## ThinkCentre M90a Gen 3 11VF003CFR



#### **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

Technical support up to 2 HDDs + 1 SSD, but Lenovo® only offers the models with up to 2 HDDs or 1 SSD + 1 HDD

#### **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 Hvbrid

#### Microphone

2x, Array

#### **Power Supply**

180W 90%

#### **DESIGN**

#### Display

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

#### Keyboard

USB Traditional Keyboard, Black, French

#### 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 Wi-Fi® 6E AX211. 11ax 2x2 + BT5.1. vPro®

#### **Rear Ports**

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

#### **Right Ports**

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

#### **Optional Right Ports (configured)**

1x card reader

#### **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**

Intel 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
- · RoHS compliant
- ErP Lot 3
- TCO edge
- TCO Certified 9.0

#### Other Certifications

- UL Anti-dust
- TÜV Rheinland® Low Blue Light
- TÜV Rheinland Flicker Free

#### 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. French

#### **MODEL**

TopSeller : Yes Announce Date : 2022-04-26
EAN / UPC / JAN : 0196380079412 End of Support : 2028-10-29



<sup>·</sup> Lenovo reserves the right to change specifications or other product information without notice.

<sup>·</sup> 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 Premier Support upgrade from 1Y Premier Support (5WS1F52305)
BETTER	4Y Premier Support upgrade from 1Y Premier Support (5WS1F52300)
GOOD	3Y Premier Support upgrade from 1Y Premier Support (5WS1C83308)

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

