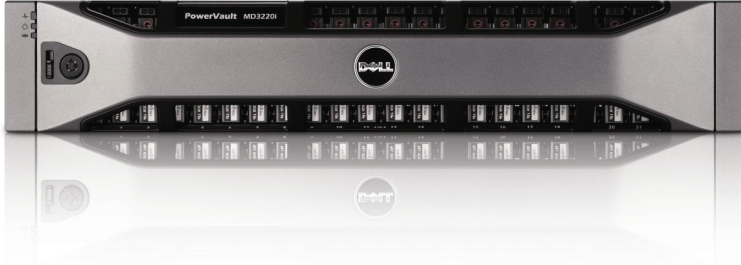




Modular storage

The Dell™ PowerVault™ MD
storage family



Simplifying IT

The Dell™ PowerVault™ MD Family simplifies IT by optimizing your data storage architecture and ensuring the availability of your data. This frees up valuable resources to help reduce costs and make innovation a daily practice.

The Dell Difference:

Simplification is in our DNA

We are dedicated to helping you reclaim time and resources through IT simplification.

Standardize

We don't rely on proprietary technologies but instead build systems that are standards-based.

Intelligent automation

Our systems are designed for ease-of-use, freeing up your IT team to focus on bigger initiatives.

Scale up as your needs grow

Our storage solutions are completely modular. Buy only what you need, then add capacity as your data storage needs grow.

The perfect balance

IT organizations are being challenged by the need to store and manage rapidly increasing amounts of data with limited resources and budgets. The Dell PowerVault MD Family addresses these challenges with versatile solutions that are optimized for smaller-scale storage consolidation and virtualization projects. PowerVault MD products include a series of high-performance SAN and direct-attached storage arrays, high-capacity expansion enclosures and robust management software that together deliver exceptional flexibility, scalability and value.

Storage consolidation and virtualization

The PowerVault MD3200i Series of iSCSI SAN arrays is ideal for network storage consolidation and virtualization deployments with up to 32 physical servers. MD3200i Series arrays can deliver high capacity and excellent performance without the need to invest in typically expensive and complex Fibre Channel networks.

High availability storage

The PowerVault MD3200 Series of storage arrays incorporates 6 Gb/s SAS technology for shared storage and virtualized environments on PowerEdge™ servers. These next-generation arrays offer exceptional flexibility, scalability and performance. Dual-controller models can connect up to four high-availability servers or eight non-redundant servers for balanced performance in mixed virtualized environments.

Simplified expansion

For performance

The PowerVault MD1200 and MD1220 are direct-attach 6 Gb/s SAS expansion enclosures that can be connected to MD3200 Series arrays and Dell PowerEdge servers to provide additional capacity for high performance and data-intensive applications.

The PowerVault MD1220 delivers the speed, flexibility and reliability to satisfy data-hungry, performance-intensive applications that store active and frequently changing information. This high performance 2U array can accommodate up to twenty-four (24) 2.5" SAS HDDs or SAS SSDs to provide up to 12 TB of storage.

For capacity

The PowerVault MD1200 expansion enclosure is ideal for applications that move large amounts of data and require extended storage capacity. Up to twelve (12) 3.5" or 2.5" SAS HDDs or SSDs can be housed in this 2U array

to provide up to 24 TB of storage. Both drive sizes can be combined behind a single PowerEdge RAID Controller.

The PowerVault MD1000 expansion enclosure is optimized to support high-capacity applications and its modular design enables easy expansion and pay-as-you-grow flexibility. It can be used in conjunction with a server-based Dell PERC RAID controller and can accommodate up to fifteen (15) 3.5" disk drives in a single 3U rackable chassis. This direct-attached storage enclosure supports both Serial Attached SCSI (SAS) and Serial ATA (SATA) disk drives to offer extensive configuration and optimization flexibility.

Optimized for
smaller-scale storage
consolidation and
virtualization
projects.

Dell PowerVault MD Family



Modular flexibility

The modularity of the PowerVault MD Family enables you to easily upgrade an existing system and evolve current storage infrastructures to meet changing business needs. For example, migrating from a standard to a highly available PowerVault MD3200i or MD3200 Series solution simply requires you to slide in a second controller module—no data migration or extended downtime required. Plus, this modularity offers easy and economical expansion for Dell PowerEdge servers and PowerVault MD storage arrays.

Powerful storage management

The PowerVault MD Family is supported by a robust suite of easy-to-use, intelligent storage management software. For the MD3200i and MD3200 Series of arrays, the Modular Disk Storage Manager combines an intuitive interface, wizard-guided tools, and a task-based management structure to significantly reduce the complexity of installation, configuration, management, and diagnostic tasks.

For MD1200, MD1220 and MD1000 systems deployed behind a PowerEdge RAID Controller, Dell OpenManage™ Storage Management provides a comprehensive set of standards-based tools for the proactive management information and control functions needed to optimize deployment, health status monitoring, fault recovery, and change management.

Match drive and performance to your needs

The PowerVault MD Family is designed to provide the versatility to match storage drives to different tiers of application data performance and space requirements to maximize capacity at the lowest cost per gigabyte. To satisfy the near-line speed, performance and reliability requirements of mainstream and server applications, 10K and 15K RPM SAS drives can be used in all MD Family arrays. If data protection is priority, MD3200i, MD3200, MD1220 and MD1200 Series arrays can be equipped with Self-Encrypting Drives (SED) for additional security.

PowerVault storage and PowerEdge server commonalities

The PowerVault MD Family uses the same disk drives as PowerEdge servers, so you only need to stock a single type of spare drive, fan or power supply. PowerVault storage arrays are designed and engineered to pair perfectly with PowerEdge servers, offering a complete solution that enhances usability and can make support and service easier.

Supporting your unique environment

Dell ProSupport* for IT provides tech-to-tech support for IT Professionals, Database Administrators, and internal service desks or help desks. Features such as Fast-Track Dispatch, direct access to Dell Expert Centers, and customer-controlled severity levels were designed with your specific challenges in mind. Dell Infrastructure Consulting helps organizations—from small-to-medium-size companies to large corporations—select the right storage infrastructure to ensure data availability and optimize it with a variety of service options to meet their requirements for backup, recovery, and archiving. Dell Global Services incorporates operational excellence, accountability, and value to deliver end-to-end service and support solutions designed to maximize your IT investment by simplifying your IT environment.

Exceptional flexibility, scalability and balanced performance for mixed virtualized workloads.

	PowerVault MD3200i	PowerVault MD3200	PowerVault MD3220i	PowerVault MD3220	PowerVault MD1220	PowerVault MD1200	PowerVault MD1000
Drives	12	12	24	24	24	12	15
Maximum Drives	96	96	96	96	192	96	Controller Dependent
Drive Type	3.5- and 2.5-inch 6 Gbps SAS and NL SAS HDDs, 2.5-inch 3 Gbps SSDs	3.5- and 2.5-inch 6 Gbps SAS and NL SAS HDDs, 2.5-inch 3 Gbps SSDs	2.5-inch 6 Gbps SAS and NL SAS HDDs, 2.5-inch 3 Gbps SSDs	2.5-inch 6 Gbps SAS and NL SAS HDDs, 2.5-inch 3 Gbps SSDs	2.5-inch 6 Gbps SAS and NL SAS HDDs, 2.5-inch 3 Gbps SSDs	3.5- and 2.5-inch 6 Gbps SAS and NL SAS HDDs, 2.5-inch 3 Gbps SSDs	3.5-inch 3 Gbps SAS, NL SAS and SATA II HDDs
Maximum Cache	4GB (2GB per controller)	4GB (2GB per controller)	4GB (2GB per controller)	4GB (2GB per controller)	Controller Dependent	Controller Dependent	Controller Dependent
Host Interface	Eight x 1Gb Ethernet (4 per controller)	Eight x 6Gb SAS (4 per controller)	Eight x 1Gb Ethernet (4 per controller)	Eight x 6Gb SAS (4 per controller)	Two 6GB SAS	Two 6GB/sec SAS	Two 3GB SAS
Maximum Hosts	32	8	32	8	Controller Dependent	Controller Dependent	Controller Dependent
Maximum HA Hosts	32	4	32	4	Controller Dependent	Controller Dependent	Controller Dependent
Form Factor	2U Rack	2U Rack	2U Rack	2U Rack	2U Rack	2U Rack	3U Rack
Management Software	MD Storage Manager	MD Storage Manager	MD Storage Manager	MD Storage Manager	OpenManage™ Storage Management	OpenManage™ Storage Management	OpenManage™ Storage Management
Optional Features	Snapshot, Virtual Disk Copy, Self-encrypting drives, High Performance Tier	Snapshot, Virtual Disk Copy, Self-encrypting drives, High Performance Tier	Snapshot, Virtual Disk Copy, Self-encrypting drives, High Performance Tier	Snapshot, Virtual Disk Copy, Self-encrypting drives, High Performance Tier	N/A	N/A	N/A
Server Support	Industry-standard servers	Dell servers	Industry-standard servers	Dell servers	Dell™ PowerEdge™ only	Dell™ PowerEdge™ only	Dell™ PowerEdge™ only
OS Support	Microsoft® Windows®, Linux, VMware®, Microsoft Hyper-V™	Microsoft® Windows®, Linux, VMware®, Microsoft Hyper-V™	Microsoft® Windows®, Linux, VMware®, Microsoft Hyper-V™	Microsoft® Windows®, Linux, VMware®, Microsoft Hyper-V™	Controller Dependent	Controller Dependent	Controller Dependent

*Availability and terms of Dell Services vary by region. For more information, visit www.dell.com/servicesdescriptions

Simplify storage at dell.com/storage

