

ThinkCentre M90a Pro Gen 6

Powering through spreadsheets, simulations, or code compilations becomes effortless with up to Intel® Core™ Ultra 9 Processor—a force engineered for modern multitasking. Paired with up to 64GB DDR5-5600 memory, this desktop responds instantly to complex tasks like financial modeling, large dataset manipulation, or real-time architectural rendering. For professionals working in visual effects, CAD, or content creation, the optional NVIDIA® GeForce RTX™ 4050 graphics card unlocks accelerated workflows and enhanced realism. Together, these capabilities provide a fluid, uninterrupted experience, perfectly calibrated for desk-based professionals who demand consistent performance across diverse software environments.



Empowering the modern workforce with a streamlined desktop experience

The ThinkCentre M Series AIOs offer seamless productivity with powerful processors, ample memory, and vibrant display. Space-saving design and versatile connectivity cater to the diverse needs of modern professionals.

From color-accurate photo editing to multitasking across dashboards, the 27" QHD display with 400nits brightness and 99% sRGB delivers clarity and precision. Seamless integration with high-speed networks and peripherals is made easy through Intel® Wi-Fi® 7, Thunderbolt™ 4/USB4, HDMI, and DisplayPort connectivity options.

With up to 6TB SSD storage, creative assets and project files are housed securely, while Discrete TPM 2.0 and optional Smart Human Presence Detection ensure data protection and intelligent user-aware privacy.

Designed for crisp web conferencing, it delivers High Definition (HD) Audio through stereo speakers, while the optional dual-microphone array captures voices clearly—ensuring professionals sound as sharp as they look in every virtual meeting.

Lenovo Services

Lenovo delivers tailored sustainability services, devices, and infrastructure solutions from our broad portfolio, working closely with you to support your target outcomes across the IT lifecycle..



On-site Service

- On-site support if needed
- Normally next business day service
- Agreed appointment times

Accessories

Lenovo Go Wired Speakerphone

- Microsoft Teams certified, omni-directional far-field 2x microphones array
- Portable plug-and-play capabilities and effortless PC UC support
- Comes with intuitive control with volume wheel, tactile keys, and readable LEDs



PN: 4XD1C82055, CXD1C82051

ThinkPad Bluetooth Silent Mouse

- Left/Right hand, easy-to-carry low profile mouse
- Switch between 2 devices with dual-host Bluetooth 5.0 connectivity
- 2-way scrolling with on-the-fly DPI adjustment (2400, 1600, 800)



PN: With Battery : 4Y50X88822 Without Battery : 4Y50X88823



ThinkCentre M90a Pro Gen 6

Performance

Processor

Intel Core Ultra 5/7/9 Processor (Series 2)

Operating System

Windows 11 Pro or Home

NPU

Integrated Intel AI Boost, up to 13 TOPS
(Optional) Discrete NPU card, up to 30 TOPS*

Graphics

Intel Graphics (integrated)
NVIDIA GeForce RTX 4050

Chipset

Intel Q870 chipset

Memory ²

Up to 64GB DDR5-5600, two SO-DIMM slots

²The max memory is based on the test results with current Lenovo memory offerings.

Storage ³

Up to three drives, 3x M.2 SSD
M.2 SSD up to 2TB each
RAID 0/1 support

³The max capacity of each disk type is based on the test results with current Lenovo storage offerings.

Optical*

DVD-ROM or DVD±RW, USB external

Audio

High Definition (HD) Audio
Stereo speakers (5W x2), Dolby Atmos
Dual-microphone array*

Camera*

5.0-megapixel RGB
5.0-megapixel RGB & IR hybrid
5.0-megapixel RGB & IR hybrid with Human Presence Detection

Power Supply ⁴

180W 90% adapter, 80 PLUS Gold qualified
230W 92% adapter, 80 PLUS Platinum qualified

⁴230W PSU is for discrete graphics models only

Design

Display

27" FHD (2560x1440) IPS display, Anti-glare, 16:9
- 400nits, 99% sRGB, hardware low blue light, flicker free, eyesafe 2.0
- 250nits, 99% sRGB, hardware low blue light, flicker free, eyesafe 2.0, Focus Sound

Form factor

AIO (27 inches)

Dimensions ⁵

Models (with UltraFlex V stand, with camera)
Starting at (flat mode) 613.6 x 363.86 x 236.06 mm (24.16 x 14.33 x 9.29 inches)
Models (with full function monitor stand, with camera)
Starting at 613.6 x 222.21 x 415.18-560.18 mm (24.16 x 8.75 x 16.35-22.05 inches)

⁵The system dimensions may vary depending on configurations.

Weight ⁶

Models (without stand): 8.25 kg (18.19 lbs, maximum configuration)
Models (with full function monitor stand): 12.31 kg (27.14 lbs, maximum configuration)
Models (with UltraFlex V stand): 11.27 kg (24.85 lbs, maximum configuration)

⁶The system weight is approximate and may vary depending on configurations

Color

Black

Bays

No bays

Expansion Slots

Four M.2 slots (one for WLAN, three for SSD / discrete NPU)

Connectivity

Ethernet

Gigabit onboard Ethernet

WLAN + Bluetooth* ⁷

802.11be (Wi-Fi 7) or 802.11ax (Wi-Fi 6 / Wi-Fi 6E),
Bluetooth 5.2, 5.3 or 5.4
Up to Realtek Wi-Fi 7 RTL8922AE, Bluetooth 5.4

⁷Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

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 (HDMI in 1.4 / HDMI out 2.1 TMDS combo port)
1x DisplayPort 1.4a (HBR2)
1x Ethernet (RJ-45)

Right ports

1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
1x USB-C (Thunderbolt 4 / USB4 40Gbps), with USB PD 3.0 up to 65W output, DisplayPort 2.1, Always On
1x USB-C (USB 10Gbps / USB 3.2 Gen 2), support data transfer and 5V@3A charging
1x headphone / microphone combo jack (3.5mm)
1x card reader*

Security & Privacy

Security

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified
Kensington Security Slot, 3 x 7 mm
Chassis Intrusion Switch*
Smart Human Presence Detection (Camera with Radar Sensor)*
ThinkShutter camera cover (camera models)*

Manageability

System Management* ⁸

Intel vPro Enterprise

⁸Intel vPro offers a superset of DASH's defined capabilities.

Lenovo services

Base Warranty

Up to 3-year limited onsite service

Certifications

Green Certifications ^{10 11}

ENERGY STAR 9.0*
EPEAT Gold Registered*
ErP Lot 3
GREENGUARD
RoHS compliant
TCO Certified, generation 10*
TCO edge*

¹⁰The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration.

¹¹EPEAT is registered where applicable, please see epeat.net for registration status by country.

Other Certifications ¹²

IP55-compliant (front face)*
SGS Performance Tested certification : Super Quiet@Hi-Performance Grade 1
Eyesafe Certified 2.0
TÜV Rheinland Flicker Free
TÜV Rheinland Low Blue Light (Hardware Solution)
Anti-dust
MIL-STD-810H

¹²IP55-compliant is not for the models with Focus Sound