SUPERLOADER 3

Entry-Level Automated Tape Storage Ideal for
Small Businesses and Remote Office Environments

FEATURES & BENEFITS

**Quickly Backup and Restore
Data from Tape**
With performance up to 750 MB/sec
(2.7 TB/hr)*

*2.5:1 compression LTO-9, LTO-8, and
 LTO-7 Half-Height drives only

**Meet Compliance and
Security Requirements**
Secure protection with AES 256-bit
hardware-based encryption standard.

WORM (Write Once, Read Many)
functionality with use of WORM cartridges.

**Low-Cost and Reliable Long-Term
Data Storage**
Protect up to 45 TB* of data
on each cartridge.

*2.5:1 compression LTO-9, LTO-8, and
 LTO-7 Half-Height drives only

**Complete Solution with Backup
Software and Deduplication**
Includes DATASTOR Shield backup
software; reduces data by 20X. Up
to 720 TB* of capacity with standard
compression; up to 5,760 TB of capacity
with DATASTOR Shield deduplication.

*2.5:1 compression, 20:1 deduplication with LTO-9.

Small Sites Require Offline Data Protection

Data growth does not limit itself to larger data centers. Smaller data centers face the same challenges of protecting terabytes of data from loss, malware, and potential damage to facilities in central and remote locations with limited IT staff.

Tape storage is the perfect backup and archive media to address all the retention, protection, and compliance requirements of small to medium businesses. Tape is also economical, portable, and provides air-gapped protection against ransomware. With tape storage, you can manage backups and long-term data in a simple to install and operate 2U rack-mounted automated tape system that can be left unattended or be easily managed by IT staff who have limited tape library training to deliver strong offline data protection to meet all your compliance requirements.

Efficient Data Protection

Quantum's SuperLoader® 3 puts the power and economy of the latest in LTO tape technology into a low-profile, affordable, easy-to-manage automated backup and archive appliance. It scales easily as data grows, supports backup volumes up to 720* TB of capacity in a 2U form factor, and with the included DATASTOR Shield backup software with deduplication, you can reduce your data by up to 20x, so that you can store more data per tape than in other competitive models.

Quantum SuperLoader 3 also includes a bar-code reader as a standard feature to simplify media management. To simplify administration, it comes with management software that uses intelligent diagnostics to monitor the system over the Internet and provide proactive remote support.

*Assumes 2.5:1 compression for LTO-9, LTO-8, and LTO-7, 20:1 deduplication for DATASTOR Shield

LEARN MORE:

www.quantum.com/superloader3

QUANTUM SUPERLOADER 3 SPECIFICATIONS

Configuration:	2U Rackmount, Single Tape Drive
Number of Tape Slots:	8 or 16
Dimensions Width: Height: Length: Weight:	17.7 in / 45 cm 3.5 in / 8.9 cm 29.71 in / 75.46 cm 50 lb / 22.7 kg
Drive Type Offered:	LTO-9 HH SAS, LTO-8 HH SAS , LTO-7 HH SAS - See table below for drive specifications
Backup Software Included:	DATASTOR Backup Software
Other Items Included:	One LTO HH Drive, one or two eight-cartridge removable magazines, (30) Data Bar Code labels; One (2m) SAS-mini cable, NAM, UK, EMEA power cord

SUPERLOADER 3 TAPE DRIVE OPTIONS AND SPECIFICATIONS

Drive Generation:	LTO-9 HH Tape Drives	LTO-8 HH Tape Drives	LTO-7 HH Tape Drives
Media Compatibility:	Read/Write to LTO-9 and LT0-8 media	Read/Write to LTO-8 , LTO-7 M8, and LTO-7 media	Read/Write to LTO-7 and LTO-6 media, read from LTO-5 media
Connectivity:	12 Gb SAS	6 Gb SAS	6 Gb SAS
Sustained Transfer Rate, Native	300 MB/s	300 MB/s	300 MB/s
Performance, