

# 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.

Scalar i6000 scales up to 360 PB\* of data, supporting large enterprise storage environments. Capacity-on-Demand (CoD) offers fast, flexible, and non-disruptive growth, easing the difficulties of managing dynamic storage requirements. Quantum customers

experience significant time management 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 (EDLM) feature 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.

### 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, or DR. Integrates with StorNext® Storage Manager to automate protection of archived data.

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

**High-Density Expansion Module:** Can store up to 23.4 PB\* in a single 19-inch rack without compromising cartridge access performance. Provides non-disruptive bulk loading and 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.

**RESTful Web Services:** Saves administrative time by easily automating repetitive tasks.

**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-inch 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:** Available to present tapes as NAS storage, enabling new ways to manage and access archive files.

\*Assumes 2.5:1 compression.



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



> **LEARN MORE:**  
[www.quantum.com/scalar](http://www.quantum.com/scalar)

# TECHNICAL SPECIFICATIONS

## CAPACITY CONFIGURATIONS

TOTAL DRIVE, CARTRIDGE, AND CAPACITY RANGES				
Drive Type	Media Type	Drives	Cartridges	Capacity (TB) <sup>1</sup>
LTO-8	LTO-8 (L8)	1 to 192	100 to 12,006	360,180
LTO-8	LTO-7 (M8) <sup>2</sup>	1 to 192	100 to 12,006	270,135
LTO-7	LTO-7 (L7)	1 to 192	100 to 12,006	180,090
LTO-6	LTO-6 (L6)	1 to 192	100 to 12,006	75,038

Please see [www.quantum.com](http://www.quantum.com) for more drive specifications.

<sup>1</sup>Assumes 2.5:1 compression.

<sup>2</sup>New, unused LTO generation 7 cartridges can be initialized as LTO-8 Type M media (M8).

## CAPACITY-ON-DEMAND

**Cartridge Slot Starting Points:** 100, 200, 400, 700, 1,500, 3,000, 5,000, 7,000, 9,000, and 11,000

## OPERATION

**Drive Interface:** 8 Gb Fibre Channel, 8 Gb native Fibre Channel  
**Library Interface:** 8 Gb Fibre Channel bridged through the drive for data; 1 GbE with remote GUI and RESTful Web Services for library management.  
**Inventory Speed:** For most modules, 1 minute 12 seconds; four modules <5 minutes.  
**Configuration:** Auto-discovery and auto-calibration for installed/added components (modules, tapes, drives, magazines, etc.)

## IMPORT/EXPORT OPTIONS\*

**Control Module:** One I/E station with 24 slots  
**Expansion Modules:** Option for 0, 24, or 72 slot I/E stations per expansion module  
**Maximum I/E Station Slots:** 1,104 slots  
**Extended Import/Export:** Allows licensed storage slots to be used as import/export elements  
**Bulk Load/Unload:** Up to 540 slots per High-Density Expansion Module (HDEM) without interrupting library operations  
**Auto-import:** Library automatically imports cartridges to multiple partitions 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

**Electrical:** 100-240 VAC, 2-24 kVA  
-48 VDC, <1 kVA per module  
**Power:** 80 PLUS<sup>®</sup> certified power supplies  
**Temperature:** 15 °C to 35 °C operating temperature  
**Humidity:** 20 to 80% non-condensing operating humidity

## RELIABILITY

**Library MSBF:** Greater than 3 million  
**Library MTTR:** 20 minutes, 10 minutes for Dual Robot replacement  
**Power:** Optional 2N power  
**Diagnostics:** Proactive Diagnostics embedded within the library monitor major subsystems, run self-diagnostic procedures, and send policy-based communications to system administrators

## SOFTWARE AND PLATFORM COMPATIBILITY

For a complete list of software and platforms compatible with Scalar i6000, consult the most recent Software Compatibility Guide on [www.quantum.com](http://www.quantum.com).

## COMPLIANCE AND CERTIFICATION

**Safety Standards:** TUV IEC-60950-1:2006 CB Scheme, EN 60950-1 2nd Edition  
**Emissions Standards:** Class A: FCC CFR-47 Part 15, CISPR 22, EN 55022, KN22, ICES-003  
**Immunity Standards:** EN 55024, KN24  
**International Certifications:** CE, cTUVus, KCC (MIC), GOST, VCCI, C-Tick

## PHYSICAL

Module Type	H x W x D
Control Module (H x W x D):	77.4 in x 24.3 in x 38.3 in (196.6 cm x 61.7 cm x 97.4 cm)
Expansion Module (H x W x D):	77.4 in x 23.6 in x 38.3 in (196.6 cm x 59.9 cm x 97.4 cm)
Parking Module (H x W x D):	77.4 in x 23.6 in x 38.3 in (196.6 cm x 59.9 cm x 97.4 cm)

## DRIVE CAPACITY AND PERFORMANCE

Drive Type	Media Type	Cartridge Capacity Native/Compressed <sup>1</sup> (TB)	Drive Throughput Native/Compressed <sup>1</sup> (MB/sec)
LTO-8	LTO-8 (L8)	12 / 30	360 / 900
LTO-8	LTO-7 (M8) <sup>2</sup>	9 / 22.5	300 / 750
LTO-7	LTO-7 (L7)	6.0 / 15.0	300 / 750
LTO-6	LTO-6 (L6)	2.5 / 6.25	160 / 400

Please see [www.quantum.com](http://www.quantum.com) for more drive specifications.

<sup>1</sup>Assumes 2.5:1 compression.

<sup>2</sup>New, unused LTO generation 7 cartridges can be initialized as LTO-8 Type M media (M8).

## 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

**Firmware Auto-leveling:** Maintains consistent firmware levels across all tape drives in the library

**Active Vault:** Vault archive tapes inside the library  
Reduces software and hardware costs  
Reduces management time  
Included 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 Robot:** 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

## ABOUT QUANTUM

Quantum is a leading expert in scale-out storage, archive, and data protection, providing solutions for capturing, sharing, and preserving digital assets over the entire data lifecycle. From small businesses to major enterprises, more than 100,000 customers have trusted Quantum to address their most demanding data workflow challenges. Quantum's end-to-end, tiered storage foundation enables customers to maximize the value of their data by making it accessible whenever and wherever needed, retaining it indefinitely and reducing total cost and complexity. See how at [www.quantum.com/customerstories](http://www.quantum.com/customerstories).

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