DXi6800 Series

High-Performance, Secure, Easy-to-Deploy Disk Backup with Deduplication and Replication for Multiprotocol Environments

For enterprise customers who want multi-site, multi-tier protection that is secure and easy to manage for fast on-site restore and long-term retention, the DXi6800 Series is an extensible deduplication appliance that offers the most scalable, highest performing, greatest density and lowest power disk backup and deduplication solution. Unlike other deduplication solutions, the DXi6800 Series provides certainty that all your data is secure and available when you need it most—no matter your architecture, scale, or location.

The DXi6802 appliance, which is the first model in the DXi6800 Series, provides deduplication without compromise, combining the broadest scalability and highest performance with comprehensive security, improved data availability, and unique extensibility supporting the full range of enterprise presentation options: NAS, VTL and OST. Built on Quantum's DXi® software, the DXi6802 provides up to 16.3TB/hour performance and pay-as-you-grow scalability with 3TB self-encrypting drives (SEDs) from 13TB to 156TB of usable capacity in a single system. The DXi6802 provides maximum flexibility and value for investment protection in evolving backup environments and, unlike the competition, includes the following software licenses in its base price: NAS, VTL, OST, deduplication, replication, path-to-tape (PTT) and DXi Accent[™] software for hybrid deduplication.

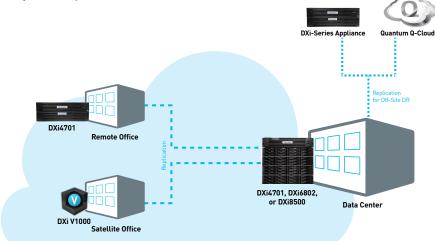


Figure 1 - Replication of Backup Data for Automated DR Protection

KEY BENEFITS

- Pay-as-you-Grow Scalability through Capacity-on-Demand (CoD) provides simple, predictable, and easy-to-install storage capacity
- Broad Capacity Range through the use of 3TB drives delivers greater storage density with reduced power consumption
- Increased Performance (up to 16.3TB/ hour) reduces the pressure on the backup window—which is increasing as data volumes continue to increase
- Comprehensive Data Security through data-at-rest encryption via self-encrypting drives (SEDs) protects against data breach from physical removal of disk drives
- Improved Data Availability with the addition of hot spare drive capacity enables continued backup and restore operations without unplanned system degradation



TECHNICAL SPECIFICATIONS

INTERFACES

NAS backup target	
Presentations:	CIFS and/or NFS
Shares:	128 max
OpenStorage (OST) API	
Presentations:	Symantec Storage Servers and Logical Storage Units
Shares:	128 max
VTL Fibre Channel	
Partitions (max):	64
Drives (max):	256
Cartridges per Partition (max):	9,000
Emulations (libraries):	Scalar® 24, Scalar i40/i80, Scalar 100, Scalar i500, Scalar i2000, Scalar i6000
Emulations (drives):	DLT7000, SDLT 320, SDLT 600, DLT-S4, LTO-1, LTO-2, LTO-3, LTO-4, LTO-5

INLINE PERFORMANCE

NAS Interface: 13.5TB/hour 16.3TB/hour* OST Interface: VTL Interface: 15.0TB/hour 12.1TB/hour** DXi Accent:

SYSTEM REDUNDANCY

Enhanced RAID, redundant power, redundant cooling, hot spare drive capacity, hot-swap drives, power supplies and fans

HOST TO APPLIANCE H/W INTERFACE

Six 8Gbps FC, up to four 10GbE Optical (SFP+) or Copper, and up to seven 1GbE ports

SOFTWARE LICENSES INCLUDED

The base price of the DXi6802 includes licenses for NAS, VTL, OST, deduplication, replication, path-totape (PTT) and DXi Accent™ software for hybrid deduplication.

CAPACITY AND SCALABILITY

Usable capacity: 13TB to 156TB Scaling increment: 13TB 260TB to 3,120TB*** Logical Capacity: Hard Disk Drives: 3TB SAS

PHYSICAL SPECIFICATIONS

Dimensions: System Node: 2U, [17.5in (W) x 3.4in (H) x 29.7in (D)] - [44.5cm (W) x 8.6cm (H) x 75.4cm (D)] Expansion Module: 2U, [17.8in (W) x 3.4in (H) x 21.8in (D)] - [45.2cm (W) x 8.6cm (H) x 55.4cm (D)] Weight: 64.9lbs (29.4kg) System Node: Expansion Module: 57lbs (25.9ka) Up to six expansion modules with 3TB drives, 2U each Expansion:

POWER SPECIFICATIONS

Power Input: Input Voltage:	NEMA 5-15P to C13 power cord 100 to 240VAC, 50-60Hz
Rated Current: System Node: Array Module: Expansion Module:	4.90A @ 100V, 2.25A @240V 2.45A @ 100V, 1.02A @240V 2.25A @ 100V, 0.94A @240V
Typical Power Consumption: System Node:	490W, 4.9A @ 100VAC – 1672 BTU/hr 480W, 2.00A @ 240VAC – 1638 BTU/hr
Array Module:	250W, 2.5A @ 100VAC - 853 BTU/hr 250W, 1.25A @ 240VAC - 853 BTU/hr
Expansion Module:	225W, 2.25A @ 100VAC - 768 BTU/hr 225W, 1.12A @ 240VAC - 768 BTU/hr
Inrush:	50A @ 100VAC 16A @ 240VAC

