This small form factor PC saves space and energy and runs at a speed that modern professionals can only imagine. Powered by up to 12th Gen Intel Core i9 processors and up to 128GB DDR5 memory support, it delivers state-of-the-art computing experiences while handling demanding software and complex applications. With Intel UHD graphics integrated into the processor and discrete Intel Iris Xe as well as discrete AMD Radeon, users can choose the graphics card that supports industry-specific imaging equipment.



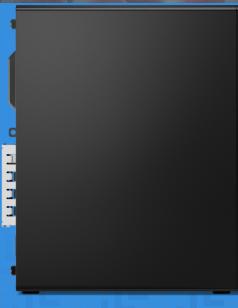
## **REASONS TO BUY**

Though small, it's packed with a wallop of expandability features, such as up to 4 expansion slots and up to 4 storage drives that include ultra-fast M.2 SSD drives up to 2TB. Plus, it has plentiful onboard and optional ports to help expand its functions as the businesses expand.

Security features include a selfhealing BIOS which can restore itself in the event of a BIOS update failure or if maliciously attacked. Smart USB protection helps prevent data breaches by restricting access to external storage drives.

Optimized to reduce power consumption with optional Energy Star 8.0 and optional **EPEAT Gold & Silver energy** efficiency certifications.





The ThinkCentre M9 Series offers more expansion and performance capabilities than any other desktop in our portfolio; perfect for users who need higher computing performance than average.

# ThinkCentre M90s Gen 3

### **KEY SPECIFICATIONS**

Processor	Intel® Pentium®, or 12th Generation Intel Core™i3/i5/i7/i9 Processor
Operating System	Powered by up to Windows 11 Pro
Graphics	Intel UHD graphics 710/730/770 integrated in processor, Intel Iris® Xe MAX 100 (discrete), AMD Radeon™RX 6400 (discrete)
Memory	Up to 128GB DDR5
Storage	Up to four drives, 1x 2.5"/3.5" HDD + 1x 2.5" HDD + 2x M.2 SSD (2.5" HDD up to 1TB each, 3.5" HDD up to 2TB, M.2 SSD up to 2TB)
Optical	optional DVD-ROM or DVD burner
Additional Internal Bays	Optional 2.5" Bay
Expansion Slots	One PCIe 4.0 $\times$ 16, low-profile, One PCIe 4.0 $\times$ 16 ( $\times$ 4 signal), low-profile, Two PCIe 3.0 $\times$ 1, low-profile, Three M.2 slots (one for WLAN, two for SSD)
Power Supply	One of the following 260W 90%   310W 92%   380W 92%
Dimensions	92.5 x 297.7 x 339.5 mm (3.6 x 11.7 x 13.4 inches)
Weight	starting at 5.3 kg (11.7 lbs)

### **GREEN CERTIFICATIONS**

(Optional) EPEAT™ Gold, (Optional) EPEAT Silver, (Optional) ENERGY STAR® 8.0

## **OTHER CERTIFICATIONS**

(Optional) TÜV Rheinland® Ultra Low Noise, MIL-STD-810H military test passed

### CONNECTIVITY

33.11.23.11.11	
Front I/O	1x USB-C 3.2 Gen 2 (15W charging), 2x USB 3.2 Gen 1, 2x USB 3.2 Gen 2, 1x headphone / microphone combo jack (3.5mm), 1x microphone (3.5mm), 1x card reader (optional)
Rear I/O	4x USB 3.1 Gen 1, 1x HDMI 2.1 TMDS, 2x DisplayPort™ 1.4, 1x Ethernet (RJ-45), 1x line-out (3.5mm). Optional ports: 1x USB-C 3.2 Gen 2x2 (via USB-C expansion card, PCle x4), 2x USB 2.0 (via 2-port adapter), 2x USB 3.2 Gen 1 (via 2-port USB expansion card, PCle x1), 2x USB-C 3.2 Gen 2 (via 2-port USB-C expansion card, PCle x4), 1x HDMI 2.1 TMDS (Flex IO), 1x DP 1.2 (Flex IO), 1x VGA (Flex IO), 1x USB-C 3.2 Gen 1 with DisplayPort function (Flex IO), 1x serial, 1x 2nd serial, 4x serial (via 4-port serial expansion card, PCle x1), 1x parallel, 2x PS/2
Optional Rear Ports	One of the following  1x 2nd serial + 1x serial + 1x parallel + 2x PS/2   1x DP 1.2 (Flex IO)   1x HDMI 2.0 (Flex IO)   1x USB-C (Flex IO)   1x VGA (Flex IO)   1x parallel   1x serial   1x serial + 1x 2nd serial   1x serial + 1x 2nd serial + 1x HDMI 2.0 (Flex IO)   1x serial + 1x 2nd serial + 2x USB 2.0   1x serial + 1x DP 1.2 (Flex IO)   1x serial + 1x HDMI 2.0 (Flex IO)   1x serial + 2x USB 2.0 + 1x HDMI 2.0 (Flex IO)   2x PS/2   2x PS/2 + 1x serial + 1x 2nd serial   2x PS/2 + 2x USB 2.0   2x PS/2 + 2x USB 2.0 + 1x DP 1.2 (Flex IO)   2x USB 2.0 + 1x DP 1.2 (Flex IO)   2x USB 2.0 + 1x USB 3.2 Gen1 + 1x DP 1.2 (Flex IO)
WLAN + Bluetooth	One of the following Intel AX201 11ax, 2x2 + BT5.1   Intel AX211 Wi-Fi 6E, 11ax, 2x2 + BT5.1, vPro
Ethernet	One of the following BN8E88 + Integrated 100/1000M   Integrated 100/1000M   RTL8168H + Integrated 100/1000M
SECURITY & PRIVACY	

Chassis Intrusion Switch E-Lock

Discrete TPM 2.0, TCG certified, (Optional) E-lock, (Optional) Smart Cable Clip, Kensington® Security Slot, Padlock Loop

### MANAGEABILITY

Non-vPro vPro Enterprise

Information presented here may represent the maximum possible configurations for this product, but it does not necessarily reflect what is available in your region. Please ask your rep or check the specifications for specific Part Numbers in your region. © 2022 Lenovo. Products are available while supplies last. Lenovo is not responsible for photographic or typographic errors. Lenovo, the Lenovo logo, ThinkPad, ThinkCentre, ThinkBook, ThinkStation and ThinkVision are trademarks or registered trademarks of Lenovo. 3rd party product and service names may be trademarks of others. Depending on factors such as the processing capability of peripheral devices, file attributes, system configuration and operating environments, the actual data transfer rate of USB connectors will vary and is typically slower than published standards.

# Recommended for this device



## ThinkPad X1 Active Noise **Cancellation Headphones**

Ambient & electronic noise cancellation, integrated boom-less mic for calls

Bluetooth 5.0 connectivity with USB-C charging in under 3

Lightweight 214g (0.47lbs) design with memory foam ear cups



## Lenovo Kensington MicroSaver Cable Lock

Cut-resistant cable lock to protect against device theft; 5ft/1.5m cable anchors to desk, table or any fixed structure

Tamper-resistant, disk-style lock provides near-impenetrable theft protection, but still allows users to pivot and rotate

Fits a wide range of devices and docking solutions based on the Kensington slot design. Dual head locks available to secure 2 devices to one cable



## **Warranty Extensions**

Purchase additional warranty periods from 1 to 5 years Buy at any point with or after your device purchase Optional On-site Service