



Scalar 10K

The Enterprise Library
for Consolidated Backup
and Archiving

The Quantum® Scalar® 10K is the SAN-enabled enterprise library that lets IT departments consolidate storage in a single, easily managed resource. It is the industry's first capacity-on-demand library, delivering built-in room to grow and allowing users to increase storage by activating additional capacity whenever they need it. The Scalar 10K operates seamlessly in new or existing storage networks. It supports multiple protocols and fabrics at the same time, providing industry-leading scalability, capacity, availability, and technology independence. A fully redundant library architecture option supports dual robotics, controllers, power, and library control paths to provide continual access to data through virtually all service operations.



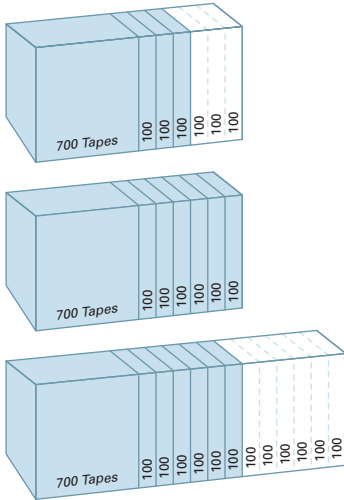
The Scalar 10K provides built-in room to grow, integrated SAN management, and dual redundant robotics.

- INDUSTRY-LEADING SCALABILITY
- UP TO 13,884 TAPES
- INDUSTRY-LEADING DRIVE RANGE:
1 TO 324 DRIVES
- LTO AND IBM TS1120 DRIVE SUPPORT
- INSTANT CAPACITY-ON-DEMAND
- STORAGE NETWORKING ARCHITECTURE

FEATURES AND BENEFITS

- Capacity on demand lets IT departments activate additional storage instantly while paying only for the storage they actually use
- Qualified storage network interoperability means seamless integration into new or existing SANs
- Single robotics design provides higher performance and reliability at a lower cost
- Up to 324 drives
- Supports LTO and IBM TS1120 technology; provides easy technology migration and options for mixed-media operation
- Fully redundant architecture option: dual robotics, controllers, power, and library control paths for continuous operation
- Five slots per second inventory speed; auto-discovery and auto-calibration of all components for rapid configuration
- Superior floor space density
- One-year on-site service included for highest levels of protection

Scalar 10K Capacity-On-Demand Libraries



When You Need More Tape Slots You Activate Them With A Software Key

With capacity-on-demand scalability, users add capacity as their data grows and pay only for the storage they actually use. Most upgrades are activated via software keys, and all physical capacity enhancements are implemented without pass-through ports.

The Scalar 10K's capacity-on-demand scalability is designed to make it easy for IT departments to increase their storage as their data grows and to pay only for the storage they actually use. In capacity-on-demand libraries, extra capacity is delivered that users can activate in increments of 100 tape slots using software authorization keys. When most of the capacity of an installed unit has been activated, Quantum delivers additional capacity upgrades without charge. Scalar 10K capacity-on-demand libraries provide seamless pay-as-you-grow scalability from 700 to nearly 4,000 tape cartridges and from 1 to 84 drives. And through all its capacity expansion, the Scalar 10K uses Quantum's barrier-free library architecture, which provides a single, high-performance storage system that does not use pass-through ports.

The table below shows the delivered capacity, upgrade points, drive positions available, and overall physical dimensions for Scalar 10K capacity-on-demand libraries.

Drive Technology	Activated Media	Cartridge Positions	Total Drive Positions	Overall System Size: D x L x H
LTO-3* / LTO-2 SCSI and Native Fibre	700 to 1,300	1,785	36	4.3 x 10.5 x 6.4 feet
	1,400 to 2,000	2,865	60	4.3 x 15.5 x 6.4 feet
	2,100 and up	3,945	84	4.3 x 20.5 x 6.4 feet
IBM TS1120*	700 to 1,100	1,594	16	5.0 x 10.5 x 6.4 feet
	1,200 to 1,700	2,498	32	5.0 x 15.5 x 6.4 feet
	1,800 and up	3,402	48	5.0 x 20.5 x 6.4 feet

* Native Fibre only.

Flexible Configurations for Maximum Capacity and Mixed Media

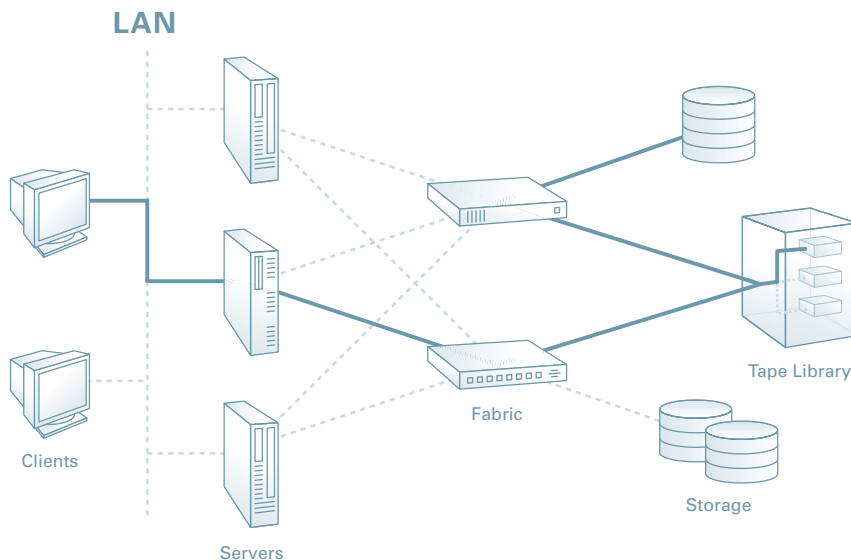
For users with requirements for mixed media or higher cartridge and drive counts than capacity-on-demand libraries, the Scalar 10K offers maximum capacity models. These libraries provide up to 13,884 cartridges, 324 drives, dual active robotics, the ability to support multiple kinds of media in a single library, and a high degree of configuration flexibility.