*Performance in target mode—does not require use of DXi Accent software. **DXi Accent improves throughput in bandwidth-constrained environments. ***Assumes a deduplication ratio of 20:1. Actual deduplication ratios will vary

depending upon data types, retention, and compressibility of your data

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE Operating: Shipping & Storage: RELATIVE HUMIDITY Operating:

ALTITUDE

Operating:

-4° to 140°F 20 to 80% non-condensing

Shipping & Storage: 5 to 95% non-condensing

50° to 86°F

-50 to 10,000ft (-15.2 to 3,048m) -50 to 39.370ft [-15.2 to 12.000m] Shipping & Storage:

DIRECT TAPE CREATION INCLUDED

Direct tape creation-physical tape can be written in background over dedicated Fibre Channel connections without using media server or backup SAN. DXi6802 units support direct to tape operation under Symantec NetBackup and Backup Exec, OST (Netbackup), EMC Networker, Oracle Secure Backup, and Atempo Time Navigator with full control of the tape creation process and tracking of media barcodes by the application.

[10° to 30°C]

(-20° to 60°C)

SYMANTEC OPENSTORAGE (OST) API SUPPORT

Support for OST is a standard feature for all DXi6802 units, allowing users to write data to OST logical storage units (LSUs) and enabling application-aware replication in NetBackup and Backup Exec environments Support includes Optimized Duplication, Auto Image Replication (AIR), Granular Restore Technology (GRT), and OST direct path-to-tape introduced in NetBackup 6.5.4. OST Optimized Synthetic Full Backups is supported to reduce network I/O and shorten time to perform full restore from incremental backups.

DXi ACCENT

DXi Accent software, a standard feature on all DXi6800 Series models, allows the backup server to collaborate in the deduplication process, off-loading part of the data reduction activity so that only unique blocks are sent over the network to the DXi appliance. This hybrid approach provides faster backups over bandwidth constrained LANs or WANs. DXi Accent can be enabled or disabled on a per-media server basis. Initial support for DXi Accent is provided through the NetBackup OpenStorage (OST) API

DATA-AT-REST ENCRYPTION

Data-at-Rest Encryption uses Self Encrypting Drive (SED) technology to secure all data stored on the DXi6802. This includes file data and metadata, configuration files, and the DXi software and operating system. When Data-at-Rest Encryption is enabled, all hard drives in the DXi are paired with the disk controllers using encryption keys. After this, accessing data on the drives requires the same encryption keys and controllers that were used to write the data. This ensures that a drive that is physically removed from the DXi cannot be read using another system or device.

DXI ADVANCED REPORTING

DXi Advanced Reporting, which is included on all DXi appliances, sets new standards for onboard intelligence by giving users a detailed view of internal appliance operations and provides them with years of backup and replication data for extended trend analysis. DXi Advanced Reporting reduces administration time, improves operations, streamlines performance tuning, and helps users maximize the value of their DXi appliances.

QUANTUM VISION

Quantum Vision® provides powerful monitoring, reporting, and analysis tools for all of the Quantum storage devices in your backup environment. You can view the status and track the performance of multiple DXi disk backup systems, vmPRO software, DXi V-Series virtual devices, Scalar LTFS devices, and Scalar libraries using a single flexible interface.

vmPR0

Quantum vmPRO™ software is a complete data protection solution for virtual environments Combining simplified management, optimized protection and future flexibility, vmPRO brings unique value to virtual data protection. Protecting virtual data in native VMDK allows customers to easily restore virtual data in seconds, instantly boot VMs from the DR site or the cloud, and integrate simply with their existing backup infrastructure. Combined with DXi appliances, vmPRO can reduce resource utilization by as much as 95% and deliver best-of-breed cloud-based data protection

Q-CLOUD READY

Quantum Q-Cloud™ provides a new, innovative Cloud backup and DR strategy designed specifically for virtual and physical environments. Q-Cloud is a subscription-based solution that allows customers of all sizes to keep more data offsite for a longer period of time by efficiently replicating data to the Cloud with a simple, cost-effective approach. Q-Cloud is a secure cloud data protection solution that integrates with your existing backup software and reduces risk for IT Departments with a convenient option to efficiently replicate your data to the cloud.

ABOUT QUANTUM

Quantum is a proven global expert in Data Protection and Big Data management, providing specialized storage solutions for physical, virtual and cloud environments. From small businesses to major enterprises, more than 100,000 customers have trusted Quantum to help maximize the value of their data by protecting and preserving it over its entire lifecycle. With Quantum, customers can Be Certain they're able to adapt in a changing world - keeping more data longer, bridging from today to tomorrow, and reducing costs. See how at www.quantum.com.

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Quantum **BE CERTAIN**