#### Quantum

### DXi4700 Series



#### > DATASHEET

## The enterprise-grade, multipurpose appliance that simultaneously allows the use of best-in-class deduplication technology and native format archiving

For small and midsize office environments that want fast on-site restore and long-term data retention, the DXi4700 Series is a scalable deduplication appliance that offers the most efficient variable deduplication and replication, and scales with simplicity. Unlike other deduplication solutions, the DXi4700 provides certainty that all your data is secure and available when you need it most—no matter your architecture, scale, or location.

The DXi4700 Series appliance provides a simple and extensible architecture designed for customers' data protection needs, combining industry-leading price/TB, ease-of-use, and the broadest capacity range from 5TB to 135TB for an entry-level deduplication appliance. The DXi4701 enables a quick

return on investment by providing the lowest cost/TB all-inclusive pricing model, and by providing the industry's most intuitive and advanced management features to reduce time spent managing backups and speed time-to-resolution. Powered by Quantum's DXi® software, the DXi4700 Series provides up to 6TB/hr ingest performance and includes all software licenses in its base price, including interface (NAS/OST, VTL, or multi-protocol), deduplication, replication, and DXi Accent™ software for distributed deduplication.

Complemented by Rocket Arkivio Autostor software, the DXi4700 Series can also be used as a target for archiving unstructured static data, freeing up expensive primary storage for re-use.

# BACKUP APPLICATION MEDIA SERVER Symantec. Symantec. Sommwaut Wiscommunication Backup Section on DXi Replication DXi-Series Appliance Arkivio Autostor identifies and moves unstructured data to the DXi Archive Section using policy-based data tiering

Figure 1 - Replication of Backup Data for Automated DR Protection

#### **FEATURES & BENEFITS**

#### Improve backup and restore times

Powered by the world's most powerful file system, StorNext® 5, DXi software enables faster deduplication and access to your data.

#### Protect data across sites and in the cloud

WAN efficient replication makes it faster and less expensive to move data in and out of the cloud and between sites for offsite backups.

#### Scale on your terms

Broadest scalability from 5TB to over 135TB with Quantum's own Capacity-on-Demand (CoD) methodology.

#### Minimize storage utilization

Patented variable-length deduplication maximizes data reduction, providing lowest OPEX and maximizing efficiencies locally, in the cloud, and across WANs.

#### Increase IT staff productivity

Comprehensive and intuitive management tools enable precise business decisions and speed resolution time.

#### Provide an extra layer of security

Protect against data breaches across the enterprise using industry-standard AES 256-bit encryption with Self-Encrypting Drives. This is also applied to data-in-flight.

#### Use the same appliance for archiving

DXi with Rocket Arkivio helps customers control their increasing storage costs by empowering them to use the same appliance simultaneously for both backup and active archive storage.



#### TECHNICAL SPECIFICATIONS

#### **INTERFACES**

DXi4700 is available as three models: NAS/OST, VTL, and multi-protocol. The multi-protocol model supports both NAS/OST and VTL interfaces simultaneously on the same device.

NAS backup target

Presentations: CIFS and/or NFS
Shares: 128 max

OpenStorage (OST) API

Presentations: Symantec Storage Servers and Logical Storage Units

VTL Fibre Channel
Partitions (max): 64
Drives (max): 64

 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:
 7.7TB/hour

 OST Interface:
 7.9TB/hour\*

 VTL Interface:
 5.9TB/hour

 DXi Accent:
 16.9TB/hour\*\*

#### SYSTEM REDUNDANCY

RAID 6, redundant power, redundant cooling, hot spare drives, hot-swap drives, power supplies and fans.

#### **HOST TO APPLIANCE H/W INTERFACE**

Three 1GbE ports, up to two 10GbE Optical (SFP+), Twinax, 10GBASET, up to four 8GB FC ports (VTL and Multi-protocol models only)

#### SOFTWARE LICENSES INCLUDED

The base price of the DXi4701 includes licenses for NAS or VTL, OST, deduplication, replication and DXi Accent $^{TM}$  software for distributed deduplication.

#### **CAPACITY AND SCALABILITY**

 Usable capacity:
 5TB to 135TB

 Scaling increment:
 6TB, 8TB, or 18TB

 Logical Capacity:
 100TB to 2700TB\*\*

Hard Disk Drives: 4TB

#### PHYSICAL SPECIFICATIONS

Dimensions:

 System Node:
 2U, [17.5in (W) x 3.4in (H) x 28.6in (D)] - [44.5cm (W) x 8.6cm (H) x 72.6cm (D)]

 Expansion Module:
 2U, [17.8in (W) x 3.4in (H) x 21.8in (D)] - [45.1cm (W) x 8.8cm (H) x 55.2cm (D)]

Weight: System No

System Node: 61.0lbs (27.7kg)
Expansion Module: 59.0lbs (26.8kg)

#### **POWER SPECIFICATIONS**

 Power Input:
 NEMA 5-15P to C13 power cord

 Input Voltage:
 100 to 240VAC, 50-60Hz

Rated Current: System Node:

 System Node:
 3.48A @ 100VAC, 1.46A @ 240VAC

 Expansion Module:
 2.4A @ 100VAC, 1.1A @ 240VAC

Max Current: System Node:

 System Node:
 11.76A @ 100VAC, 15.33A @ 240VAC

 Expansion Module:
 16.05A @ 100VAC, 6.47A @ 240VAC

Max Power:

System Node: 344W, 1174BTU/hr Expansion Module: 263W, 898BTU/hr

#### **ENVIRONMENTAL SPECIFICATIONS**

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-condensingShipping & Storage:5 to 95% non-condensing

ALTITUDE

Operating: -50 to 10,000ft (-15.2 to 3,048m)
Shipping & Storage: -50 to 39,370ft (-15.2 to 12,000m)

#### SYMANTEC OPENSTORAGE (OST) API SUPPORT

Support for OST is a standard feature for all DXi4700 Series 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), and Granular Restore Technology (GRT). 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 DXi4700 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 distributed 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 DXi4701. 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.

#### **REPLICATION**

Replication compatible with all DXi-Series products, schedules and bandwidth use set in DXi4701 scheduler. Replication is asynchronous, one-to-one or multiple-to-one configurations; partitions ame unit act as replication source or target; units with partitions acting as replication targets can also support local backup; data is deduplicated and encrypted (AES 256-bit) 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.

To learn more about Quantum DXi, please visit www.quantum.com/dxi

Quantum.

<sup>\*</sup>Performance in target mode—does not require use of DXi Accent software.

<sup>\*\*</sup>Assumes a deduplication ratio of 20:1. Actual deduplication ratios will vary depending upon data types, retention, and compressibility of your data