



DXi-Series

De-duplicated-enabled disk and remote replication solutions that dramatically improve backup and recovery for organizations of all sizes

The DXi-Series disk backup solutions leverage data de-duplication technology to reduce disk requirements by 90% or more and make WAN-based replication a practical DR tool. The DXi-Series spans the widest range of backup capacity points in the industry, from 1.2TB to 240TB of raw disk capacity. All models are connected by a common technology base, replication capability, and management layer. This allows IT departments to connect all their sites in a comprehensive data protection strategy that boosts backup performance, and reduces or eliminates media handling, all without changing their existing backup applications or re-architecting their network infrastructure. The DXi3500 and DXi5500 are easy-to-use disk backup appliances for distributed offices and midrange data centers. The DXi7500 offers a choice of de-duplication methods based on user policy, enterprise performance and capacity, and direct tape creation. All DXi-Series solutions offer simultaneous NAS and VTL interfaces—and all are supported by Quantum, the leading global specialist in backup, recovery, and archive.



DXi-Series replication uses existing WANs for DR protection, linking backup data across sites and reducing or eliminating media handling

The DXi-Series are part of Quantum's innovative solutions that integrate multiple technologies like disk, tape, de-duplication, replication and encryption, all supported by common management tools and a global service and support organization.

KEY BENEFITS

Boosts Backup and Recovery Performance While Managing Costs

- ☛ Use patented data de-duplication technology to decrease disk requirements by 90% or more.
- ☛ Increases performance and reliability while reducing capital costs and the demands for space, power, and cooling.
- ☛ Let's you choose the right de-duplication policy for each specific application or business.

Improve and Automate Disaster Recovery

- ☛ Reduce bandwidth requirements by 90% or more, making replication a practical DR tool.
- ☛ Integrate direct tape creation from disk to combine short-term and long-term protection.
- ☛ Reduce media handling, improve restore times, enable centralized tape operations, reduce costs.

Protect all Your Sites

- ☛ Deploy common technology within a single product family from 1TB to 180TB usable capacity.
- ☛ Link small, midrange, and Enterprise sites via replication.
- ☛ Bring data de-duplication to your Enterprise – up to 4TB/hour performance, 180TB capacity, and policy-based de-duplication.

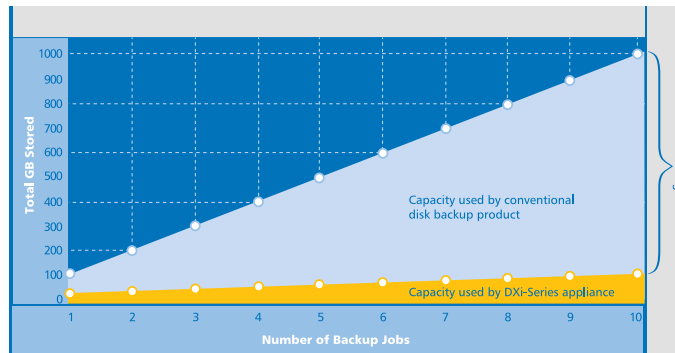
Advanced Data De-duplication Increases Disk Capacity—Preserves High Performance

QUANTUM'S COMPREHENSIVE DATA PROTECTION STRATEGY

All DXi-Series solutions are connected by a common technology base, replication capability, and management layer. For the first time, users can connect all their sites in a comprehensive data protection strategy that boosts performance and reduces media handling – all without changing their existing backup applications or re-architecting their network infrastructure. Quantum's approach provides a foundation for a new generation of intelligent backup, recovery and archive solutions that will improve data protection for a broad range of customer environments from small remote offices to large enterprise data centers.

The DXi-Series disk backup and replication systems use Quantum's patented data de-duplication technology to dramatically increase the role that disk can play in data protection. With DXi-Series solutions, users can reduce capacity requirements for disk by 90% or more and makes 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 DXi-Series policy-based de-duplication option gives users the ability to choose different de-duplication approaches for different data sets, providing business benefits for the widest possible range of data protection environments.

