# Quantum

# Scalar i6000



#### > DATASHEET

# The Intelligent Tape Library for Enterprise Archive, Disaster Recovery, and Long-Term Data Retention

Protecting and retaining your data can be challenging. Keeping pace with fast, unpredictable data growth in a cost- and time-efficient manner pushes IT staff to their limits. Ensuring that data is secure and available over long periods of time adds to these challenges. The Scalar® i6000 tape library was designed to solve these problems and simplify your environment.

The i6000 scales up to 180PB of data, supporting large enterprise storage environments. Capacity-on-Demand offers fast, flexible, and non-disruptive growth, easing the difficulties of managing dynamic storage requirements. Quantum customers

experience significant management time savings due to the intelligent and proactive features in iLayer™ management software, up to 75% savings compared to other libraries. High availability features like Dual Robot and Path Failover allow the library to continue to operate despite failures of library components or even failures within the SAN fabric. The Extended Data Life Management feature (EDLM) ensures your archived media is trouble-free so the data is available when you need it. Security features like FIPS-compliant encryption key management safeguard your data while in the library and after export.



The Scalar i6000 features ultra high density and a 19-inch rack form factor and scales from 100 to 12,006 cartridges.













# **FEATURES & BENEFITS**

iLayer Intelligent Software | Intelligent software automates administrative tasks, reducing administrative time up to 75% compared to other tape library products.

Active/Active Dual Robots | Adds a second robot to the library for high availability and faster performance. Operations continue in the event of a robot failure. Robot service is non-disruptive to the application.

Extended Data Life Management (EDLM) | Exclusive iLayer feature to ensure availability of your data placed in long-term storage/archive/DR. Integrates with StorNext® Storage Manager to automate protection of archived data.

Active Vault | Archive tapes inside the library to minimize costs and cartridge handling while improving security and access to vaulted content.

High-Density Expansion Module | Can store almost 12.5PB' in a single 19-inch rack without compromising cartridge access performance. Provides non-disruptive bulk loading, fast independent cartridge scan/inventory.

Advanced Reporting | Media, drive and security reports improve understanding of library utilization and performance. Automated report scheduling and distribution save time.

Path Failover | Control path and data path failover features ensure library system stays operational and accessible even with a SAN fabric failure.

Consolidation | Library capacity, high availability features, and partitioning support tape and library consolidation, delivering significant ROI.

Smart Bulk Cartridge Imports/Exports | The largest import/export capability in the industry, coupled with exclusive auto-import and export-redirect features, significantly reduces cartridge load/unload time.

Modular Architecture with Continuous Robotics Provides flexible scalability in a standard 19" rack form factor without sacrificing reliability.

Capacity-on-Demand Growth | Simplifies storage growth by scaling quickly, easily and without disruption.

Quantum Vision® Management Software Support

Reduces management time in multiple-device environments and integrates easily with Quantum disk backup solutions.

Scalar Key Manager Support | FIPS-validated solution makes it easy to manage keys, mitigating risk of lost data.

Scalar LTFS Appliance is available to present tapes as NAS storage, enabling new ways to manage and access archive files.

# TECHNICAL SPECIFICATIONS

#### **CAPACITY CONFIGURATIONS**

| TOTAL DRIVE, CARTRIDGE AND CAPACITY RANGES |          |               |                            |  |  |
|--|----------|---------------|----------------------------|--|--|
| Technology <sup>1</sup>                    | Drives   | Cartridges    | Capacity (TB) <sup>2</sup> |  |  |
| LTO-7                                      | 1 to 192 | 100 to 12,006 | 180,090                    |  |  |
| LTO-6                                      | 1 to 192 | 100 to 12,006 | 75,038                     |  |  |
| LTO-5                                      | 1 to 192 | 100 to 12,006 | 36,018                     |  |  |

Please see www.quantum.com for more drive specifications. 1 Available in IBM or HP models.

2 Assumes 2:1 compression for LTO-5. Assumes 2.5:1 compression for LTO-6 and LTO-7

#### **CAPACITY-ON-DEMAND**

100, 200, 400, 700, 1500, 3000, 5000, 7000, 9000, and 11,000 Cartridge Slot Starting Points:

#### **OPERATION**

**Drive Interface:** 8Gb FC. Native 8Gb FC

8Gb FC bridged through the drive Library Interface:

For most modules, 1 minute 12 seconds. 4 modules <5 minutes. Inventory Speed: Auto-discovery and auto-calibration for installed/added Configuration: components (modules, tapes, drives, magazines, etc.)

