

## QUICK REFERENCE GUIDE: KEY FEATURES AND BENEFITS QUANTUM LTO-6 SCALAR TAPE LIBRARIES, STANDALONE DRIVES AND MEDIA



### TAPE LIBRARIES — ENTERPRISE

#### SCALAR i6000

- ▶ Intelligent enterprise library with up to 45PBs of compressed capacity
- ▶ Integrated iLayer™ software provides proactive monitoring, advanced diagnostics and email alerting:
  - Up to 75% management time savings
  - 50% reduction in service calls
  - 30% faster issue resolution
- ▶ Dual Robot – Adds a second robot to the library for high availability. Allows the library to continue to operate despite a robot failure. Robot service is non-disruptive to the application.
- ▶ Extended Data Life Management – Exclusive iLayer feature used to ensure availability of your data placed in long-term storage/archive/DR. Integrated with StorNext® Storage Manager to automate protection of archived data.
- ▶ Active Vault – Vault archive tapes inside the library to minimize costs while improving security and data protection. Eliminates the need to manually handle vaulted tapes.
- ▶ Advanced Reporting – Media, drive and security reports improve understanding of library utilization and performance. Automated report scheduling and distribution save time.
- ▶ Native Storage Networking – Control path and data path failover features reduce downtime; LUN mapping capability improves security
- ▶ Encryption – FIPS-validated tape-based encryption. Highly secure and easy to manage. KMIP support provides an open solution for future investment protection.
- ▶ Scalar® LTFS – Presents tapes as NAS storage, enabling new ways to manage and access archive files.
- ▶ Capacity-on-Demand Growth – Simplifies storage growth by scaling quickly, easily and without disruption, in a standard 19" rack footprint
- ▶ Warranty: One-year Bronze Onsite: 5x9 Next Business Day Response

	Drive Type	Compressed Capacity* (TB)	Drives	Maximum Cartridge Slots
<b>Base Configuration</b>	LTO-6	625 to 1,875	1 to 12	100 to 300
<b>Maximum Configuration</b>	LTO-6	45,150	1 to 96	up to 7,224
<b>Base Configuration</b>	LTO-5	300 to 900	1 to 12	100 to 300
<b>Maximum Configuration</b>	LTO-5	21,672	1 to 96	up to 7,224
<b>Base Configuration</b>	LTO-4	160 to 480	1 to 12	100 to 300
<b>Maximum Configuration</b>	LTO-4	11,558	1 to 96	up to 7,224



\*Based on 2.5:1 compression (LTO-6), 2:1 compression (other LTO)

## TAPE LIBRARIES — MIDRANGE

### SCALAR i500 SERIES

- ▶ The intelligent library platform for growing midrange storage environments
- ▶ Integrated iLayer software provides proactive monitoring and remote diagnostics in order to reduce service calls by 50% and shorten resolution time by 30%
- ▶ Extended Data Life Management – Exclusive iLayer feature used to ensure availability of your data placed in long-term storage/archive/DR. Integrated with StorNext Storage Manager to automate protection of archived data.
- ▶ Native Storage Networking – Control path and data path failover features reduce downtime; LUN mapping capability improves security
- ▶ Modular architecture and single, continuous robotics for increased scalability, performance, and reliability
- ▶ Quantum's Scalar Key Manager Appliance in conjunction with LTO-4, LTO-5 and LTO-6 drives meets government-recommended AES 256-Bit Encryption Standard for highest levels of security
- ▶ Supported by Quantum Vision® management software for centralized administration, monitoring, trend analysis, and reporting of Quantum tape libraries and disk systems
- ▶ Encryption – FIPS-validated tape-based encryption. Highly secure and easy to manage. KMIP support provides an open solution for future investment protection.
- ▶ Scalar LTFS – Presents tapes as NAS storage, enabling new ways to manage and access archive files
- ▶ Capacity-on-Demand (COD) growth for streamlined, non-disruptive expansion
- ▶ Native SMI-S support allows direct management by leading SRM tools including EMC ControlCenter
- ▶ Warranty: One Year, 5x9 Phone Support with Next Business Day CRU replacement and on-site FR replacement

	Drive Type	Compressed Capacity* (TB)	Drives	Maximum Cartridge Slots
<b>i500 - 5U Configuration</b>	LTO-6	256	1 to 2	41
<b>i500 - 14U Configuration</b>	LTO-6	831	1 to 6	133
<b>i500 - 23U Configuration</b>	LTO-6	1,406	1 to 10	225
<b>i500 - 32U Configuration</b>	LTO-6	1,981	1 to 14	317
<b>i500 - 41U Configuration</b>	LTO-6	2,556	1 to 18	409
<b>i500 - 5U Configuration</b>	LTO-5	123	1 to 2	41
<b>i500 - 14U Configuration</b>	LTO-5	399	1 to 6	133
<b>i500 - 23U Configuration</b>	LTO-5	675	1 to 10	225
<b>i500 - 32U Configuration</b>	LTO-5	951	1 to 14	317
<b>i500 - 41U Configuration</b>	LTO-5	1,227	1 to 18	409



## TAPE LIBRARIES — ENTRY-LEVEL

### SCALAR i40 / i80

- ▶ The intelligent tape library for entry-level and remote office environments
- ▶ iLayer intelligent management simplifies library management and increases reliability, reducing service calls by 50%
- ▶ Encryption – FIPS-validated tape-based encryption. Highly secure and easy to manage. KMIP support provides an open solution for future investment protection.
- ▶ Scalar LTFS – Presents tapes as NAS storage, enabling new ways to manage and access archive files
- ▶ Capacity-on-Demand (COD) growth for simple, non-disruptive expansion, providing market-leading investment protection
- ▶ AES 256-Bit Encryption Standard for highest levels of security
- ▶ Disk-friendly design supports operations with disk, for seamlessly integrated backup and archive processes
- ▶ Supported by Quantum Vision management software for centralized administration, monitoring, and reporting of Quantum tape libraries and disk systems
- ▶ SAS and native FC interfaces
- ▶ Warranty: One Year, 5x9 Phone Support with Next Business Day CRU replacement and on-site FRU replacement