ADVANTAGE OVER CONVENTIONAL DISK

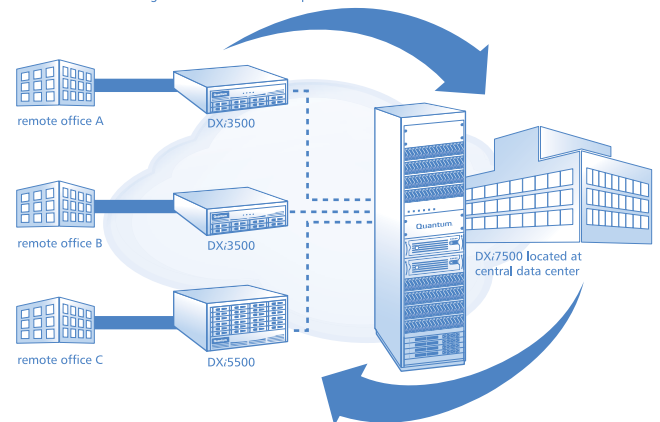


The DXi-Series' data de-duplication technology eliminates the need to store redundant data, letting users reduce capacity requirements for disk by 90% or more than conventional storage systems.

Remote Replication Links Backup Data Across Multiple Sites

Today most backup occurs on isolated devices, making it difficult to deploy disk backup when disaster recovery protection is required. Quantum's data de-duplication technology makes replication of backup data practical and cost effective by dramatically reducing the bandwidth needed to move backup datasets between distributed sites, giving disk backup automated DR protection. In addition, the DXi-Series solutions give you fast, disk-based backup and restore, and with its automated disaster recovery protection it reduces the need for tape and media management. With DXi-Series replication, users can transmit data from a single site or multiple sites to a central location using any DXi model. DXi-Series replication is an asynchronous, automated background process that includes encryption of data in transit.

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.



DXi3500 and DXi5500: Easy to Install and Manage in Distributed Environments

The Quantum DXi3500 and DXi5500 disk backup solutions make data de-duplication and remote replication easy to install and use in distributed environments and midrange data centers. These integrated appliances offer an intuitive graphical user interface for local and remote management, and provide a choice of presentations that make them easy to integrate into existing backup environments. A backup NAS interface (CIFS or NFS) allows direct connection to any Ethernet network for easy device sharing. For environments where performance is key, a virtual library interface (Fibre Channel or iSCSI) supports SAN backup with all leading ISV applications. Partitioning allows any DXi-Series solution to support all of these interfaces at the same time, and replication links them to any other DXi-Series solution.



DXi7500: Scalability, Performance, and Enterprise Availability

The DXi7500 is the disk backup solution for distributed and Enterprise environments that allows users to add policy-based de-duplication, remote replication, and direct tape creation to their backup strategy to increase performance, enhance data protection, and reduce costs. With up to 180TB usable capacity and 4TB/hr ingest, the DXi7500's policy-based de-duplication option gives users the ability to choose different de-duplication approaches for different datasets, providing optimal value for the widest range of data protection environments. The DXi7500 supports VTL (Fibre Channel) and NAS (CIFS and NFS) presentations, and can be linked by replication to other disk backup systems leveraging Quantum's de-duplication software. The DXi7500's direct tape creation capability writes physical media over dedicated FC connections, and it is compatible with backup applications' direct tape creation protocols, including Symantec NetBackup 6.5.



Part of a Comprehensive, Supported Solution from the Leading Backup, Recovery, and Archive Specialist

The DXi-Series solutions represent a major step forward in making disk backup an easily deployed and practical part of a comprehensive data protection strategy. Protecting critical data in distributed sites often requires a combination of approaches and technologies depending on data volume and types, recovery objectives, time constraints, budgets, and long term retention policies. All of the DXi-Series solutions are supported by Quantum's Vision management software, a flexible tool that allows users to manage all their disk, tape, and replication solutions from a single console. Vision's advanced reporting for Enterprise disk systems gives users easy-to-read summaries and scheduled reports that include de-duplication statistics, replication, reduction and capacity utilization trend analysis. Finally, the DXi-Series is supported, along with Quantum libraries, by StorageCare™ Services, providing proven, comprehensive service for all of your data protection needs.



Quantum Vision allows you to manage and monitor all your disk, tape and replication solutions from a single console.



