



DXi8500 Enterprise

Powerful, flexible disk backup solution
leveraging data deduplication for
Enterprise-wide protection

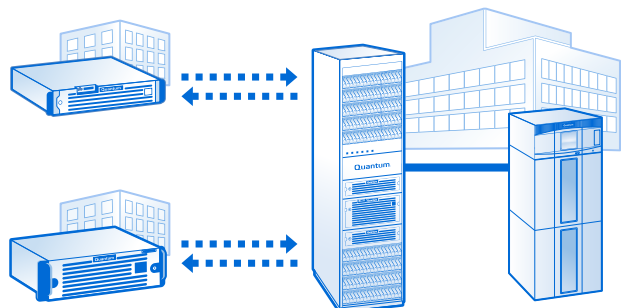
The DXi8500 is the high performance deduplication solution with the power and flexibility to anchor an Enterprise-wide backup, disaster recovery, and data protection strategy.

The DXi8500 offers industry leading performance of up to 6.4 TB/hour, and advanced deduplication technology that reduces typical disk and bandwidth requirements by 90% or more. The results are faster backups, streamlined restores, and automated DR protection that leverages remote replication to simplify management, reduce or eliminate removable media, and lower costs.

The DXi8500 scales from 20 to 200TB of usable capacity, and presents the industry's widest range of presentation options, including deduplication-enabled VTL, CIFS, NFS, and OST, as well as native-mode (non-deduplicating) VTL and NAS shares. All interfaces can be supported simultaneously in the same unit to provide maximum configuration options for heterogeneous environments.

To integrate short term protection and long term retention, the DXi8500 features an integrated path to tape for both VTL and OST presentations, providing a direct link to physical tape libraries that bypasses the backup server but is fully integrated into leading backup applications' management interface and media catalogs.

The DXi8500 delivers Enterprise deduplication systems the management tools needed to integrate them into a multi-site, multi-tier protection strategy, offering both advanced reporting for internal operations and support for global management across users' disk, tape, and replication systems. All software licenses—including replication, VTL, OST, and direct tape creation—are included in the DXi8500's base price to maximize value and streamline deployment.



With up to 6.4 TB/hour data ingest, the DXi8500 supports high performance data center backup and anchors a multi-site, multi-tier protection strategy. Replication, VTL, OST, and direct tape creation software licenses are included in the base appliance price.

The DXi8500 is designed to anchor an Enterprise-wide data protection strategy that unifies disk, tape, and replication under common management.

KEY BENEFITS

Industry-leading Backup and Recovery Performance While Managing Costs

- Up to 6.4 TB hour performance for faster backup and restore
- Uses patented data deduplication technology to decrease disk requirements by 90% or more
- Streamlines backup management, reduces capital costs and the demands for space, power, and cooling
- All software—replication, tape creation, VTL, OST—included in the base price

Improve and Automate Disaster Recovery

- Reduces bandwidth requirements by 90% or more, making remote replication a practical DR tool
- Replication automates DR, reducing or eliminating use of removable media—full support for OpenStorage API with NetBackup and BackupExec
- Integrates direct tape creation from disk to combine short-term and long-term protection
- Reduces media purchase and handling

Protect all Your Sites

- Enterprise backup system with flexible interface—VTL, NFS, CIFS, OpenStorage (OST); combines deduplicating and non-deduplicating shares
- Supports all leading backup software, replication compatible with all DXi appliances
- Supports unified disk and tape protection across multiple sites under common management

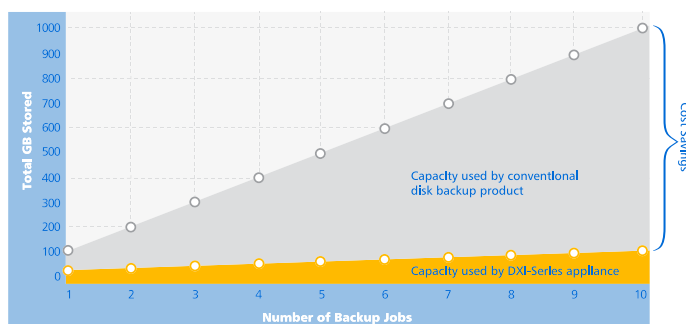
Advanced Data Deduplication Increases Disk Capacity—Preserves High Performance

