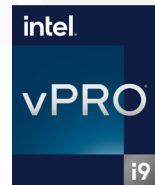# ThinkCentre M90a Gen 3

For all-in-one convenience, uncompromised productivity, and seamless remote collaboration, the new 23.8'' Full-HD ThinkCentre M90a Gen 3 delivers a premium experience for the work-from-everywhere world. Powered by Intel vPro® with up to 12th Gen Intel® Core™ i9 processors and protected by ThinkShield plus Windows secured-core, this AIO powers data-heavy tasks with ease.

Innovative features like the phone-docking bar, keyboard-docking zone, and monitor-based speaker bar deliver an all-around clean aesthetic to reduce desk clutter. AI noise suppression, immersive Dolby Atmos audio, an industry-first tiltable camera, and optional conference call base* combine for crystal-clear videoconferencing. Plus, the optional Advanced In-cell Touch (AIT) screen empowers next-level productivity and creativity with outstanding touch response.

intel. vPRO i9
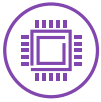
Smarter technology for all

Lenovo

ThinkCentre M90a Gen 3

	M90a Gen 2	M90a Gen 3	Gen-to-Gen
Platform, Processor & Chipset	Intel vPro® / Up to 11th Gen Intel® Core™ i9-11900 (65W) / Intel® Q570	Intel vPro® / Up to 12th Gen Intel® Core™ i9-12900 (65W) / Intel® Q670	Up to 100% enhanced performance
GPU	Integrated: Intel˙ UHD Graphics Optional: AMD Radeon 630 2GB GDDR5	Integrated: Intel˙ UHD Graphics Optional: NVIDIA MX550 2GB GDDR6	More efficient at manipulating computer graphics and image processing
PSU	External adaptor: 150W 89%; 170W 89%	Internal PSU: 180W 90%; 230W 92%	Improved power efficiency; easier to deploy
Peripheral	n/a	Optional conference call base	Seamless remote collaboration
Physical button for monitor mode	No	Yes	Expanded desktop ecosystem with enhanced user experience and flexibility to use AIO as monitor
Side IO	2x USB 3.2 Gen 2 1x USB-C 3.2 Gen 2 (RC) 1x Combo jack Optional 1x card reader	3x USB 3.2 Gen 2 1x Combo jack Optional 1x 3-in-1 card reader	Enhanced connectivity with more advanced IO solutions
Rear IO	4x USB 3.2 Gen 1 1x DP Out/In combo Optional 1x HDMI out Optional 1x Serial port	1x USB-C 3.2 Gen 2 (RC) 3x USB 3.2 Gen 1 (1x support USB power on) 1x HDMI Out 2.1/In 1.4 combo 1x DP Out 1.4 Optional 1x Serial port	
Security	n/a	Optional Human Presence Detection (HPD) sensor	Smart innovative sensor to enhance security; easy to use and saves energy
Reliability	10 MIL-SPEC	12 MIL-SPEC	More strict tests for improved durability
Sustainability	EPEAT Silver TCO 8.0	EPEAT Gold TCO 9.0	Meets higher environmental standard

Lenovo

ThinkCentre M90a Gen 3

ENHANCED EXPERIENCE

The ThinkCentre M90a Gen 3 delivers on modern workforce demands, from super-fast and secure Intel® Wi-Fi 6 and 6E connectivity and built-in security to the powerful Intel vPro® with up to 12th Gen Intel® Core™ i9 processors and optional NVIDIA graphics. Because virtual conferencing is part of every workday, the ThinkCentre M90a elevates the experience with AI noise suppression technology and immersive Dolby Atmos sound. Plus, Low Blue Light and flicker-free certifications help support eye health.

