ThinkCentre M90a Gen 3 11VF005NCK

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 RGBIR

Microphone

2x, Array

Power Supply

180W 90%

DESIGN

Display

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

Touchscreen

None

Keyboard

USB Traditional Keyboard, Black, Czech / Slovak

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)

Dimensions (WxDxH)

Lowest in vertical mode: $539.6 \times 216.32 \times 387.63 \text{ mm}$ (21.24 x $8.52 \times 15.26 \text{ inches}$)

Highest in vertical mode: 539.6 x 216.32 x 472 mm (21.24 x 8.52 x 18.58 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

3Y Premier Support upgrade from 3Y Onsite (5WS0V08537)

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 DG Windows 10 Pro 64, Czech / Slovak / English

Bundled Software

None

MODEL

TopSeller : Yes Announce Date : 2022-04-26
EAN / UPC / JAN : 0196380070266 End of Support : 2028-10-29

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

Advanced technical support, 24x7x365, in Technical Account Managers for proactive relationship and escalation management

Comprehensive hardware & OEM software Priority on service delivery and repair parts support

Single point of contact for simplified end-toend 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

ThinkPad UltraSlim USB DVD Burner

4XA0F97775

ThinkPad UltraSlim USB DVD Burner -- is a small form factor external portable DVD and CD recordable drive that can be attached to Notebooks with USB2.0 port or USB3.0 port. With 9.5mm UltraSlim engine, 20% slimmer tha...

Lenovo 500 FHD Webcam

4XC0V13599

A USB Video Class (UVC) compliant video camera designed for teleconferencing applications on desktop or laptop. It's a reliable digital video device to transfer video data with HD quality through a high-speed USB inte...

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