QUANTUM'S COMPREHENSIVE DATA PROTECTION STRATEGY

DXi®-Series solutions are designed to let users connect all their sites in a comprehensive data protection strategy that boosts performance, guards against backup throttling, and reduces media handling—all without changing their existing backup applications or re-architecting their network infrastructure. The DXi-Series helps IT departments maximize value from all their backup assets by providing advanced reporting, proactive trend analysis, and common management across multiple sites and multiple technology layers.

The DXi8500 uses Quantum's patented data deduplication technology to dramatically increase the role that disk can play for backup and DR protection. With DXi-Series solutions, users can reduce capacity requirements for disk by 90% or more and make WAN-based remote replication of backup data a practical tool for disaster recovery protection. This advantage allows IT departments to cost-effectively retain months of backup data on disk for faster, more reliable restores and more data recovery points. Quantum's innovative implementation of this core technology means that users do not have to compromise on performance to take advantage of extended retention capability. The DXi8500 offers up to 6.4 TB/hour performance for data being deduplicated to keep ingest performance high, even during periods of highest loading.

ADVANTAGE OVER CONVENTIONAL DISK

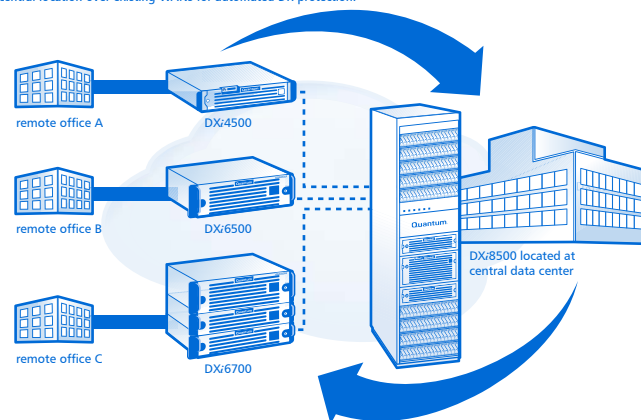


The DXi8500's data deduplication technology eliminates the need to store redundant data, letting users reduce capacity requirements for disk by 90% or more than conventional storage systems.

Remote Replication Links Backup Data Across Multiple Sites for Automated DR

Today most backup occurs on isolated devices, making it difficult to deploy disk backup when disaster recovery protection is required. Quantum's data deduplication technology makes replication of backup data practical and cost effective by dramatically reducing the bandwidth needed to move backup datasets between sites, giving disk backup an automated DR protection component and reducing the need to manage removable media. With the DXi8500, replication is an asynchronous, automated background process that includes a flexible set of options, including encryption of data in transit, scripting, scheduling, deduplication of data prior to transmission, and immediate file-by-file data availability. Integration through the Symantec OpenStorage API (OST) provides application-aware operation for NetBackup and Backup Exec 2010.

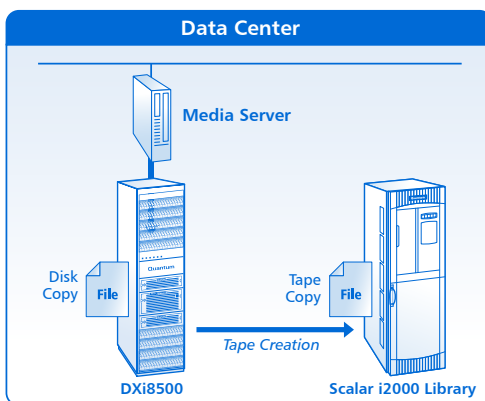
Quantum's Replication Technology
Users can transmit data from a single site or multiple sites to a central location over existing WANs for automated DR protection.



