

Brand : Lenovo

Product family: ThinkCentre

Product code: 12JM0019SP

Product name : M90a Pro Gen 4





Display

Display		Camera	
Display diagonal *	68.6 cm (27")	Privacy type	Privacy shutter
Display resolution *	2560 x 1440 pixels	Network	
Touchscreen * HD type * Native aspect ratio Display brightness Panel type RGB colour space Anti-glare screen Colour gamut Processor	× Quad HD 16:9 350 cd/m ² IPS sRGB ✓ 99%	Wi-Fi * Top Wi-Fi standard * Wi-Fi standards WLAN controller manufacturer WLAN controller model Antenna type Ethernet LAN * Ethernet LAN data rates Bluetooth *	 ✓ Wi-Fi 6E (802.11ax) Wi-Fi 6E (802.11ax) Intel Intel Wi-Fi 6E AX211 2x2 ✓ 100,1000 Mbit/s ✓
Processor manufacturer *	Intel	Bluetooth version	5.1
Processor family * Processor generation	Intel® Core™ i7 13th gen Intel® Core™ i7	Ports & interfaces	
Processor model * Processor cores Processor boost frequency Performance cores Efficient cores Performance-core Max Turbo Frequency Efficient-core Max Turbo Frequency Performance-core base frequency Efficient-core base frequency Processor cache Processor cache type	i7-13700 16 5.2 GHz 8 8 5.1 GHz 4.1 GHz 2.1 GHz 1.5 GHz 30 MB Smart Cache	Ethernet LAN (RJ-45) ports USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity * USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity * USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity * Intel® Thunderbolt 4 Thunderbolt 4 ports quantity HDMI ports quantity * DisplayPorts quantity Combo headphone/mic port	1 3 2 1 • • 1 1 1 1
Processor base power	65 W	Design	
Maximum turbo power	219 W	Colour name Product colour *	Black Black

