

Lenovo ThinkCentre

The Lenovo ThinkCentre M90a Pro Gen 6 all-in-one (AIO) empowers professionals across industries for supercharged productivity, with the Intel® Core™ Ultra processor for up to 260 TOPS AI performance with heterogeneous computing architecture and with Intel vPro® for trusted hardware-based security. An AI-accelerated user experience amplifies the wow factor, thanks to Lenovo Focus Sound¹, industry-first ultrasonic directional precision sound delivery that eliminates the need for headphones. Human Presence Detection 2.0 also engages the power of AI to ensure your data isn't compromised by menacing shoulder surfers.

Bring your big ideas to life on the massive 27-inch QHD display with four-sided ultra-thin bezels and color calibration for vivid views, while the impressive NVIDIA® RTX™ 4050 dGPU lets your creativity soar. Whatever your industry, this Lenovo ThinkCentre keeps you calm, cool, and collected with the efficient Intelligent Cooling Engine (ICE) 7.0 that maintains optimal temperatures for high-performance computing while controlling power consumption, along with the new IP55-certified cleanable screen² for optimal sanitization.

Lenovo ThinkCentre M90a Pro Gen 6



intel
vPRO

AI PCs built for business

¹ Optional

² Front-facing only

Smarter
technology
for all

Lenovo



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	M90a Pro Gen 4	M90a Pro Gen 6	Gen-to-Gen
Platform, Processor & Chipset	Intel vPro®, up to 13th Gen Intel® Core™ processor (65W)/Intel® Q670	Intel vPro®, up to Intel® Core™ Ultra 9 processor (65W)/Intel® Q870	Industry-leading AI performance and efficiency. Up to 46%* improved CPU performance
dNPU	No	Yes	Industry-leading 30 TOPs dNPU + AI Turbo Engine
Panel	27" QHD 3-side 60Hz, 1000:1	27" QHD 4-side like 120Hz, 1500:1	Improved picture quality, contrast ratio & frame refresh rate
Hearing Care	N/A	Lenovo Focus Sound	Clearer directional audio that doesn't add noise burden to environment
IP55	N/A	Yes, front face only for non Focus Sound SKU	Improved industry-unique ingress protection against solids & liquids
Sustainability	65% PCC recycled material; ENERGY STAR® 8.0; TCO Certified 9.0	85% PCC recycled material; ENERGY STAR® 9.0; TCO Certified 10.0	Enhanced environmental compliance & efficiency
Wi-Fi	Wi-Fi 6/6E	Wi-Fi 6/6E/7	Lower latency and improved efficiency

M90a Pro Gen 6 stand options



Full-function Stand



Ultra-Flex V Stand

*Based on Lenovo internal testing



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INTELLIGENT PRODUCTIVITY

This Lenovo ThinkCentre AIO provides industry-leading AI and heterogeneous computing performance powered by Intel® Core™ Ultra processor with Intel® AI Boost, along with industry-leading 6GB gDDR6 memory and the potent NVIDIA RTX 4050 dGPU (up to 85W). Additionally, built-in Lenovo AI Now and Lenovo AI Turbo Engine features boost AI acceleration for a productive, personalized, and protected experience. Cost-efficient on-device access to AI models not only personalizes learning over time, but also minimizes risk around storing and using AI on the cloud.



PREMIUM EXPERIENCE

With a sleek, modern design that always gets a second look, this Lenovo ThinkCentre AIO boasts a next-gen stand with upgraded functions and options, plus front- and rear-facing cameras to elevate AI features. Best in its class, the 27" QHD 1500:1 display delivering a high framerate and industry-leading color calibration is also designed for comfort and optical health, with Eyesafe 2.0 Certification for a low blue light and a flicker-free experience. Robust certifications ensure reliability and durability, including IP55 (Ingress Protection) certification¹ for water and dust resistance—ideal for kiosks and healthcare settings—plus industry-unique healthcare compliance for user and patient safety.



UNCOMPROMISED COLLABORATION

Experience zero-friction connectivity with Thunderbolt Share to sync your AIO, laptop, smartphone, and peripherals for multi-device collaboration to keep ideas flowing seamlessly. In fact, the Lenovo ThinkCentre M90a Pro Gen 6 supports one 8K or two 4K monitors in addition to additional accessories and docks. Enjoy super high-speed data transfer via Thunderbolt™ 4 (up to 40Gbps), DDR5 memory, and up to 6TB storage. Lenovo innovation enhances video meetings with AI noise suppression for voice clarity and the new Lenovo Focus Sound², which delivers AI-driven ultrasonic directional sound to keep meeting discussions private—no headphones required.

