Dell and ATTO Storage Solution

Together, Dell and ATTO Technology provide a leading server-to-high-density storage solution. The Dell PowerVault MD3060e is a highly scalable enclosure built to handle workloads in large data environments, and when paired with the high-performance and low-latency features of ATTO's ExpressSAS RAID adapters, you can keep pace with the growing demands of enterprise environments.

Dell and ATTO storage solution benefits

CacheAssure™

- Flash-based cache protection protects against lost data during power or system failure
- Instantly detects the failure and preserves the cached data
- Provides high-performance connectivity for bandwidth-intensive data transfers

Advanced Data Streaming™

- Provides high-performance host-based RAID for direct-attached storage
- Moves large amounts of data faster and more efficiently
- Reduces project interruptions by maximizing the number of transactions that can be processed

DriveAssure™

- Full performance in degraded mode or during a rebuild
- Uninterrupted access to data allows systems and applications to run longer, faster and smoother
- Increased data protection with constant monitoring of drive health

Adaptive Path Optimization™

- Supports redundant paths to storage
- Fast, dynamic rebalancing minimizes disruptions and quickly restores a balanced configuration that delivers predictable performance

Dell PowerVault MD3060e

The Dell PowerVault MD3060e is a 60-drive enclosure that exhibits high bandwidth as well as high-performance storage on a wide range of applications. The MD3060e provides high availability and speed while remaining flexible to consolidate data storage.

ATTO ExpressSAS R680-C00 RAID Adapter with CacheAssure

ExpressSAS RAID Adapters add high-performance data protection to direct attached SAS JBOD storage, providing a flexible connectivity solution. ATTO's R680 RAID adapter delivers high bandwidth and consistent performance that is engineered for smooth data transfers and impressive latency management.

Included with this SKU is CacheAssure™ a maintenance-free, NV cache protection solution that safeguards against the loss of cached data during a power or system failure. CacheAssure is a more reliable data recovery alternative to battery backup and does not require lengthy charge times to start protecting cached data. In the event of a power or system failure, CacheAssure instantly detects the failure and preserves the cached data in nonvolatile memory on the RAID adapter allowing users to maintain their data until power is restored. To purchase the ATTO ExpressSAS R680-C00 with CacheAssure, use SKU# A7860305 from the S&P.

ATTO ExpressSAS R680-000 RAID Adapter

The ExpressSAS RAID Adapter without Cache Assure option supports all features of the RAID Adapter but does not have additional cache protection. To purchase the ATTO ExpressSAS R680-000, use SKU# A7497834 from the S&P.

Dell PowerVault MD3060e Tech Specs	
Drives	60 drives in a 4U rack enclosure; up to 4 enclosures behind a single server; scales to 240 drives; "Soft Eject" tray feature prevents drive failure from shock
Capacity	Up to 960TB[1] raw capacity
3.5" drives	NL-SAS (7.2K): 500GB, 1TB, 2TB, 3TB and 4TB SSDs: 200GB and 400GB; read-intensive: 800GB and 1.6TB (available with 3.5" HDD carriers)
2.5" drives	SAS (15K): 146GB and 300GB SAS (10K): 300GB, 600GB, 900GB and 1.2TB NL-SAS (7.2K): 500GB, 1TB, 2TB, 3TB, 4TB and 6TB SSDs: 200GB and 400GB; read-intensive: 800GB and 1.6TB
Connectivity	6Gb SAS
Availability	Highly available architecture with dual redundant power and cooling modules
Controllers	Dual Enclosure Management Modules (EMMs)
Server support	Dell PowerEdge C6220 (only without Cache Assure), R520, R530, R620, R630, R720, R720xd, R730 and R820 servers
OS support	Microsoft® Windows Server® 2012 R2, Red Hat® Enterprise Linux® 6.5, Ubuntu 12.04 LTS, and Debian 7.4
Dimensions	177.8 mm (7.0") x 482.6 mm (19.0") x 825.5 mm (32.5"); maximum weight: 105.20 kg (232.0 lb)
Dell support and optional storage service offerings	Along with Deployment and Consulting Services and Dell Copilot Support, Dell Copilot Optimize is available for ongoing strategic counsel and guidance from a highly trained system analyst.[2]

ATTO ExpressSAS R680 SAS RAID Adapter Tech Specs	
Ports	8 external ports in a low-profile form factor
Host connection	x8 PCIe 2.0 host connection
Connectivity	SAS 2.0, SAS connectivity
RAID	Supports RAID Levels 0, 1, 4, 5, 6, 10, 50, 60 and JBOD
Data protection	Data Recovery Modes
End device support	Supports up to 256 end devices
OS support	Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, Windows 8.1, Windows 7, Red Hat Linux and SUSE Linux
Warranty	3-year standard product warranty
Memory	512MB ECC memory
Management	Easy-to-use GUI-based configuration utility and CLI-based tools
Purchase SKU	To purchase the ATTO ExpressSAS R680-C00 with CacheAssure in the United States, use SKU# A7860305 from the S&P. To purchase the ATTO ExpressSAS R680-000 in the United States, use SKU# A7497834 from the S&P.

Global services and support

Reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell Enterprise Solutions and Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services has a wide range of options to make technology acquisition easy and affordable. Contact your Dell Sales Representative for more information.

OEM-ready version available

From bezel to BIOS to packaging, your storage arrays can look and feel as if they were designed and built by you.[3] For more information, visit Dell.com/OEM.

[1] GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.
[2] Availability and terms of Dell Services vary by region. For more information, visit Dell.com/ServiceDescriptions.
[3] OEM-ready available on certain models.

Simplify Your Storage at Dell.com/PowerVaultMD3