches}$)

Highest in vertical mode: 539.6 x 252.60 x 472.00 mm (21.24 x 9.94 x 18.58 inches)

Weight^[6]

Around 7.83 kg (17.3 lbs)

CONNECTIVITY

Ethernet

Integrated 100/1000M

WLAN + Bluetooth®

Intel® Wi-Fi® 6 AX201, 802.11ax 2x2 + BT5.2

WWAN

Non-WWAN

Rear Ports

- 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)

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

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[7]

Non-vPro®

SERVICE

Base Warranty

3-year, 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

- Eyesafe® Certified 2.0
- TÜV Rheinland® Low Blue Light (Hardware 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. English

MODEL

 TopSeller
 : Yes
 Announce Date
 : 2024-02-20

 EAN / UPC / JAN
 : 197530792557
 End of Support
 : 2030-08-16

Note:

- [1] Installed memory is actually DDR5-5600 but may run as DDR5-4800 depending on the memory support capability of Intel.
- [2] The max memory is based on the test results with current Lenovo memory offerings.
- [3] The max capacity of each disk type is based on the test results with current Lenovo storage offerings.
- [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA,
- [5] The system dimensions may vary depending on configurations.
- [6] 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.
- [7] 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=12SH001AAU

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

Technical Account Managers for proactive relationship and escalation management

Comprehensive hardware & OEM software support

Advanced technical support, 24x7x365, in

more than 100 markets

Priority on service delivery and repair parts

Single point of contact for simplified end-toend case management Lenovo Service Connect Portal for customized reporting and product support

Lenovo USB-C to Ethernet Adapter

The Lenovo USB-C to Ethernet Adapter is quick and easy way to connect your USB-C enabled notebook to Ethernet connections. It's ideal for imaging of systems or transferring large files quickly.

Recommended Accessories

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

Recommended Services

BEST	4Y Premier Support Plus upgrade from 3Y Onsite (5WS1L42245)
BETTER	3Y Premier Support Plus upgrade from 3Y Onsite (5WS1L42289)
GOOD	3Y Premier Support upgrade from 3Y Onsite (5WS0V08537)

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