Lenovo AI Focus Sound

Create a personal, private, and distraction-free workspace even when you're sharing space with others. Lenovo AI Focus Sound is the industry's first AIO empowered by AI-driven technology that targets sound directly to where you're sitting. Traditional speakers emit sound in every direction they point, allowing those around you to be part of your conversations and meetings. With Lenovo Focus Sound, you get high directivity and enhanced voice clarity. Compared to traditional speakers, this new audio technology allows users to hear clearly at a lower volume even in noisy environments.

Experience remarkable sound privacy with the precision sound delivery of the innovative Lenovo AI Focus Sound.



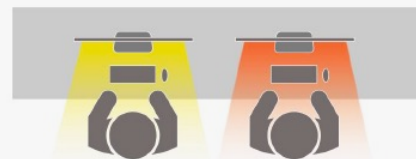
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Traditional speaker



Focus-sound solution



¹ Front-facing only
² Optional

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Services

Lenovo offers a comprehensive portfolio of end-to-end services to support and protect your investment—so you can focus on the job at hand, not IT.



LENOVO PREMIER SUPPORT PLUS

Resolve issues quickly with easy break/fix support. Get 24/7/365 access to Lenovo expert engineers for a seamless remote fix to boost productivity, enhance device longevity, and support circularity. AI-powered proactive and preventive alerts provide insights before issues arise. Benefit from next-business-day onsite labor and parts prioritization¹, Accidental Damage Protection for mishaps such as drink spills, Keep Your Drive, and more.



ASSET RECOVERY SERVICE (ARS)

Lenovo's Asset Recovery Service (ARS) enables secure destruction of data, helps reduce e-waste, and offers a fair market value for your end-of-life IT assets. The service also supports equipment from any manufacturer, including PCs and tablets, monitors, servers, phones, printers, copiers, and networking equipment.



LENOVO CO₂ OFFSET SERVICES

Lenovo CO₂ Offset Services make offsetting carbon emissions simple and within the control of the customer. We offset the carbon emissions across the average lifecycle associated with each of our devices by providing the option at point of purchase. These offsets help support climate action projects verified by United Nations, Gold Standard®, and Climate Action Reserve.

Accessories

Lenovo Wireless VoIP Headset

Get guaranteed performance and unmatched comfort with a lightweight 140g design, patented adaptive headband, and plush memory foam ear cups with premium leatherette for a custom fit. Certified for Microsoft Teams Open Office, this headset ensures clear, reliable communication and seamless connectivity with multipoint Bluetooth® technology.



PN: 4XD1M80020

Lenovo Professional Wireless Rechargeable Combo Keyboard and Mouse

Experience enhanced productivity with this full-size keyboard featuring smooth scissor switches and a bio-rubber mouse with a 4,000 DPI sensor for all-day comfort. With exterior casing made from 65% recycled materials, this combo delivers on both performance and sustainability.



PN: 4X31K03931

Kensington MicroSaver DS 2.0 Cable Lock from Lenovo

Tested for durability, this compact cable lock with 10mm lock head, anti-pick Hidden Pin™ Technology, and T-Bar™ Locking provides advanced PC security. The carbon steel cable resists cutting and can be anchored to a fixed structure to deter theft.



PN: 4XE1L68273

¹ Dependent on market, parts, and HW availability.

Lenovo ThinkCentre M90a Pro Gen 6

performance

PROCESSOR

Up to Intel® Core™ Ultra 9 processor on the Intel vPro® platform

OPERATING SYSTEM

Windows® 11 Pro
Windows® 11 Home
Windows® 11 Home Single Language
No preload operating system

GRAPHICS

Integrated Intel® Graphics
NVIDIA RTX 4050 dGPU¹

NPU

Integrated Intel® AI Boost, up to 13 TOPS
Discrete NPU card, up to 30 TOPS¹

MEMORY

Max Memory¹: Up to 64GB DDR5-5600
Memory Slots: Two DDR5 SODIMM slots, dual-channel capable

STORAGE

Up to 3x M.2 SSD 256GB/512GB/1TB/2TB
1x ODD (external modular)¹

CPU

65W, Intel® Dynamic Tuning
Technology Optimization

POWER SUPPLY

230w 92% /180w 90%

display

PANEL SIZE

27" 4-side like-borderless

RESOLUTION

QHD (2560 x 1440)

