Dell PowerVault MD1200

The Dell™ PowerVault™ MD1200 direct-attached storage array is the second generation of our low-cost, high-capacity expansion enclosure that improves density, versatility, and performance[1] to enhance support for mainstream and capacity-intensive applications.

Simple and versatile server expansion

The PowerVault MD1200 offers seamless expansion for Dell™ PowerEdge™ servers with the PERC H800 HostRAID adapter and gives customers the most drive flexibility of any of Dell's direct-attached storage arrays.

- Easily expand your server capacity: This expansion array can support twelve 2.5-inch or 3.5-inch SAS HDDs and SAS SSDs in a 2U array and expands up to 8 arrays behind a single PERC H800 HostRAID adapter.

- Versatility and flexibility to meet most business needs: With the ability to mix 2.5-inch and 3.5-inch enclosures behind a single PERC H800 HostRAID adapter and support for 2.5-inch drives[2], PowerVault MD1200 delivers capacity and performance to support most customer deployments.

Keeping up with business needs

The PowerVault MD1200 offers customers the ability to support mainstream, capacity-intensive, and performance-intensive applications in a single storage solution. This flexibility makes it easy to tier your data by matching your data requirements and drive characteristics. The following features maximize the efficiency of your storage solution:

- Support for 2.5-inch and 3.5-inch drives in PowerVault MD1200.

- Ability to mix 2.5-inch and 3.5-inch enclosures behind a single PERC H800 HostRAID adapter.

- Ability to mix and match 7.2K (nearline), 10K, and 15K RPM SAS Hard Disk Drives (HDDs) with Solid State Drives (SSDs). This includes SAS HDDs that support Self-Encrypting Drive (SED) technology.

Keeping your data safe

Access and accuracy of data is key to success for any business. The PowerVault MD1200 has been engineered to maximize uptime and the security of your data.

- Redundant Path with I/O Load Balancing: Even if a single cable path fails from one port of the PERC H800, you will continue to have access to your data through the second port.

- Self Encrypting Drives (SED): With drive-level encryption, if a drive is removed from its storage system or the server it is housed in, the data on that drive is encrypted and useless to anyone who attempts to access it without the appropriate security authorization. Additionally, SED supports Instant Secure Erase of drives which permanently removes data when repurposing or decommissioning drives.

- Hot Swappable Drives: With hot swappable drives, you can remove and replace drives even when your system is operating; no need to turn it off and no need to reboot—new drives are available right away.

Affinity with PowerEdge

The Dell PowerVault MD1200 storage array is engineered to work optimally with Dell PowerEdge™ servers, utilizing the PERC H800 HostRAID adapter, Dell OpenManage™ Storage Manager, and common components, as follows:

- The configuration of the PERC H800 enables the software to recognize all storage as a single unit, helping to increase reliability and fault tolerance.

- Dell OpenManage Storage Manager software can manage both the external array and internal storage, streamlining storage management through a single, common interface. This helps reduce resource load on the system, and enables easier navigation for the user.

- The PowerVault MD1200 leverages the same 2.5-inch and 3.5-inch drives as 11G PowerEdge servers and the same power supplies and fans as the PowerVault MD1220, reducing the cost of spares.

Direct-Attached Storage Expansion Enclosure

Improves Density, Versatility and Performance

Feature	Dell™ PowerVault™ MD1200
PERC H800	PCI-E 2.0 Host-RAID adapter with two external x4 SAS ports, standard 512MB cache and TBBU (transportable battery-backup unit)
Drives and Capacity	
Drives	Up to twelve (12) hot-pluggable SAS Hard Disk Drives (HDDs) at 7.2K, 10K, and 15K rpm and SAS Solid State Drives (SSDs)
Drive Performance and Capacities	**2.5" SAS HDDs in 3.5" carrier,** 10,000 RPM 6Gb/s SAS drives available in 300GB and 600GB **2.5" SAS SSDs in 3.5" carrier**, 3Gb/s SSD available in 149GB
Maximum Capacity (per enclosure)	24TB using twelve (12) 2TB 7,200 RPM 6Gb/s SAS disk drives
Expansion Capabilities	PERC H800 HostRAID adapter enables expansion to 8 enclosures (4 enclosures per port)
Host Connectivity	
Unified Mode	Unified mode (single path) for daisy chaining of up to 8 enclosures per PERC H800 (4 enclosures per port, single path)
	Unified mode (recommended redundant path) for daisy chaining up to 4 enclosures per PERC H800 (4 enclosures connected to both ports via redundant path cabling)
Split-Mode/Dual-Host Access	Split mode with dual Enclosure Management Modules providing direct connectivity to drives 0 though 5 and a separate connectivity to drives 6 through 11
Enclosure Management Modules and RAID levels	
Enclosure Management Modules (EMM)	2 EMM provide redundant enclosure management capability
RAID Levels	PERC H800 supports RAID levels 0, 1, 5, 6, 10, 50, and 60
Back-Panel Connectors (per EMM)	
Host Connectivity	1 SAS (SFF 8088) IN connector for connection to the host
Expansion Connectivity	1 SAS (SFF 8088) OUT connector for expansion to an additional enclosure
Service Management	1 6-pin UART mini-DIN connector (for factory use only)
Power Supplies (per PSU)	
Wattage	600 W
Host Heat Dissipation	188 W
Input Voltage Range	100-240 VAC, auto-sensing
Frequency Range	50/60 Hz
Amperage	8.6 A at 100 V, 4.3 A at 240 V
Available Hard Drive Power (per slot)	
Supported Continuous Consumption	up to 1.16 A at +5V up to 1.6 A at +12V
Physical	
Height x Width x Depth	8.7cm (3.39 inches) x 48.2cm (18.8 inches) x 59.4cm (23.17 inches)
Weight	28.39 kg (62.6 lb) (maximum configuration) 8.84 kg (19.5 lb) (empty)
Environmental	
Temperature	Operating: 10° to 35°C (50° to 95°F) with maximum temperature gradation of 10°C per hour Storage: -40° to 65°C (-40° to 149°F) with temperature gradation of 20°C per hour
Relative Humidity	Operating: 8% to 85% (non-condensing) with maximum humidity gradation of 10% per hour Storage: 5% to 95% (non-condensing)
Altitude	Operating: -16 to 3048 m (-50 to 10,000 ft) Storage: -16 to 10,600 m (-50 to 35,000 ft)

[1]Compared to previous generation array—PowerVault MD1000.

Simplify your storage at Dell.com/PowerVault