MODELS AND CAPACITIES

DXi3500 Disk Backup Appliances				
Models (usable capacity)	1.2TB	1.8TB	2.8TB	4.2TB
Models (raw capacity)	2TB	3TB	4TB	6TB
Retention Capacity @ 20:1*	24TB	36TB	56TB	84TB
Retention Capacity @ 50:1*	60TB	90TB	140TB	210TB

DXi5500 Disk Backup Appliances				
Models (usable capacity)	3.6TB	5.4TB	7.2TB	10.8TB
Models (raw capacity)	6TB	9TB	12TB	18TB
Retention Capacity @ 20:1*	72TB	108 TB	144TB	216TB
Retention Capacity @ 50:1*	180TB	270 TB	360TB	540TB

*Capacities and amount of data protected assume standard business data mix and extended on-disk data retention. 20:1 capacity ratio assumes a weekly full and daily incremental backup model. 50:1 capacity ratio assumes daily full backups. Actual results will vary with data type, change rates, and backup methodologies. Smaller DXi-Series appliances can be scaled in-chassis and on-site to specific larger units: DXi3500 1.2 TB units scale to 2.8 TB units; DXi3500 1.8 TB units scale to 4.2 TB units; DXi5500 3.6 TB units scale to 7.2 TB units; DXi5500 5.4 TB units scale to 10.8 TB units. Data de-duplication is in-line.

DXi7500 Disk Backup Systems	
Models	9TB to 180TB usable capacity
Policy Based Data De-duplication Options:	Adaptive Mode: (de-duplicates during ingest) For most efficient disk usage Deferred Mode (post processing): For shortest backup window and fast restore Native VTL Mode: Fastest backup and restore for specialized datasets
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. Function maintains barcode integrity between virtual and physical tapes and is compatible with backup software direct to tape commands (e.g., NetBackup 6.5)
System Redundancy	Dual RAID controllers (active-active) Redundant power Redundant cooling Hot swap drives, power supplies, fans

HOST TO APPLIANCE H/W INTERFACE	
DXi3500/DXi5500:	10/100/1000 BaseT Ethernet, 2 Gb Fibre Channel
DXi7500:	10/100/1000 BaseT Ethernet, 4 Gb Fibre Channel

POWER INPUT	DXi3500	DXi5500	DXi7500
	Power Cord NEMA 5-15P to C13 3 connectors	Power Cord NEMA 5-15P to C13 4 connectors	Power Cord NEMA L6-30P on system 2 - 8 connectors

POWER ENVIRONMENT			
Input Voltages:	100 to 240 VAC	110 to 240 VAC	100 to 240 VAC
Rated Frequency:	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz
Rated Current:	4A @ 230 VACx2	5A @230 VACx4	12A @230 VAC x 2

CLIMATIC ENVIRONMENT		
Temperature		
Operating:	50Pto 95PF	(10P to 30PC)
Shipping & Storage:	-4P to 140PF	(-20P to 60PC)
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)	

INTERFACES	
NAS Backup Target:	NFS or CIFS
Virtual Library:	Fibre Channel or iSCSI* connectivity Different partitions in same appliance can present different interfaces simultaneously

PERFORMANCE	DXi3500	DXi5500	DXi7500
	Up to 290GB/hour	Up to 800GB/hour	1.8 TB/hour in Adaptive Mode (de-duplication during ingest) 3.2 TB/hour in Deferred Mode (de-duplication as a post process) 4.0 TB/hour in native VTL Mode (no de-duplication)

REPLICATION

DXi3500, DXi5500 and DXi7500 models all offer support for remote replication. 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.

VTL SPECIFICATION	DXi3500	DXi5500	DXi7500
Virtual Libraries (max)	8	16	64
Virtual drives (max)	32	64	160
Virtual Cartridges (max)	1,600	3,200	30,000
Emulations: Libraries:	ADIC Scalar 24, Scalar 100, Scalar i500, Scalar i2K; ATL P7000; Quantum M2500, PX500 series		
Drives:	DLT7000, SDLT 320, SDLT 600, SLT-S4, LTO-1, LTO-2, LTO-3		

PHYSICAL SPECIFICATIONS		
	DXi3500	DXi5500
Width (in/cm)	19 / 48.3	19 / 48.3
Height (in/cm)	3.5 / 8.8 2U	8.75 / 22.2 5U
Length (in/cm)	27 / 68.5	25.4 / 64.5
Weight (lbs/kg)	50 / 22.68	122 / 55.34

DXi7500 (Usable Capacity)

9TB unit - 5U
18TB unit - 18U
Beyond 18TB, each additional disk shelf of 9TB - 3U
180TB unit - 40U in each of two racks

*DXi3500/DXi5500 Only.



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

Quantum®

Backup. Recovery. Archive. It's What We Do.

©2008 Quantum Corporation. All rights reserved. Quantum, the Quantum logo, and all other logos are registered trademarks of Quantum Corporation or of their respective owners. Protected by Pending and Issued U.S. and Foreign Patents, including U.S. Patent No. 5,990,810.

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. 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.