#### IMPORT/EXPORT OPTIONS\*

Control Module: One I/E Station with 24 slots

Option for 0, 24, or 72 slot I/E stations per expansion module Expansion Modules:

Maximum I/E Station Slots: 1,104 Slots

Extended I/E: Allows licensed storage slots to be used as

import/export elements
Up to 540 slots per High Density Expansion Module (HDEM) Bulk Load/Unload:

without interrupting library operations

Library automatically imports cartridges to multiple partitions Auto-import

based on user policies without needing cartridges placed in

specific I/E slots

Export Redirect: Automatically redirects cartridge exports to bulk unload

areas or to an Active Vault based on user policies

\*Up to 240 import/export elements supported per logical partition

# **ENVIRONMENTAL**

100-240 VAC , 2-24 kVA Electrical: -48 VDC, <1 KVA per module Power: 80 Plus certified power supplies

Temperature: 15 to 35°C operating Humidity:

20 to 80% non-condensing operating

## RELIABILITY

Library MSBF: Greater than 3.000.000

Library MTTR: 20 minutes, 10 minutes for Dual Robot replacement

Optional 2N power

Diagnostics: Embedded monitoring of major subsystems, self-diagnostic

procedures, and policy-based email and pager alerts to system administrators and Quantum Global Services

### **COMPATIBILITY**

Consult the most recent Software Compatibility Guide on www.guantum.com for a complete list of software and platforms compatible with Scalar i6000.

#### **COMPLIANCE AND CERTIFICATION**

Safetv: TUV IEC-60950-1-2006 CB Scheme

EN60950-1 2nd Edition

Class A: FCC CFR-47 Part 15, CISPR 22, EN55022, Emissions:

KN22, ICES-003 Immunity: FN55024, KN24

CE, cTUVus, KCC (MIC), GOST, VCCI, C-Tick International:

## **PHYSICAL**

| Module Type               | H×W×D                                     |  |
|---------------------------|---|--|
| Control Module (H×W×D):   | 77.4"×24.3"×38.3" [196.6cm×61.7cm×97.4cm] |  |
| Expansion Module (H×W×D): | 77.4"×23.6"×38.3" [196.6cm×59.9cm×97.4cm] |  |
| Parking Module (H×W×D):   | 77.4"×23.6"×38.3" [196.6cm×59.9cm×97.4cm] |  |

#### DRIVE CAPACITY AND PERFORMANCE

| Drive Type <sup>1</sup> | Cartridge Capacity<br>Native/Compressed¹ (TB) | Drive Throughput<br>Native/Compressed²(MB/sec) | Encryption<br>Support | LTFS |
|-------------------------|---|--|-----------------------|------|
| LTO-7                   | 6.0 / 15.0                                    | 300 / 750                                      | Yes                   | Yes  |
| LTO-6                   | 2.5 / 6.25                                    | 160 / 400                                      | Yes                   | Yes  |
| LT0-5                   | 1.5 / 3.0                                     | 140 / 280                                      | Yes                   | Yes  |

Please see www.quantum.com for more drive specifications

1 Available in IBM or HP model

#### **ADVANCED FEATURES**

Advanced Reporting: Media Integrity Analysis report, Media Usage

report, Drive Utilization report, Security report and media removal notifications, Report scheduling with automated report creation and delivery to

distribution lists

Maintains consistent firmware levels across all tape drives Firmware Auto-leveling:

in the library

Active Vault: Vault archive tapes inside the library. Reduces software and hardware costs

Reduces management time Policy-based tape exports Improves data security

Extended Data Life Management: Media health reports of cartridges stored for long-

term archive and DR, information is collected outside of normal operations:

Automated scheduling for scanning tapes

Notifications on test results

Policy-based data migration to new cartridges (only available

with StorNext Storage Manager)

**Dual Robots** Adds a second, redundant robot to the library for

high availability.

Path Failover: Control Path Failover, Data Path Failover including support

for path failure within the SAN fabric

Library Partitioning: Supports up to 16 partitions for tape consolidation

<sup>2</sup> Assumes 2:1 compression for LTO-5. Assumes 2.5:1 compression for LTO-6 and LTO-7.