INTELLIGENT SECURITY

ThinkCentre M90a Gen 3 is built on the Intel vPro® platform, which brings together the best of Intel innovations and helps minimize security risks by leveraging technologies deep in the silicon. Equipped with the end-to-end security of ThinkShield, offering Smart USB Protection, zero touch login with its IR camera and Windows Hello™, this AIO safeguards data and assets while delivering long-term stability. Human presence detection (HPD)* not only adds to data privacy, but the walk-away sleep mode enables a new level of security, modern experience, and energy efficiency.
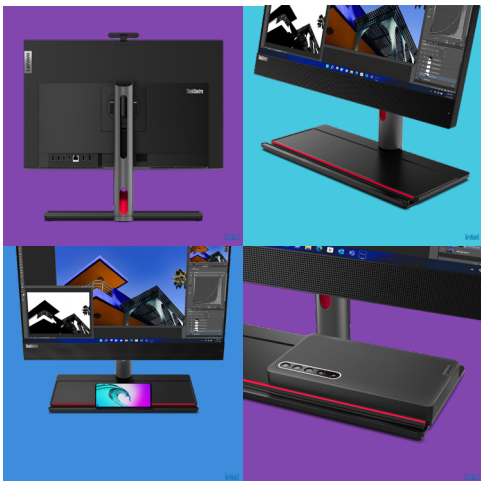
PURPOSEFUL DESIGN

The industry-first tiltable camera along with the full-function stand with adaptable tilt, lift, pivot, and swivel add versatility to this dynamic AIO design. Ideal for tight workspaces, the innovative conference call base*, phone-docking bar, and built-in cord management base reveal the intentional efficiency details of this must-have AIO.

INTENTIONAL SUSTAINABILITY

Not only is the ThinkCentre M90a Gen 3 engineered to be energy efficient with EPEAT GOLD and Energy Star 8.0 certifications, it's also built with 65% PCC material and delivered in 90% recycled packaging. Committed to industry-leading sustainability practices, Lenovo plans by 2025 to use 100% post-consumer recycled materials in the manufacturing of its PC products.

Smarter enhances the virtual workplace.

Conference Call Base*

4 DMIC array + AI algorithm

- 4.5m 360-degree far-field voice capture
- Echo cancellation & AI noise suppression

3W x 4 Harman speakers

- 4.5m long-distance playback
- Crystal-clear, clean audio, fine-tuned for the human voice

Physical button & LED indicator

- One-press button to invoke TEAMS app
- Meeting status indicator

Standard USB Type-C interface

*Optional

Lenovo

ThinkCentre M90a Gen 3

Services

Lenovo offers a comprehensive portfolio of services that support the full lifecycle of your Lenovo IT assets. From initial strategic planning to customized configuration, deployment, support, protection, security, and asset recovery—Lenovo has solutions to help you embrace new workplace technologies.

PREMIER SUPPORT

Premier Support provides direct 24x7x365 access to elite Lenovo engineers for comprehensive hardware and OEM software support, priority on service delivery, repair of parts, and many more. This ensures that customers' issues and concerns are resolved quickly, saving them costs and enhancing productivity.
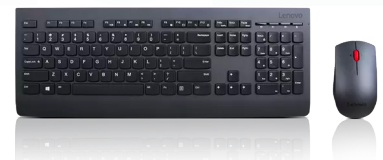
CO_2 OFFSET SERVICES

Make offsetting carbon emissions simple and within your control. You can use this service to compensate for environmental impact based on realistic emissions over an average product lifecycle. It is offered as an option at point of purchase, with tangible proof of CO_2 emission that offset

Accessories

Lenovo Professional Wireless Keyboard and Mouse Combo

The slim 3-zone keyboard with number pad features responsive, quiet keys for a premium typing experience. The one- touch dedicated media keys put the controls you use most at your fingertips. The ergonomic full-size mouse provides comfort and support for all-day use.

PN: 4X30H56xxx

Lenovo Fingerprint Biometric USB Mouse

The Lenovo Fingerprint Biometric USB Mouse offers enhanced input functionality with an integrated fingerprint sensor for password-free authentication. It features a 1600dpi resolution with an optical sensor for precise tracking and an ambidextrous design for more fluid control and ergonomics.

PN: 4Y50Q64661

Lenovo Go Wired Speakerphone

The Lenovo Go Wired Speakerphone brings enterprise-grade conferencing and audio to the remote workforce. In one portable plug-and-play solution, you can hold natural conference calls optimized by advanced voice-first algorithms. And with Teams Certified tech, you can rest easy knowing you can make the most of your favorite UC platform.

