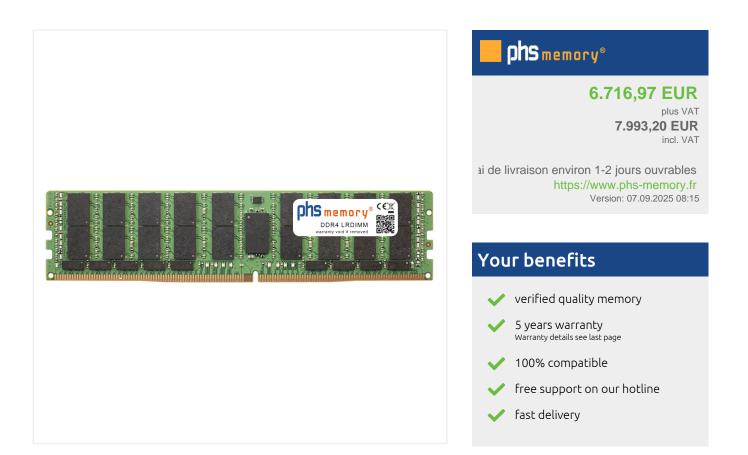
phs memory®

256GB Computer memory DDR4 for HP ProLiant DL180 Gen9 (G9) LRDIMM 3DS



PHS-memory® - computer memory with 100% quality

- many years of IT competence
- Free support for optimal configuration and product selection
- High availability through professional warehouse management
- Fast delivery in throughout Europe
- Short response times and professional order processing due to full digitalization throughout the entire process with complete traceability
- Incoming goods inspection include checks of the DRAMs, PCBs and the programmed SPDs in order to exclude possible errors (Controlled BOM).
- PHS-memory® brand memories guarantee 100% compatibility to the specified system.
- PHS-memory® memories can be used together with existing memories in the device depends on to the configuration rules of the system.
- The "fallback option" in the SPD of PHS-memory® allows DRAMs with higher clock rates to be operated together with older memory modules with lower clock rates within the system.
- Products with unique serial number for service and warranty
- Pre-sales and after-sales support by technically trained personnel



Memory Specification



Memory size	256GB		
Memory technology	DDR4		
ECC support	yes		
JEDEC Norm	PC4-25600-L		
DRAM Organization	3DS 4H 16Gx4		
Rank	8Rx4 (2S4Rx4)		
Туре	LRDIMM (ECC LR DIMM) 3DS		
Number of pins	288 Pin DIMM		
Memory data transfer rate	3200MHz @ CL22		
Voltage	1,2 Volt		
Speciality	3DS		
Board dimensions	133,35 x 31,25 (LxB mm)		
Operating temperature	0° C - 85° C		
Storage temperature	-40° C - +95° C		
RoHS compliant	yes		
SKU	SP464402		
EAN	4067488278938		

overRAMing maximize your RAM



Most systems - including the HP ProLiant DL180 Gen9 (G9) - can be upgraded with more memory than originally specified by the device manufacturer.

Therefore, our memory specialists continuously analyze new memory solutions in selected systems. Due to improved manufacturing technologies, new memories with higher performance and capacity will be tested for stability and functionality.

Then the new memory solutions are released for the respective systems. Use the benefits of larger computer memory capacity with the PHSmemory® overRAMing memory solutions.

https://www.phs-memory.fr/-BOR

Note: The module specified in this datasheet is one of several possible configurations available under this part number.

Some details may differ from the specifications described here and the illustration, but have no negative influence on the functionality.



System Specifications

The memory is 100% compatible with this sytem:

System manufacturer	HP
Device type	Server
Device family	ProLiant
Device series	DL180 Serie
Device name	ProLiant DL180 Gen9 (G9)
Maximum memory*	4TB / 1TB according to manufacturer
Number of memory sockets	16

* The specifications for the maximum memory upgrade may differ from those of the manufacturer HP. Often the information given in the manual for the maximum memory upgrade is not up to date. New memory technologies, bios updates or newer software versions often allow the use of memory modules with a higher capacity than specified by the manufacturer with the same performance and stability.

Memory modules with our overRAMing-symbol are approved by us for maximum memory expansion.

Information on memory allocation

Information on memory configuration

Folgende technischen Gegebenheiten sollte im Vorfeld beachtet werden:

- Für jeden installierten Prozessor können 16 Computer memory installiert werden
- Registered DIMM and Load Reduced LRDIMM memory modules must not be mixed
- Bei einer Aufrüstung sollten Sie deshalb wissen, welche memory bereits vorhanden sind or komplett with LRDIMMcomputer memory upgrade.

Information on memory installation

- Turn off the system
- Remove the plug of the power supply unit (if connected)
- Remove the battery, according to the user manual of the system
- Always ground yourself before touching electronic components
- Protect the memory module from static voltages:
- Do not touch the gold pins of the memory module
- Only touch the sides of the memory module
- Use a grounding strap and/or ESD glove if possible

General installation instructions are supplied by E-Mail.



Further memory options for HP ProLiant DL180 Gen9 (G9)

8CBSP162263DDR4RDIMM (ECC Registered)288 Pin DIMMPHS-memory®16CBSP162258DDR4RDIMM (ECC Registered)288 Pin DIMMPHS-memory®32CBSP162260DDR4RDIMM (ECC Registered)288 Pin DIMMPHS-memory®64CBSP162256DDR4LRDIMM (ECC LR DIMM)288 Pin DIMMPHS-memory®64CBSP464403DDR4RDIMM (ECC Registered) 3DS288 Pin DIMMPHS-memory®64CBSP464401DDR4LRDIMM (ECC Registered) 3DS288 Pin DIMMPHS-memory®64CBSP464405DDR4LRDIMM (ECC Registered) 3DS288 Pin DIMMPHS-memory®64CBSP464405DDR4RDIMM (ECC Registered) 3DS288 Pin DIMMPHS-memory®64CBSP464405DDR4LRDIMM (ECC Registered) 3DS288 Pin DIMMPHS-memory®64CBSP464402DDR4LRDIMM (ECC LR DIMM) 3DS288 Pin DIMMPHS-memory®	Size	SKU	Technology	Туре	Number of pins	Brand	Reference no.
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LR DIMM) 3DS 256GB SP464405 DDR4 RDIMM (ECC Registered) 3DS 288 Pin DIMM PHS-memory® 256GB SP464402 DDR4 LRDIMM (ECC Registered) 3DS 288 Pin DIMM PHS-memory®	128GB	SP464404	DDR4	•	288 Pin DIMM	PHS-memory®	
Registered) 3DS 256GB SP464402 DDR4 LRDIMM (ECC 288 Pin DIMM PHS-memory®	128GB	SP464401	DDR4	,	288 Pin DIMM	PHS-memory®	
	256GB	SP464405	DDR4	•	288 Pin DIMM	PHS-memory®	
	256GB	SP464402	DDR4	,	288 Pin DIMM	PHS-memory®	

PHS-memory® warranty

Every PHS-memory® is equipped with a 5-years-warranty of perfect operation. If the RAM module is defective or fails within 5 years of purchase when used properly, you will receive an appropriate RAM module free of charge. If a suitable memory module is no longer available, we will refund the purchase price.

For more information on warranty and service please visit https://www.phs-memory.fr/-W5Y



Contact Information

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All information without guarantee. Technical changes and errors excepted. You can find current price information in our online shop at https://www.phs-memory.fr