Scalar 10K

Storage Networking Library With Intelligent Management

The Scalar 10K is the first library to integrate storage networking support into its architecture for better performance, higher reliability, and easier management.

Its direct SAN connection makes it easy to set up and operate. Its data path conditioning builds in error recovery and proactively verifies that paths are ready to carry data. And the Scalar 10K's integrated SAN firewall protects your data from unauthorized access. The Scalar storage networking architecture can extend to include Gigabit Ethernet protocols like iSCSI, and the technology is certified for compatibility with leading SAN disk and NAS appliance providers.



The Scalar 10K's integrated storage networking support improves backup reliability through end-to-end path verification.



The Scalar 10K offers dual-aisle configuration options which provide full dual-redundant robotics, controllers, and main library control paths. The dual robotics access a common set of media storage positions to allow continuous access to user data through virtually all service operations.

Full Redundancy for Continuous Backup Operations

The Scalar 10K leads the industry in high availability features. Its dual robotics and controller option ensures uninterrupted data access during service operations such as changing drives, upgrading power sources, or even servicing the main library controllers. Its fully redundant, cross-coupled AC and DC power system ensures that all library components, including drives, operate normally regardless of power faults. True hot-swap drives, auto-calibration, and SAN drive address persistence

LIBRARY CONFIGURATIONS

CAPACITY-ON-DEMAND CONFIGURATIONS					CUSTOMER SPECIFIC CONFIGURATIONS		
Technology	Drives	Cartridges	Increments	Capacity (TB) ¹	Drives	Cartridges	Capacity (TB) ¹
LTO-3	Up to 84	700 to 3,945	100 tapes	3,156	Up to 324	Up to 13,884	Up to 11,107
LTO-2	Up to 84	700 to 3,945	100 tapes	1,578	Up to 324	Up to 13,884	Up to 5,554
IBM TS1120	Up to 48	700 to 3,402	100 tapes	1,701	Up to 208	Up to 11,386	Up to 5,693

Capacity-on-Demand configurations provide a cost effective scalability model: pay only for capacity in use.

Customer specific configurations provide maximum capacity, dual robotics, controllers, and mixed-media operation.

RELIABILITY

Library MCBF:	Greater than 2,000,000
Library MTTR:	30 minutes
Diagnostics:	SNMP traps reported through RMU or Scalar DLC. Built-in self-test, store/recall past events, fault isolation assistance, self-initiating configuration and calibration; e-mail alert
Module Upgrade:	Any storage module may be added in two hours; customer-installable drive and slot upgrades
Redundancy:	2N AC and DC power standard; dual-redundant library control ports standard; optional dual robotics and main library controllers

ENVIRONMENTAL

Power:	208-240 VAC; 20 amp per cabinet
Temperature:	16 to 32°C operating
Humidity:	15 to 75% non-condensing operating

OPERATION

Cartridge Exchanges:	Up to 450 per hour ²
Drive Interface:	LTO and Native Fibre: SCSI-2 LVD; integrated FC interface optional for all; TS1120: SCSI-2, SNC or Native FC LVD or HVD
Library Interface:	SCSI-2 LVD; integrated FC interface optional
Inventory Speed:	100 slots in 20 seconds ²
Configuration:	Auto-discovery and auto-calibration for installed/added components (modules, tapes, drives, magazines, etc.)
Import/Export:	Up to 72 (LTO/TS1120) positions in removable magazines ²

STORAGE NETWORKING SUPPORT

Connectivity:	Direct 2 Gbps Fibre Channel connectivity through integrated Storage Network Controller or direct attached drive(s)
Management Services:	End-to-end path verification, error recovery, drive performance optimization, SAN security (Scalar Firewall Manager), serverless backup (Data Mover Module), connectivity failover, switch-port aggregation

COMPLIANCE AND CERTIFICATION

Safety:	UL-1950 ITE, CSA950, EN 60950
Emissions:	FCC #47 CFR, Part 15, Class A, CSA C108.8M, EN 55022, Class A
Immunity:	IEC (1000-4-2, 3, and 4)
International:	CE, GS

SOFTWARE AND PLATFORMS

Consult the most recent Software Compatibility Guide on www.adic.com for a complete list of software and platforms compatible with the Scalar 10K.

DRIVE CAPACITY AND PERFORMANCE

Drive Type	Cartridge Capacity	Drive Throughput	Data Buffer	File Access
	Native/Compressed ¹ (GB)	Native/Compressed ¹ (MB/sec)	(MB)	Time (sec)
LTO-3	400 / 800	70 / 140	64	49
LTO-2	200 / 400	35 / 70	64	49
IBM TS1120	500 Native	104 Native	512	46

Please see www.adic.com/drives for more drive specifications.

¹ Assumes 2:1 compression for LTO and Native compression for IBM TS1120.
² Specifications provided for single robotics configurations.

 For contact and product information, visit quantum.com or call 800-677-6268

Quantum[®]

Backup. Recovery. Archive. It's What We Do.

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About Quantum

Quantum Corp. (NYSE:DSS) is the leading global storage company specializing in backup, recovery and archive. Combining focused expertise, customer-driven innovation, and platform independence, Quantum provides a comprehensive range of disk, tape, media and software solutions supported by a world-class sales and service organization. As a long-standing and trusted partner, the company works closely with a broad network of resellers, OEMs and other suppliers to meet customers' evolving data protection needs.