DXi8500 Enterprise

Integrates Backup and Restore with Long-Term Retention

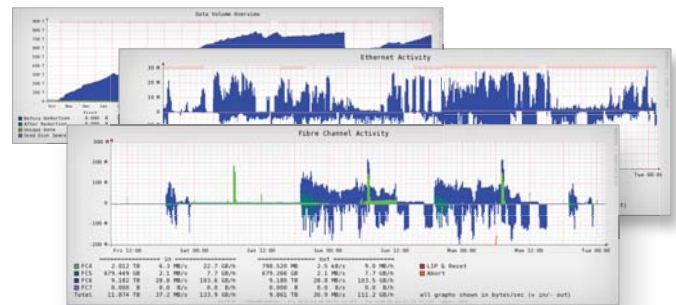
For IT departments that need an optimal combination of short-term backup/restore performance and economical long-term data retention, the DXi8500 offers an application-specific direct path to tape option both for VTL and OST interfaces. This integrated functionality writes backup data directly from the DXi appliance to an attached tape library over an 8Gb FC link, without sending the data through a backup server. Direct tape creation reduces loading on servers and production SANs, and it makes tape creation an automated process that takes place outside the backup window. To reduce management time, Quantum's application-specific path to tape is integrated with leading backup applications, giving users a single point of control and unified media catalogs that automatically track data across disk and tape layers. Supported applications include Symantec NetBackup for VTL and OST, BackupExec, EMC/Legato Networker, Oracle Secure Backup, and Atempo TimeNavigator. Supported tape systems include both Quantum and third-party tape libraries. Replication, OST, VTL, and direct tape creation licenses are included in the base price of all DXi8500 appliances.



Proven integration with backup applications means reduced complexity for users and more effective protection. The application-specific path to tape writes data directly from the DXi8500 to a tape library. The process is controlled and media is cataloged by the backup application, but the data moves directly from disk to tape without going back through a media server.

Management Tools Maximize Value in Deduplication Environments

Effective management is critical for obtaining full value from deduplication deployments. Quantum provides the industry's most advanced set of management tools for its disk appliances and for managing the entire backup hardware infrastructure. DXi Advanced Reporting, included on all DXi appliances in the appliance's base price, sets new standards for onboard intelligence by giving users a detailed view of internal appliance operations and providing 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. And for systems with larger scope, Quantum Vision™ management software provides industry-unique capabilities, giving IT departments global management of all their Quantum disk and tape systems from a single console. Vision's centralized reporting and flexible trend analysis tools help users optimize system value by giving them automated, flexible access to the information they need to make proactive decisions concerning on-going system administration, dynamic capacity planning, and system-wide troubleshooting.



Quantum management tools provide details of internal appliance operations and single-console views across all of a user's disk and tape systems. They reduce management time, streamline performance tuning, accelerate troubleshooting, and provide trend analysis information for proactive decision making that maximizes system value.

DISK BASED BACKUP AND REMOTE REPLICATION

TECHNICAL SPECIFICATIONS

INTERFACES

Multiple interfaces supported in single unit simultaneously

NAS Backup Target:	NFS or CIFS mount point; supports up to 128 deduplicating and non-deduplicating shares
VTL (Fibre Channel):	Supports both deduplicating and non-deduplicating operation
Partitions (max):	64
Drives (max):	160
Virtual Cartridges (max):	40,000
Emulations Libraries:	ADIC Scalar 24, Scalar 100, Scalar i500, Scalar i2000, ATL P7000, Quantum M2500 and PX500 Series
Emulations Drives:	DLT7000, SDLT 320, SDLT 600, SLT-S4, LTO-1, LTO-2, LTO-3, and LTO-4
Symantec OpenStorage (OST) API:	Symantec NetBackup and BackupExec (see details in OST Support Section below)

PERFORMANCE

Adaptive Ingest (during deduplication):	up to 6.4TB/hour*
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SYSTEM REDUNDANCY

RAID 6 with hot spares, Redundant power, Redundant cooling. Hot swap drives, power supplies, and fans.

