ThinkCentre M90a Gen 3 11VF004ESP

PSREF
Product Specifications Reference

PERFORMANCE

Processor
Intel® Core™ i7-12700, 12C (8P + 4E) / 20T, P-core 2.1 / 4.8GHz, E-core 1.6 / 3.6GHz, 25MB

Graphics
Integrated Intel UHD Graphics 770

Chipset
Intel Q670 Chipset

Memory
1x 16GB SO-DIMM DDR4-3200

Memory Slots
Two DDR4 SO-DIMM slots, dual-channel capable

Max Memory
Up to 64GB DDR4-3200

Storage
512GB SSD M.2 2280 PCIe® 4.0x4 Performance NVMe® Opal

Storage Support
Up to three drives, 2x 2.5" HDD + 1x M.2 SSD
• 2.5" HDD up to 2TB each
• M.2 SSD up to 1TB

Card Reader
3-in-1 Card Reader

Optical
DVD±RW

Audio Chip
High Definition (HD) Audio, Realtek® ALC256-NL codec

Speakers
3Wx2

Camera
5.0MP + IR Hybrid

Microphone
2x, Array

Power Supply
180W 90%

DESIGN

Display
23.8" FHD (1920x1080) IPS 250nits Anti-glare, 72% NTSC, Touch

Touchscreen
10-point Multi-touch

Keyboard
USB Traditional Keyboard, Black, Spanish

Mouse
USB Calliope Mouse, Black

Expansion Slots
Two M.2 slots (one for WLAN, one for SSD)

Case Color
Black

Stand
UltraFlex V Stand

Mounting
VESA mount

Form Factor
AIO (23.8 inches)

Weight
Around 8.742 kg (19.27 lbs)

CONNECTIVITY

Ethernet
Integrated 100/1000M

WLAN + Bluetooth®
Intel AX211 Wi-Fi® 6E, 11ax, 2x2 + BT5.1, vPro

Rear Ports
- 3x USB 3.2 Gen 1
- 1x USB-C® 3.2 Gen 2 (support data transfer and 15W charging)
- 1x HDMI® (HDMI in 1.4 / HDMI out 2.1 TMDS combo port)
- 1x DisplayPort™ 1.4
- 1x Ethernet (RJ-45)

Optional Rear Ports (configured)
None

Right Ports
- 3x USB 3.2 Gen 2
- 1x headphone / microphone combo jack (3.5mm)

Optional Right Ports (configured)
1x card reader

Monitor Cable
None

SECURITY & PRIVACY

Security Chip
Discrete TPM 2.0, TCG 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

MANAGEABILITY

System Management
vPro Enterprise

SERVICE

Base Warranty
3-year, Onsite

Included Upgrade
1Y Premier Support from 3Y Onsite WHB (CPN) (5WS1F31123)

CERTIFICATIONS

Green Certifications
- EPEAT™ Gold
- ENERGY STAR® 8.0
- ErP Lot 3
- TCO Certified 9.0
- TCO edge
- RoHS compliant

Other Certifications
- TÜV Rheinland® Flicker Free
- TÜV Rheinland Low Blue Light
- 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 64, Spanish

Bundled Software
None

MODEL

TopSeller	: Yes	**Announce Date**	: 2022-04-26
EAN / UPC / JAN	: 0196380072963	**End of Support**	: 2028-10-29

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· Product image on this page is a sample, it may not match the real color of this model

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

- Advanced technical support, 24x7x365, in more than 100 markets
- Technical Account Managers for proactive relationship and escalation management
- Comprehensive hardware & OEM software support
- Priority on service delivery and repair parts
- Single point of contact for simplified end-to-end case management
- Lenovo Service Connect Portal for customized reporting and product support

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

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Recommended Accessories



Kensington MicroSaver 2.0 Cable Lock from Lenovo

4XE0N80914

Protect your device. Lenovo offers the latest standard in device security – the MicroSaver 2.0 Cable Lock From Lenovo. Engineered to be the smallest, strongest lock for laptops and other devices, the MicroSaver 2.0 re...

Recommended Services

BEST	5Y Lenovo Protect (Premier Support + ADP + KYD + International Upg) (5PS1D67032)
BETTER	5Y Lenovo Support (Premier Support + KYD + International Upg) (5PS1D67028)
GOOD	4Y Lenovo Support (Premier Support + KYD + International Upg) (5PS1D67027)

For a full list of accessories and services, please visit:
https://smartfind.Lenovo.com

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