ThinkCentre M90a Gen 5 12SH0029US

PERFORMANCE

Processor

Intel® Core™ i7-14700, 20C (8P + 12E) / 28T, Max Turbo up to 5.4GHz, P-core 2.1 / 5.3GHz, E-core 1.5 / 4.2GHz, 33MB

Graphics

Integrated Intel® UHD Graphics 770

Chipset

Intel® Q670 Chipset

Memory

2x 16GB SO-DIMM DDR5-5600

Memory Slots

Two DDR5 SO-DIMM slots, dual-channel capable

Max Memory^[1]

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

Storage

512GB SSD M.2 2280 PCIe® 4.0x4 NVMe® Opal 2.0

Storage Support^[2]

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^[3]

23.8" FHD (1920x1080) IPS Anti-glare 250nits, 60Hz, 99% sRGB, hardware low blue light, flick free, eyesafe, non-touch

Keyboard

USB Calliope Keyboard, Black, English

Mouse

USB Calliope Mouse, Black

Expansion Slots

Models with Intel $^{\mbox{\scriptsize B}}$ UHD graphics: Three M.2 slots (one for WLAN, two for SSD)

Case Color

Black

Stand

UltraFlex V Stand

Mounting

VESA mount

Form Factor

AIO (23.8 inches)

Dimensions (WxDxH)^[4]

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^[5]

Around 7.83 kg (17.3 lbs)

CONNECTIVITY

Ethernet

Integrated 100/1000M

WLAN + Bluetooth®

Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 + BT5.3, vPro®

Rear Ports

- 1x USB-C[®] (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® (HDMI® in 1.4 / HDMI® out 2.1 TMDS combo port)
- 1x DisplayPort[™] 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[®] Security Slot[™], 3 x 7 mm

Other Security

ThinkShutter camera cover (camera models)

MANAGEABILITY

System Management^[6] Intel[®] vPro[®] Enterprise

SERVICE

Base Warranty 3-year, Onsite

CERTIFICATIONS



- ENERGY STAR® 8.0
- EPEAT[™] Gold Registered
- ErP Lot 3
- GREENGUARD[®]
- RoHS compliant
- TCO Certified 9.0
- TCO edge

Other Certifications

• TÜV Rheinland® Low Blue Light (Hardware Solution)

Lenovo

PSRFF

Reference

Product Specifications

- Eyesafe® Certified 2.0
- 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

MODEL

Note:

AAS.

offerings

current Lenovo storage offerings

To see more note information, please link to

https://psref.lenovo.com/Detail/2409?M=12SH0029US

TopSeller	: Yes	Announce Date	: 2024-07-30
EAN / UPC / JAN	: 198154815158	End of Support	: 2030-08-16



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

[2] The max capacity of each disk type is based on the test results with

[4] The system dimensions may vary depending on configurations.

[5] The system weight is approximate and based on results in...... • Lenovo reserves the right to change specifications without notice.

[3] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA,

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

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

Technician Installed Customer

Onsite Support

- Replaceable Unit Service
- International Warranty Upgrade

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Recommended Accessories



Kensington MicroSaver 2.0 Cable Lock from Lenovo

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	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

