# ThinkCentre M90a Gen 5 12SH001LUS

# PERFORMANCE

#### Processor

Intel® Core™ i5-14500, 14C (6P + 8E) / 20T, P-core 2.6 / 5.0GHz, E-core 1.9 / 3.7GHz, 24MB

#### Graphics Integrated Intel<sup>®</sup> UHD Graphics 770

#### Chipset

Intel® Q670 Chipset

# Memory

1x 16GB SO-DIMM DDR5-4800

#### Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

#### Max Memory<sup>[1]</sup>

- Models with Core™ i3/i5: Up to 64GB DDR5-4800
- Models with Core™ i7: Up to 64GB DDR5-5200

#### Storage

256GB SSD M.2 2280 PCIe® 4.0x4 NVMe® Opal 2.0

#### Storage Support<sup>[2]</sup>

Models with Intel® UHD graphics: Up to two drives, 2x M.2 SSD • M.2 SSD up to 2TB each

#### Optical

**DVD±RW** 

#### Audio Chip

High Definition (HD) Audio, Realtek® ALC233NL-VB2-CG codec

# Speakers

3Wx2

#### Camera

5.0MP + IR Hybrid

#### Microphone

2x, Array

#### Power Supply 180W 90%

# DESIGN

#### Display<sup>[3]</sup>

23.8" FHD (1920x1080) IPS Anti-glare 250nits, 60Hz, 72% NTSC, software low blue light, flick free, touch

#### Touchscreen

10-point Multi-touch

#### Keyboard

USB Calliope Keyboard, Black, English

## Mouse

USB Calliope Mouse, Black

#### Expansion Slots

Models with Intel<sup>®</sup> UHD graphics: Three M.2 slots (one for WLAN, two for SSD)

Case Color

#### Black

Stand UltraFlex V Stand

### UltraFlex V Sta

Mounting VESA mount

#### Form Factor

AIO (23.8 inches)

#### Dimensions (WxDxH)<sup>[4]</sup>

Lowest in flat mode: 539.6 x 344.19 x 227.54 mm (21.24 x 13.55 x 8.96 inches) Highest in vertical mode: 539.6 x 252.60 x 472.00 mm (21.24 x 9.94 x 18.58 inches)

#### Weight<sup>[5]</sup>

Around 7.83 kg (17.3 lbs)

# CONNECTIVITY

#### Ethernet

Integrated 100/1000M

#### WLAN + Bluetooth® Intel® Wi-Fi® 6E AX211, 11ax 2x2 + BT5.3, vPro®

Rear Ports

- 1x USB-C<sup>®</sup> (USB 10Gbps / USB 3.2 Gen 2), with data transfer and 15W charging
- 3x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x HDMI<sup>®</sup> (HDMI<sup>®</sup> in 1.4 / HDMI<sup>®</sup> out 2.1 TMDS combo port)
- 1x DisplayPort<sup>™</sup> 1.4
- 1x Ethernet (RJ-45)

#### **Right Ports**

- 3x USB-A (USB 10Gbps / USB 3.2 Gen 2)
- 1x headphone / microphone combo jack (3.5mm)

# **SECURITY & PRIVACY**

#### **Security Chip**

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

#### Fingerprint Reader

No fingerprint reader

#### Physical Locks Kensington<sup>®</sup> Security Slot<sup>™</sup>, 3 x 7 mm

Other Security ThinkShutter camera cover

# MANAGEABILITY

Lenovo PSREF Product Specifications Reference

System Management<sup>[6]</sup> Intel<sup>®</sup> vPro<sup>®</sup> Enterprise

## **SERVICE**

Base Warranty 3-year, Onsite

# **CERTIFICATIONS**

#### Green Certifications

- ENERGY STAR® 8.0
- EPEAT<sup>™</sup> Gold Registered
- ErP Lot 3
- GREENGUARD<sup>®</sup>
- RoHS compliant
- TCO Certified 9.0

# TCO edge

#### Other Certifications

- TÜV Rheinland® Low Blue Light (Software Solution)
- TÜV Rheinland® Flicker Free
- 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, English

the exact weight for each specific model.

To see more note information, please link to

## MODEL

TopSeller	: Yes	Announce Date	: 2024-03-05
EAN / UPC / JAN	: 198153130320	End of Support	: 2030-08-16

#### Note:

[1] The max memory is based on the test results with current Lenovo memory offerings.

 $\ensuremath{\left[2\right]}$  The max capacity of each disk type is based on the test results with current Lenovo storage offerings.

[3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
[4] The system dimensions may vary depending on configurations.
[5] The system weight is approximate and based on results in Lenovo lab,

distribution of each component, and manufacturing process. It may not be

which varies depending on the source of component, variance of the

· Lenovo reserves the right to change specifications without notice.

[6] Intel vPro offers a superset of DASH's defined capabilities.

https://psref.lenovo.com/Detail/2409?M=12SH001LUS

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



Advanced technical support, 24x7x365, in more than 100 markets



Comprehensive hardware & OEM software support



Single point of contact for simplified end-to-end case management



Technical Account Managers for proactive relationship and escalation management

Priority on service delivery and repair parts



Lenovo Service Connect Portal for customized reporting and product support

# **Recommended Accessories**



# Kensington MicroSaver 2.0 Cable Lock from Lenovo

4XE0N8091

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...

# 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.

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- Onsite Support

- Technician Installed Customer
- Replaceable Unit Service
- International Warranty Upgrade

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# **Recommended Services**

BEST	4Y Premier Support Plus upgrade from 3Y Onsite (5WS1L39035)	
BETTER	3Y Premier Support Plus upgrade from 3Y Onsite (5WS1L39119)	
GOOD	3Y Premier Support upgrade from 3Y Onsite (5WSOV08537)	

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