PN: 4XD1C82055

Lenovo

ThinkCentre M90a Gen 3

intel. vPRO i9

performance

PROCESSOR
Up to Intel vPro® with 12th Gen Intel® Core™ i9 processor

OS
Windows 11 (Home & Pro)
Windows 11 Downgrade (Pro)

MEMORY
2x SODIMM DDR4 (Up to 3200Mhz/64 GB)

CPU
65W, Intel Dynamic Tuning Technology Optimization

POWER
230w 92%; 180w 90%

GRAPHICS
Intel® UHD Graphics 770 / 730 / 710
Optional NVIDIA GeForce MX550 (2GB GDDR6)

display

PANEL SIZE
23.8'' Near Edgeless

RESOLUTION
Full HD (1920 x 1080)

PANEL TYPE
In-Plane Switching

REFRESH RATE
60Hz

CONTRAST RATIO (TYPICAL)
1000:1

TOUCH SOLUTION
Yes (10-point-touch with AIT technology)

BRIGHTNESS
250 cd/m2

RESPONSE TIME (ON/OFF)
14ms

COLOR GAMUT
72% NTSC (CIE 1931)

COLOR SUPPORT
16.7M

VIEW ANGLE (H/V)
178/178

ANTI-GLARE
Yes

connectivity

SIDE IO
3x USB-A 3.2 Gen 2
1x Optional Card Reader (3-in-1)
1x Combo Audio Jack

REAR IO
1x USB-C 3.2 Gen 2 (RC)
3x USB-A 3.2 Gen 1 (one supports USB power on)
1x DP Out 1.4
1x LAN
HDMI In 1.4/ Out 2.1 Combo (Up to HDMI 2.1 TDMS)
1x Optional Serial

INTERNAL BAY
2x 2.5" HDD (1x Default, 1x optional from ODD bay)
1x Slim ODD

M.2 SLOT
1x M.2 SSD Gen 4
1x M.2 Wi-Fi

WI-FI
Intel® Wi-Fi 6E[1] 2x2 AX
Intel® Wi-Fi 6 2x2 AX

design

DIMENSIONS
Non-stand: 540x350x49 mm / 21.26x13.78x1.93 in
With Ultra-Flex V Stand: Starting at 539.6mm x 367.13mm x 216.32mm / 21.24x14.45x8.52 in
With Full-function Stand: Starting at 539.6x374.15x217.31mm / 21.24x14.73x8.56 in

WEIGHT
Non-stand: 6.056 kg / 13.35 lb
With Ultra-Flex V Stand: Starting at 8.555 kg /18.92 lb
With Full-function Stand: Starting at 8.048 kg /17.74 lb

DISPLAY STAND FUNCTIONALITY
Full-function Stand (Tilt: -5° to 20°; Lift: 110mm; Pivot: 90°; Swivel: 90°, 45° left and 45° right)
Ultra-Flex V Stand (Tilt: -5° to 70°; Lift: 64° ± 2° with vertical lift range of 84.37 mm)
Non-Stand (CTO)

MECHANICAL PERIPHERALS
Full-function monitor stand
Ultra-Flex Stand
Non-Stand (CTO)

EOU
Stand / Rear cover / MB shielding / HDD / Memory

SPEAKER
3Wx2 with Dolby Atmos®
Optional conference call base

CAMERA/MIC
5M RGBIR & RGB/dual mic (Cortana)

security

Intel vPro Enterprise
Optional Human Presence Detection Sensor
Intel® Context Sensing Technology (Intel® CST)
EC Self-healing (level 2)
BIOS-based Smart USB Protection
dTPM 2.0
Kensington™ slot
Intrusion Switch (optional)
Webcam Privacy Shutter (optional)
Windows Hello™

certifications

Energy Star 8.0
Anti-dust
12 MIL-SPEC
TÜV Rheinland Low Blue Light
TÜV Rheinland Flicker Free
Ultra-Low Noise
TCO 9.0
EPEAT Gold
TCO Edge RoHS
ICE 4.0

Lenovo