HOST TO APPLIANCE H/W INTERFACE

Up to 4 8GBps FC, 2 10 GbE Optical (SFP+) or Copper, and 4 1 GbE ports.

POWER INPUT

Power Cord NEMA L6-30P or IEC 60309, 2-8 connectors

REPLICATION

Replication compatible with all DXi-Series products. Replication is asynchronous, one-to-one or multiple-to-one configurations; partitions in same unit act as replication source or target; units with partitions acting as replication targets can also support local backup; data is deduplicated and encrypted prior to transmission; cartridge-by-cartridge and file-by-file replication provides automated access to data at the target; CLI support scripting/scheduling. Provides application-aware replication with NetBackup and Backup Exec OST interface.

OST SUPPORT

Symantec OpenStorage (OST) API Support

Support for OST is a standard feature for all DXi8500 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 and OST direct path to tape introduced in NetBackup 6.5.4.

DIRECT TAPE CREATION

Direct tape creation—physical tape can be written in background over a dedicated Fibre Channel connection without using media server or backup SAN. For VTL interface, the function maintains barcode integrity between virtual and physical tapes and is compatible with backup software direct to tape commands (e.g., Backup Exec, NetBackup, EMC Networker, Oracle Secure Backup, and Atempo TimeNavigator). DXi8500 units also support direct to tape operation under Symantec's OST initiative—creating tape copies directly from OST LSU data without using a media server to move data but under NBU control (NetBackup 6.5.4 and later). OST direct tape creation is also compatible with application aware replication. Up to 2 8Gbps FC ports are dedicated for Direct Tape Creation.

SCALABILITY

20TB to 200TB usable capacity. All disk is retained and all data is preserved during capacity upgrades.

POWER ENVIRONMENT

Input Voltages:	200 to 240 VAC
Rated Frequency:	50 to 60 Hz
Rated Current:	37.7A @ 220VAC

CLIMATIC ENVIRONMENT

TEMPERATURE		
Operating:	50° to 86°F	(10° to 30°C)
Shipping & Storage:	4° to 140°F	(-20° to 60°C)
RELATIVE HUMIDITY		
Operating:	20 to 80% non-condensing	
Shipping & Storage:	15 to 95% non-condensing	
ALTITUDE		
Operating:	0 to 10,000ft (0 to 3,048m)	
Shipping & Storage:	0 to 39,370ft (0 to 12,000m)	
HEAT		
Operating:	28,500 BTUs (maximum configuration - 2 racks)	

PHYSICAL SPECIFICATIONS

Rack units:	up to 2 racks total with 71u of rack space
DXi8500 Rack Dimensions (H×W×D):	78in × 24in × 40in (198cm × 60.96cm × 102cm)
Weights:	
Base rack (minimum configuration):	712 lbs (323 kg)
Base rack (maximum configuration):	1380 lbs (626 kg)
Expansion rack (maximum configuration):	1312 lbs (595 kg)
Maximum configuration with both racks:	2692 lbs (1221 kg)

*Tested with VTL interface

For contact and product information,
visit quantum.com or call 800-677-6268

Quantum®

Preserving the World's Most Important Data. Yours.™

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About Quantum

Quantum Corp. (NYSE:QTM) is the leading global storage company specializing in backup, recovery and archive. Combining focused expertise, customer-driven innovation, and platform independence, Quantum provides a comprehensive range of disk, tape, media and software solutions supported by a world-class sales and service organization. This includes the DXi®-Series, the first disk backup solutions to extend the power of data deduplication and replication across the distributed enterprise. As a long-standing and trusted partner, the company works closely with a broad network of resellers, OEMs and other suppliers to meet customers' evolving data protection needs.