	Drive Type	Compressed Capacity* (TB)	Drives	Active Cartridge Slots
<b>i40 - Base Configuration</b>	LTO-6	156	up to 2	25
	LTO-5	75	up to 2	25
	LTO-4	40	up to 2	25
<b>i40 - with COD License</b>	LTO-6	250	up to 2	40
	LTO-5	120	up to 2	40
	LTO-4	64	up to 2	40
<b>i80 - Base Configuration</b>	LTO-6	312	up to 5	50
	LTO-5	150	up to 5	50
	LTO-4	80	up to 5	50
<b>i80 - with COD License</b>	LTO-6	500	up to 5	80
	LTO-5	240	up to 5	80
	LTO-4	128	up to 5	80



Scalar i40



Scalar i80



\*Based on 2.5:1 compression (LTO-6), 2:1 compression (other LTO)

## AUTOLOADERS

### SUPERLOADER 3

- ▶ Superior Performance – 2U rackmount form factor with up to 100TB of compressed data
- ▶ Scalable from 8 slots to 16 slots
- ▶ Superior Value – Easy automation supporting 16 LTO cartridges
- ▶ Flexibility – Mail slot and removable magazine that scales up to 16 cartridges in a 2U rackmount utility
- ▶ Ease of use – Simple integration into existing environment
- ▶ Complete backup, recovery and archive solutions with accessories
- ▶ StorageCare® Guardian for remote monitoring and diagnostics
- ▶ Warranty: One-year 5x9 Phone Support with Rapid Exchange

Drive Type	Compressed Capacity* (TB)	Maximum Drives	Maximum Cartridge Slots
LTO-6 (SAS)	100	1	16
LTO-5 (SAS)	48	1	16
LTO-4 (SCSI and SAS)	25.6	1	16
LTO-3 (SCSI)	13.8	1	16



## TAPE DRIVES FOR STANDALONE APPLICATIONS AS WELL AS LIBRARY AND SERVER UPGRADES

Designed specifically for standalone applications, server direct-attach configurations, or for library upgrades, Quantum has the broadest portfolio of tape drive technologies.

### LTO DRIVES



- ▶ Usage – High performance for enterprise servers and upgrades for existing Scalar libraries
- ▶ Quantum's LTO-6 tape drive provides compressed capacity of up to 6.25TB on a single media cartridge, with transfer rates of up to 400MB/s\*
- ▶ Quantum's LTO-5 tape drive provides compressed capacity of up to 3.0TB on a single media cartridge, with transfer rates of up to 280MB/s\*
- ▶ Quantum's LTO-4 drive is a high-performance, energy-efficient, half-height drive providing compressed capacity of up to 1.6TB, and delivers a native transfer rate of 240MB/sec\*
- ▶ Reliability – FastSense™ variable speed technology optimizes performance, SmartVerify™ verifies all data written to tape, while Dynamic Powerdown™ protects in the event of power loss
- ▶ Compatibility – LTO is backward read two generations of media and read/write to one generation
- ▶ Flexibility – Includes half-height form factor drive, as well as internal, desktop and rackmount configurations

Drive Type	Compressed Capacity*
LTO-6	6.25TB
LTO-5	3.0TB
LTO-4	1.6TB
LTO-3	800GB

Upgradable Libraries
Scalar i6K
Scalar i500
Scalar i80
Scalar i40

## MEDIA

The Quantum media family provides you more choices to better manage your data over time. Quantum offers a full line of media options including LTO Ultrium, DLTtape®, DAT, DDS and Travan data cartridges depending on your specific media requirements. Quantum media cartridges are manufactured to industry standards for quality and reliability ensuring low error rates, high performance and long-term durability. Quantum media allows you to archive your data with confidence.

### LTO ULTRIUM MEDIA

- ▶ Optimized media for high capacity and performance
- ▶ Compatible with all LTO Ultrium drives
- ▶ Storage capacities from 200GB to 6.25TB (compressed)
- ▶ Pre-labeled custom barcode numbered available



#### ABOUT QUANTUM

Quantum is a proven global expert in Data Protection and Big Data management, providing specialized storage solutions for physical, virtual and cloud environments. From small businesses to major enterprises, more than 50,000 customers trust Quantum to help maximize the value of their data by protecting and preserving it over its entire lifecycle. With Quantum, customers can Be Certain they're able to adapt in a changing world – keeping more data longer, bridging from today to tomorrow, and reducing costs. See how at [www.quantum.com/BeCertain](http://www.quantum.com/BeCertain).

©2013 Quantum Corporation. All rights reserved. Quantum, the Quantum logo, DLTtape, Dynamic Powerdown, FastSense, iLayer, Scalar, SmartVerify, StorageCare, StorNext and Vision are either registered trademarks or trademarks of Quantum Corporation and its affiliates in the United States and/or other countries. Linear Tape-Open, LTO, the LTO Logo, Ultrium and the Ultrium Logo are registered trademarks of HP, IBM and Quantum in the US and other countries. All other trademarks are the property of their respective owners.

**Quantum®**  
**BE CERTAIN**

[www.quantum.com](http://www.quantum.com) • 866-809-5230

DS00459A-v01 Jan 2013