Memory		Design	
Internal memory * Internal memory type Maximum internal memory * Memory slots	16 GB DDR5-SDRAM 64 GB 2	Cable lock slot	✓
		Cable lock slot type	Kensington
		Performance	
Memory slots type	SO-DIMM	Product type *	All-in-One PC
Memory clock speed	5600 MHz	Motherboard chipset	Intel Q670
Memory layout (slots x size)	1 x 16 GB	Trusted Platform Module (TPM)	 Image: A start of the start of
Memory form factor	DIMM/SO-DIMM	Trusted Platform Module (TPM) version	2.0
Storage Total storage capacity *	512 GB	Software	
		Operating system architecture	64-bit
Storage media *	SSD 512 GB	Operating system installed *	Windows 11 Pro
Total SSDs capacity Number of SSDs installed	1	Power	
SSD capacity	512 GB	AC adapter power	230 W
SSD interface	PCI Express 4.0	AC adapter frequency	50 - 60 Hz
NVMe	1	AC adapter input voltage	100 - 240 V
SSD form factor	M.2	Weight & dimensions	
Optical drive type *	DVD±RW	Width (with stand)	613.6 mm
Card reader integrated	٠	Depth (with stand)	219.8 mm
Graphics		Height (with stand)	411 mm
Discrete graphics card *	×	Weight (with stand)	11.2 kg
Discrete graphics card model *	Not available	Operational conditions	
On-board graphics card *	1	Operating temperature (T-T)	5 - 35 °C
On-board GPU manufacturer	Intel	Storage temperature (T-T)	-20 - 60 °C
On-board graphics card family			
	Intel [®] UHD Graphics	Operating relative humidity (H-H)	20 - 80%
On-board graphics card model *	Intel® UHD Graphics Intel UHD Graphics 770	Storage relative humidity (H-H)	10 - 90%
	·	Storage relative humidity (H-H) Operating altitude	10 - 90% -15.2 - 3048 m
On-board graphics card model *	·	Storage relative humidity (H-H) Operating altitude Non-operating altitude	10 - 90%
On-board graphics card model * Audio	Intel UHD Graphics 770	Storage relative humidity (H-H) Operating altitude Non-operating altitude Certificates	10 - 90% -15.2 - 3048 m -15.2 - 12192 m
On-board graphics card model * Audio Built-in speaker(s) *	Intel UHD Graphics 770	Storage relative humidity (H-H) Operating altitude Non-operating altitude	10 - 90% -15.2 - 3048 m
On-board graphics card model * Audio Built-in speaker(s) * Number of speakers	Intel UHD Graphics 770	Storage relative humidity (H-H) Operating altitude Non-operating altitude Certificates	10 - 90% -15.2 - 3048 m -15.2 - 12192 m
On-board graphics card model * Audio Built-in speaker(s) * Number of speakers RMS rated power	Intel UHD Graphics 770	Storage relative humidity (H-H) Operating altitude Non-operating altitude Certificates Compliance certificates	10 - 90% -15.2 - 3048 m -15.2 - 12192 m
On-board graphics card model * Audio Built-in speaker(s) * Number of speakers RMS rated power Built-in microphone	Intel UHD Graphics 770	Storage relative humidity (H-H) Operating altitude Non-operating altitude Certificates Compliance certificates Sustainability	10 - 90% -15.2 - 3048 m -15.2 - 12192 m RoHS
On-board graphics card model * Audio Built-in speaker(s) * Number of speakers RMS rated power Built-in microphone Camera	Intel UHD Graphics 770 2 10 W	Storage relative humidity (H-H) Operating altitude Non-operating altitude Certificates Compliance certificates Sustainability Sustainability certificates	10 - 90% -15.2 - 3048 m -15.2 - 12192 m RoHS
On-board graphics card model * Audio Built-in speaker(s) * Number of speakers RMS rated power Built-in microphone Camera Built-in camera *	Intel UHD Graphics 770	Storage relative humidity (H-H) Operating altitude Non-operating altitude Certificates Compliance certificates Sustainability Sustainability certificates Packaging content	10 - 90% -15.2 - 3048 m -15.2 - 12192 m ROHS ENERGY STAR, TCO, EPEAT Gold
On-board graphics card model * Audio Built-in speaker(s) * Number of speakers RMS rated power Built-in microphone Camera Built-in camera * Total megapixels	Intel UHD Graphics 770	Storage relative humidity (H-H) Operating altitude Non-operating altitude Certificates Compliance certificates Sustainability Sustainability certificates Packaging content Mouse included	10 - 90% -15.2 - 3048 m -15.2 - 12192 m ROHS ENERGY STAR, TCO, EPEAT Gold
On-board graphics card model * Audio Built-in speaker(s) * Number of speakers RMS rated power Built-in microphone Camera Built-in camera * Total megapixels	Intel UHD Graphics 770	Storage relative humidity (H-H) Operating altitude Non-operating altitude Certificates Compliance certificates Sustainability Sustainability certificates Packaging content Mouse included Mouse connectivity	10 - 90% -15.2 - 3048 m -15.2 - 12192 m ROHS ENERGY STAR, TCO, EPEAT Gold ✓ Wireless





197532547803

0197532547803

Disclaimer. The information published here (the "Information") is based on sources that can be considered reliable, typically the manufacturer, but this Information is provided "AS IS" and without guarantee of correctness or completeness. The Information is only indicative and can be changed at any time without notification. No rights can be based on the Information. Suppliers or aggregators of this Information do not accept any liability with regard to the content of (web)pages and other documents, including its Information. The publisher of the Information can not be held liable for the content of 3rd party websites that are linking this Information or are linked to from this Information. You as the User of the Information are solely responsible for the choice and usage of this Information. You are not entitled to transfer, copy or otherwise multiply or distribute the Information. You are obliged to follow the directions of the copyright owner(s) with regard to the use of the Information. Exclusively Dutch law is applicable. With regard to price and stock data on the site, the publisher followed a number of starting points, which are not necessarily relevant for your private or business circumstances. Therefore, the price and stock data are only indicative and are subject to changes. You are personally responsible for the way you use and apply this information. As a user of the Information or sites or documents in which this Information is included, you will adhere to standard fair use including avoidance of spamming, ripping, intellectual-property violations, privacy violations, and any other illegal activity.