Quantum

SCALAR i500



DATASHEET

FEATURES & BENEFITS

iLayer Intelligent Software: Integrated management software makes Scalar i500 easier to manage, reducing administrative time up to 75%.

Extended Data Life Management (EDLM):

Exclusive iLayer feature ensures availability of data placed in long-term storage, archive, or DR.

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 reduce downtime.

Proactive Monitoring and Remote

Diagnostics: Improves service levels by reducing service calls by 50% and resolution time by 30%.

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

Scalar LTFS: Optional appliance that presents tapes as NAS storage, enabling new ways to manage and access archive files.

Vision[®] Management Software Support:

Lets you monitor Scalar i500 from your smartphone. Reduces management time in multiple-device environments and integrates easily with Quantum disk backup solutions.

Encryption: FIPS-validated solution with KMIP support makes it easy to manage keys, mitigating risk of lost data. LTO drives use the AES 256-bit encryption standard for the highest levels of security.

StorageCare[®] Guardian Support: Remote monitoring service that improves system reliability without adding cost.

One year warranty with enhanced service options.

The Intelligent, Scalable Midrange Tape Library

Quantum Scalar[®] i500 is the intelligent, scalable tape library that gives growing midrange storage environments faster, easier, and more reliable data protection. It combines a modular design with continuous robotics to provide industry-leading scalability, performance, and reliability. Scalar i500 includes Quantum's iLayer™ software with proactive monitoring and remote diagnostics that can reduce management time by 75%, reduce service calls by 50%, and shorten issue resolution times by 30%. Capacity-on-Demand (CoD) scalability



enables non-disruptive growth as your capacity of data under management grows. 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, after export, and off-site. And Scalar i500 is designed to integrate easily with disk backup, making it the perfect library for tiered storage architectures. With Scalar i500, IT managers are assured of having scalable, reliable, secure, high-performance archive and effective long-term protection for years into the future, no matter how their storage needs evolve.

Scalar i500 combines a modular architecture with a single, continuous robotics system for the industry's leading combination of scalability, performance, reliability, and value.









www.quantum.com/scalar

TECHNICAL SPECIFICATIONS

CAPACITY CONFIGURATIONS

SYSTEM CAPACITY						
Module Size	Maximum Slots	Maximum Drives	Maximum Capacity (TB) ¹			
Module Size	Maximum Slots	Maximum Drives	LTO-6 (L6)	LTO-7 (L7)	LTO-8 (M8) ²	LTO-8 (L8)
5U Control Module	41	2	256	615	922	1,230
14U	133	6	831	1,995	2,992	3,990
23U	225	10	1,406	3,375	5,062	6,750
32U	317	14	1,981	4,755	7,132	9,510
41U	409	18	2,556	6,135	9,202	12,270

9U expansion modules hold up to 92 tapes. At installation, users may select slot activation levels of 0, 46, or 92 tape positions. ¹Assumes 2.5:1 compression.

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

OPERATION

Interface Options: Inventory Speed:	8 Gb Fibre Channel and 6 Gb SAS 55 seconds for average 5U configuration; 110 seconds for average 14U configuration
Configuration:	Auto-discovery and auto-calibration for installed/added components (modules, tapes, drives, magazines, etc.); auto-leveling of drive firmware
Import/Export:	Up to 54 media slots in removable magazines

RELIABILITY

Library MSBF: Library MTTR: Power:	Greater than 2 million 30 minutes Optional 2N equations and drives
Diagnostics:	Optional 2N power for all systems and drives Embedded within the library; includes monitoring of major subsystems, self-diagnostic procedures, and policy-based email and pager alerts to system administrators and Quantum Global Services
Module Upgrade:	Any storage module may be added in less than 30 minutes; customer-installable components include some drives, fans, power supplies, slot upgrades

PHYSICAL

System	H × W × D	Weight
5U Base System	8.6 in × 17.4 in × 31.4 in (21.9 cm × 44.2 cm × 79.8 cm)	66 lb (30 kg)
14U Base System	24.4 in × 17.4 in × 31.4 in (61.9 cm × 44.2 cm × 79.8 cm)	125 lb (56.8 kg)
23U Base System	40.1 in × 17.4 in × 31.4 in (101.9 cm × 44.2 cm × 79.8 cm)	184 lb (83.6 kg)
9U Expansion Module	15.8 in × 17.4 in × 31.4 in (40 cm × 44.2 cm × 79.8 cm)	59 lb (26.8 kg)
Drive	8.9 in × 13 in × 16.4 in (22.6 cm × 33 cm × 41.7 cm)	10 lb (4.6 kg)
Power Supply	8.9 in × 13 in × 16.4 in (22.6 cm × 33 cm × 41.7 cm)	5 lb (2.3 kg)

SOFTWARE AND PLATFORM COMPATIBILITY

For a complete list of software and platforms compatible with Scalar i500, consult the most recent Quantum Software Compatibility Guide on https://www.quantum.com/swcompguide.aspx.

COMPLIANCE AND CERTIFICATION

Safety Standards:	IEC-60950 with worldwide country deviations
Emissions Standards:	CISPR 22 Class A, EN 55022 Class A, EN61000-3-2, EN 61000-3-3
Immunity Standards:	EN 55024
International Certifications:	CE (Europe), VCCI (Japan), TUV/GS (Germany), FCC (USA), ICES (Canada), cTUVus (USA & Canada), GOST (Russia), MIC (Korea), BSMI (Taiwan)

ENVIRONMENTAL

Environmental Factor	Operational Storage ¹	Archival Storage ²
Temperature	16 to 35 °C (61 to 95 °F)	16 to 25 °C (61 to 77 °F)
Relative Humidity (non-condensing)	20 to 80%	20 to 50%
Maximum Wet Bulb Temperature	26 °C (79 °F)	26 °C (79 °F)
Maximum Rate of Temperature Change per Hour	2 °C	2 °C
Maximum Rate of Humidity Change per Hour	5%	5%

¹Operational Storage refers to tape cartridges housed within the library for less than 6 months. ²Archival Storage refers to tape cartridges housed within the library for more than 6 months. For tape cartridge storage or shipping environment requirements outside of the library, please refer to specific ITO tape media specifications provided by the LTO consortium at www.lto.org or specifications provided by the media manufacturer.

ELECTRICAL AND POWER

Electrical:	100 VAC to 240 VAC, 50 Hz to 60 Hz
Temperature:	10 °C to 35 °C operating temperature

DRIVE CAPACITY AND PERFORMANCE

Drive Type	Media Type	Cartridge Capacity Native/Compressed ¹ (TB)	Drive Throughput Native/Compressed ¹ (MB/sec)
LTO-8	LTO-8 (L8)	12/30	360 / 900
LTO-8	LTO-7 (M8) ²	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

¹Assumes 2.5:1 compression.

²New, 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
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)
Path Failover:	Control Path Failover, Data Path Failover
Library Partitioning:	Supports up to 18 partitions for tape consolidation



Quantum technology and services help customers capture, create, and share digital content—and preserve and protect it for decades at the lowest cost. Quantum's platforms provide the fastest performance for high-resolution video, images, and industrial IoT, with solutions built for every stage of the data lifecycle, from high-performance ingest to real-time collaboration and analysis and low-cost archiving. Every day the world's leading entertainment companies, sports franchises, research scientists, government agencies, enterprises, and cloud providers are making the world happier, safer, and smarter on Quantum. See how at **www.quantum.com**.