

DELL POWERSVULT MD3000i



iSCSI SAN that helps simplify data management and delivers enterprise data protection capabilities at a fraction of the cost of traditional storage consolidation solutions.

CONSOLIDATION WITHOUT COMPLEXITY

Now small and medium-sized organizations can harness the storage consolidation and data management capabilities of a SAN, easily and cost-effectively. The Dell™ PowerVault™ MD3000i is an iSCSI SAN that helps simplify data management and delivers enterprise data protection capabilities at a fraction of the cost of traditional storage consolidation solutions. Dell's PowerVault MD3000i networked storage array utilizes the modularity and availability of the PowerVault series of disk arrays to deliver an IP network storage solution that can consolidate storage on up to 16 servers.

FLEXIBLE AND VERSATILE

The PowerVault MD3000i system's modular expandability provides you with pay-as-you-grow flexibility. The storage array can house up to 15 3.5-inch SAS or SATA disk drives, and you can add capacity using up to two PowerVault MD1000 expansion enclosures for a total of 45 disk drives. The PowerVault MD3000i array is available in two models:

Standard model provides a lower-cost entry point. This model consists of a single controller with two 1GB/s Ethernet ports, for connecting up to two hosts directly, or up to 16 hosts when configured with an Ethernet switch.

High availability model has four 1GB/s Ethernet ports and features dual-active/active controllers that mirror each other's cache. In the event of a controller failure, the LUNs owned by the failed controller are transferred to the surviving controller and operations continue.

DUAL DRIVE FUNCTIONALITY

The PowerVault MD Family enables organizations to mix SAS and SATA drives in a single enclosure delivering additional flexibility to optimize drive speed and capacity while maximizing storage spend and footprint.

SAS for Performance — SAS disk drives deliver the speed, performance, and reliability to satisfy mainstream and demanding server applications such as e-mail or database applications that store active and frequently changing information.

SATA for Capacity — SATA disk drives easily handle large volumes of data at an excellent cost-per-Gigabyte. SATA drives are ideal supports for digital images, file archiving, audio/video storage, or backup and restoration tasks.

SIMPLE YET POWERFUL STORAGE MANAGEMENT

The PowerVault MD3000i delivers a seamless suite of intuitive, intelligent storage management software capabilities. The Modular Disk Storage Manager offers automated setup features that optimizes for performance and availability. The Recovery Guru tool diagnoses system problems and helps to determine an appropriate recovery procedure. Optional snapshot and virtual disk copy features are designed to enhance data protection.

DELL™ POWEREDGE™ SERVER COMMONALITY

The PowerVault MD family uses the same 3.5-inch disk drive as PowerEdge servers, so you only need to stock and order a single type of spare drive. Dell PowerVault storage arrays are designed and engineered to pair perfectly with Dell PowerEdge servers — LEDs, displays, and other operational functions are common to both PowerEdge and PowerVault products. This commonality in a complete solution enhances usability and can make support and service easier.

FEATURES	DESCRIPTION
Drives and Capacity	
Hard Disk Drives	Up to fifteen (15) 3.5-inch SAS or SATA hot-pluggable hard disk drives
Drive Performance and Capacities	15,000 RPM SAS drives available in 73GB, 146GB, 300GB, 450GB and 600GB 10,000 RPM SAS drives available in 300GB, 400GB and 600GB Nearline SAS (7,200 RPM) drives available in 500GB, 750GB or 1TB 7,200 RPM SATA II drives available in 250GB, 500GB, 750GB, 1TB and 2TB Energy efficient SATA II (5,400 RPM) drives available in 1TB and 2TB
Maximum Capacity Per Enclosure	30TB using fifteen (15) 2TB disk drives
Expansion Capabilities	Expands to three (3) shelves with two PowerVault MD1000 expansion arrays
Host Connectivity	
Standard Model	Supports up to 2 hosts directly connected or up to 16 servers when configured with an Ethernet switch
High Availability Model	Supports up to 4 hosts directly connected or up to 16 servers when configured with Ethernet switch; supports both IPV4 and IPV6 addressing
Storage Controllers and RAID Levels	
Storage Controllers	Standard Model: Single controller with 512MB of battery-backed up cache High Availability Model: Dual-active/active controllers with a total of 1GB mirrored, battery-backed-up cache Battery-backed-up cache provides up to 72 hours of data protection
RAID Levels	Support for RAID levels 0, 1, 10, 5, and 6 Up to 30 physical disks per group Up to 256 virtual disks
Array Management and Optional Premium Software	
Array Management	Modular Disk Storage Manager, Java-based task-oriented user interface Multi-path software provides failover management of redundant data paths between the host server and storage array
Optional Premium Software Features	Enhanced Snapshots: Up to 8 snapshots per virtual disk and 128 per system Enhanced Snapshots PLUS Virtual Disk Copy: Up to 8 snapshots and up to 8 simultaneous virtual disk copies
Back-Panel Connectors (per controller)	
Host Connectivity	Two RJ-45 1GB Ethernet
Expansion Connectivity	One x4 3GB SAS (SFF 8470)
Remote Management	One RJ-45 10/100MB Ethernet
Service Management	One PS/2 Serial
LED Indicators	
Front Panel	1 two-color LED indicator for system status, 1 single-color LED indicator for power, 1 LED unused in this system
Hard Drive Carrier	1 single-color activity LED, 1 two-color LED status indicator per drive
Storage Controller	1 two-color LED status indicator per SAS IN/OUT port (total 3 on dual-port option, 2 on single-port option), 1 one-color battery fault, LED for battery-backed cache, 1 one-color cache activity LED, 2 one-color controller fault and controller power LEDs, 2 one-color LEDs for Ethernet link and speed
Power Supply/Cooling Fan Module	3 LED status indicators for power supply status, power/supply/fan fault and AC status
Power Supplies (per supply)	
Wattage	478W (Maximum continuous); 550W (peak)
Maximum Heat Dissipation	1430 BTU/hour (maximum)
Input Voltage Range	100-240V rated (actual 90-26V)
Frequency Range	47-63Hz
Maximum Input Current at Rated Power	7.93A at 90V; 3.96A at 180V
Available Hard Drive Power (per slot)	
Supported Continuous Consumption	Up to 1.3A +12V; Up to 1.5A at +5V
Physical	
Height x Width x Depth	13.11 cm (5.16") x 44.63 cm (17.57") x 48.01cm (18.90")
Weight	35.37 km (78 lbs) (maximum configuration)
Environmental	
Temperature	Operating: 10° to 35°C (50° to 95°F), Storage: -40° to 65°C (-40° to 149°F)
Relative Humidity	Operating: 20% to 80% (non-condensing), Storage: 5% to 95% (non-condensing)
Altitude	Operating: -15 to 3048 m (-50 to 10,000 ft), Storage: -15 to 10,668 m (-50 to 35,000 ft)

SIMPLIFY YOUR NETWORK AT DELL.COM/MD3000i

