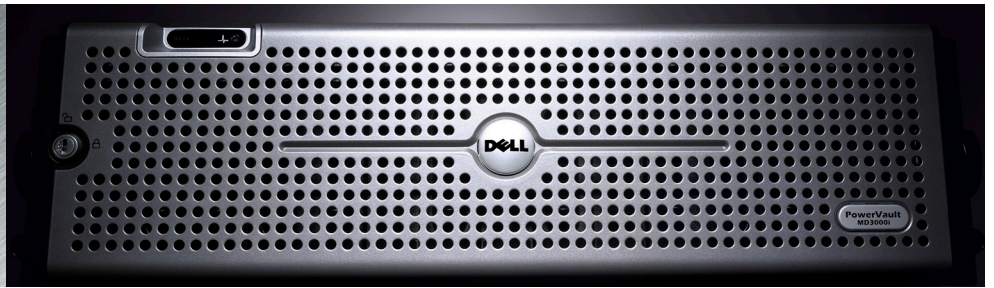


## DELL™ POWERVAULT™ MD3000i



**iSCSI SAN that simplifies 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 businesses and organizations can harness the storage consolidation and data management capabilities of a SAN, easily and cost effectively. The PowerVault MD3000i is an iSCSI SAN that simplifies data management and delivers enterprise data protection capabilities at a fraction of the cost of traditional storage consolidation solutions. Dell's new PowerVault MD3000i networked storage array leverages the modularity and availability of the PowerVault series of disk arrays to deliver an IP network storage solution that can consolidate up to 16 fully redundant hosts.

### Power and Performance

The PowerVault MD3000i array delivers good performance at a fraction of the cost of traditional fibre channel consolidation solutions. With four host-side 1GB/s Ethernet interfaces and the excellent bandwidth of SAS disk drives, the PowerVault MD3000i array enables high-performance, capacity-efficient consolidation without the need of an expensive, complicated Fibre Channel storage network.

### 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 fifteen 3.5-inch SAS 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:

The 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.

The high availability model supports up to 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.

### Simple Yet Powerful Storage Management

The PowerVault MD3000i delivers a seamless suite of intuitive, intelligent storage management software capabilities. The modular Disk Storage Manager automatically configures the system for optimal 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.



Dell PowerVault MD3000i



## DELL IT INFRASTRUCTURE SERVICES

Dell brings pure execution to IT Services. The planning, implementation and maintenance of your IT infrastructure deserves nothing less. Variability in execution can compromise your productivity, IT resources and ultimately your reputation. By leveraging our heritage of process-driven excellence, Dell Services can deliver a smarter way. We don't claim to do everything. We focus on IT infrastructure services. And we take a customer led approach, grounded in the philosophy that you know your business better than anyone. That's why Dell does not try to take key business decisions out of your hands, or lock you in to more than you need. Instead, we apply our world-class process management and "no excuses" culture to deliver what organizations need most today – flexibility and repeatable quality. That's pure execution. That's Pure Dell.

### Enterprise Support Services:

With Dell, you can get maximum performance and availability out of your Dell server and storage systems. Our Enterprise Support Services offer proactive maintenance to help prevent problems as well as rapid response and resolution of problems when they do occur. We have built a robust global infrastructure that offers multiple levels of enterprise support for systems throughout your infrastructure.

### Deployment Services

System deployment is a necessary evil that plagues nearly every organization. You must deploy new systems to help improve performance and meet user demand. With Dell's deployment services, we help simplify and speed up the deployment and utilization of new systems to maximize uptime throughout your IT environment.

### Asset Recovery and Recycling Services

Proper disposal, reselling and donation of computer equipment is a time-consuming task that typically falls to the bottom of many IT to-do lists. Dell helps simplify the end-of-life processes for IT equipment in a way that can maximize value for your organization.

### Training Services

Arm your employees with the knowledge and skills they need to be as productive as possible. Dell offers comprehensive training services which include hardware and software training, as well as PC skills and professional development classes. With Dell training you can help improve system reliability, maximize productivity and reduce end-user requests and downtime.

### Assessment, Design and Implementation Services

IT departments are continually challenged to evaluate and implement new technologies. By utilizing our technical expertise and exceptional project management, you can plan, build and manage an IT infrastructure that takes full advantage of industry standards – and realize the benefits that come along with them. Simplified operations. Improved ROI. Increased utilization. Optimized performance. More control. Less chaos. To help you get the most from your Dell systems, visit [www.dell.com/services](http://www.dell.com/services). Services vary by region.

# DELL™ POWERVAULT™ MD3000i

## TECHNICAL SPECIFICATIONS

### Drives and Capacity Hard Disk Drives

Up to fifteen (15) 3.5-inch SAS hot-pluggable hard disk drives

#### Drive performance and capacities

15K SAS drives available in 36GB, 73GB, 146GB, or 300GB capacities

10K SAS drives available in 73GB, 146GB, 300GB, and 400GB capacities

Minimum capacity (per enclosure) 72GB using two 36GB 15K SAS drives

Maximum capacity (per enclosure) 6,000GB using fifteen 400GB SAS drives

*Additional storage capacity can be achieved by adding up to two MD1000 expansion units for up to 45 SAS drives.*

Note: SATA drives available in Q4 2007

### Connectivity

**Standard model** supports up to 2 hosts directly connected or up to 16 hosts when configured with an Ethernet switch

**High Availability model** supports 4 hosts directly connected, or up to 16 fully redundant hosts when configured with Ethernet switches

### Storage Controllers and RAID Levels

**Standard:** Single controller with 512 MB of battery-backed cache

**High Availability:** Dual active/active controllers with a total of 1GB mirrored, battery-backed cache

Batteries for cache provide up to 72 hours of data protection

Support for RAID levels 0, 1, 5, 10

Up to 30 physical disks per group

Up to 256 virtual disks

### Array Management and Optional Software

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

**Virtual disk snapshots (optional):** up to four snapshots per virtual disk and 128 snapshots per system

**Virtual disk copy (optional):** up to eight simultaneous virtual disk copies and a total of 255 per system

### Back-Panel Connectors

Each MD3000i controller has the following external connections:

Two RJ-45 1Gb Ethernet ports for host connectivity

One x4 (12 Gbps) SAS port for capacity expansion

One RJ-45 10/100Mb Ethernet connection for remote management

One PS/2 serial interface for service

### 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 90-264V)

Frequency range – 47-63 Hz

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 at +12V; Up to 1.5A at +5V

### Physical

Height – 13.11 cm (5.16 inches)

Width – 44.63 cm (17.57 inches)

Depth – 48.01 cm (18.90 inches)

Weight – 35.37 kg (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)