PANEL TYPE

In-Plane Switching

REFRESH RATE

120Hz

CONTRAST RATIO (TYPICAL)

1500:1

BRIGHTNESS

400 cd/m2 (without Lenovo Focus Sound)
250 cd/m2 (with Lenovo Focus Sound)

RESPONSE TIME (ON/OFF)

14ms

COLOR GAMUT

sRGB 99%

COLOR SUPPORT

16.7M

VIEW ANGLE (H/V)

178/178

ANTI-GLARE

Yes

connectivity

SIDE IO

1x headphone / microphone combo jack (3.5mm)
1x Thunderbolt4 (Full function, up to 65W power delivery)
1x USB-C* (USB 10Gbps / USB 3.2 Gen 2), support data transfer and 5V@3A charging
1x USB-A (USB 10Gbps / USB 3.2 Gen 2)
1x 3-in-1 card reader¹

REAR IO

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™ out
1x Ethernet (RJ-45)

INTERNAL BAY

1x ODD (external modular)¹
4x M.2 slots (one for WLAN, three for SSD / discrete NPU)

WI-FI

Intel® Wi-Fi 7 2x2 BE¹
Intel® Wi-Fi 6E 2x2 AX¹
Intel® Wi-Fi 6 2x2 AX¹

design

DIMENSIONS

Non-stand: Starting at 613.6 x 388.4 x 56.1 mm (24.16x 15.29 x 2.21 in)
With Ultra-Flex V Stand: Starting at 613.6 x 363.86 x 236.06 mm (24.16 x 14.33 x 9.29 in)
With Full-function Stand: Starting at 613.6 x 415.18 x 222.21 mm (24.16 x 16.35 x 8.75 in)

WEIGHT

Non-stand: 8.25 kg (18.19 lbs)
With Ultra-Flex V Stand: 11.27 kg (24.85 lbs)
With Full-function Stand: 12.31 kg (27.14 lbs)

EOU

Stand / Rear cover / MB shielding / Memory

STAND

Ultra-Flex V stand: supports -5° to +70° tilt, up to 70°±2° lift (up to 164.97mm lift in flat mode / up to 72.78mm lift in vertical mode)
Full-function stand: supports -5° to +22° tilt, left & right 45° swivel, 90° pivot, up to 145mm lift
No stand

MOUNTING

Supports VESA mount 100mm*

SPEAKER

5Wx2 with Dolby Atmos®

CAMERA/MIC

5M RGBIR + HPD2.0 + tiltable & rotatable
5M RGBIR + tiltable & rotatable
5M RGB + tiltable & rotatable
Dual mic
AI Noise Suppression (Intel® GNA)

security

SECURITY CHIP

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

PHYSICAL LOCKS

Kensington® Security Slot™, 3 x 7 mm

CHASSIS INTRUSION SWITCH

Yes¹

OTHER SECURITY

Smart Human Presence Detection (Camera with Radar Sensor)
ThinkShutter camera cover (camera models)

BIOS SECURITY

Administrator password
Hard disk password
Power-on password
Boot sequence control
Boot without keyboard and mouse
Individual USB port disablement
Self-healing BIOS
Smart USB protection (allows keyboard / mouse only, blocks all storage devices)

MANAGEABILITY

Up to Intel® vPro® Enterprise

green certifications²

ENERGY STAR® 9.0¹
EPEAT™ Gold Registered¹
ErP Lot 3
GREENGUARD®
RoHS compliant
TCO Certified 10.0
TCO edge

other certifications

SGS Performance Tested certification: Super Quiet@ High-Performance Grade1
Eyesafe® Certified 2.0
TÜV Rheinland® Flicker Free
TÜV Rheinland® Low Blue Light (Hardware Solution)
Anti-dust
IP55-compliant (front face only, non focus sound sku only)
Mil-Spec Test: MIL-STD-810H

sustainable materials

MATERIAL

85% PCC ABS with brand closed-loop material in plastic chassis
95% PCC ABS with brand closed-loop material in wired keyboard/mouse

PACKAGING

90% PIC EPE cushion
30% OBP in bag
FSC carton in packaging



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¹ Optional

² The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration. For ESG & regulatory compliance documents, please visit <https://compliance.lenovo.com>.

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