# ThinkCentre M90q Gen 4 12EH000HGE

# PERFORMANCE

#### Processor<sup>[1]</sup>

Intel® Core™ i9-13900, 24C (8P + 16E) / 32T, Max Turbo up to 5.6GHz, P-core 2.0 / 5.2GHz, E-core 1.5 / 4.2GHz, 36MB

#### Graphics

Integrated Intel UHD Graphics 770

#### Chipset

Intel Q670 Chipset

Memory 1x 32GB SO-DIMM DDR5-5600

# Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable Max Memory<sup>[2]</sup>

Up to 64GB (2x 32GB DDR5 SO-DIMM)

# Storage

1TB SSD M.2 2280 PCIe<sup>®</sup> 4.0x4 Performance NVMe<sup>®</sup> Opal 2.0

#### Storage Support<sup>[3]</sup>

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

### Card Reader

No card reader

# Optical

None

#### Audio Chip

High Definition (HD) Audio, Realtek® ALC256VB codec

### Speakers

Premium, 2Wx1

# **Power Supply**

230W 89% Adapter

# DESIGN

### Keyboard

USB Traditional Keyboard, Black, German

Mouse

# USB Calliope Mouse, Black

**Optional Bay** 

2.5" HDD Bracket

### **Expansion Slots**

- One PCIe 4.0 x8, low-profile
- Two M.2 PCIe Gen 4x4 slots (for SSD)

# One M.2 slot (for WLAN)

Case Color Black

#### Stand None

Adapter Cage

# None

# Toolless Chassis Screw

Toolless Chassis Screw
Dust Filter

None

# Mounting

1x VESA Mount

# IO Box

None

# Form Factor

# Tiny (1L)

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

- Tiny only|179 x 182.9 x 36.5 mm with rubber feet (7.05 x 7.2 x 1.44 inches with rubber feet)
- Tiny & ODD|204.2 x 186.6 x 64 mm with rubber feet (8.04 x 7.35 x 2.52 inches with rubber feet)

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

- Tiny only 1.25 kg (2.76 lbs)
- With VESA mount & ODD box|1.74 kg (3.84 lbs)

# CONNECTIVITY

# Ethernet

Integrated 100/1000M

# WLAN + Bluetooth®

Intel Wi-Fi<sup>®</sup> 6E AX211, 11ax 2x2 + BT5.1, vPro<sup>®</sup>

## **Front Ports**

- 1x USB-C<sup>®</sup> 3.2 Gen 2 (support data transfer)
- 1x USB 3.2 Gen 2
- 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
- 1x headphone / microphone combo jack (3.5mm)

### **Optional Front Ports (configured)**

#### None

# Rear Ports

- 2x USB 3.2 Gen 1 (one supports Smart Power On)
- 2x USB 3.2 Gen 2
- 1x HDMI<sup>®</sup> 2.1 TMDS
- 1x DisplayPort<sup>™</sup> 1.4
- 1x Ethernet (RJ-45)

# **Optional Rear Ports (configured)**

- 1x Serial
- 1x DP

# Monitor Cable

None



PSREF Product Specifications Reference

# **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

Chassis Intrusion Switch Chassis Intrusion Switch

# MANAGEABILITY

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

# SERVICE

Base Warranty

3-year, Onsite

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

# **CERTIFICATIONS**

# Green Certifications<sup>[7]</sup>

• ENERGY STAR® 8.0

TCO Certified 9.0

Windows® 11 Pro, German

• EPEAT<sup>™</sup> Silver Registered

MIL-STD-810H military test passed

: Yes

and the hardware and software configurations, see

https://psref.lenovo.com/Detail/2229?M=12EH000HGE

[1] Intel Max Turbo frequency will vary depending on application workload

http://www.intel.com/technology/turboboost/ for more information.

[2] The max memory is based on the test results with current.....

· Lenovo reserves the right to change specifications without notice.

EAN / UPC / JAN : 0197529095911

To see more note information, please link to

Announce Date

End of Support

: 2023-07-18

: 2030-02-18

ErP Lot 3 RoHS compliant

Mil-Spec Test

SOFTWARE

**Operating System** 

**Bundled Software** 

None

Note:

MODEL

TopSeller

# 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

# 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**



# Lenovo Professional Wireless Combo Keyboard & Mouse (US English)

4X30H56796

This sleek and stylish full-size keyboard and mouse combo offers exceptional quality in a modern wireless solution. The slim 3-zone keyboard with number pad has responsive quiet keys and a premium typing experience. O...

# **Recommended Services**

	BEST	5Y Lenovo Support (Premier Support + KYD + International Upg) (5PS1J31179)
	BETTER	4Y Lenovo Support (Premier Support + KYD + International Upg) (5PS1J31175)
	GOOD	3Y Premier Support upgrade from 1Y Premier Support (5WS1C83305)

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

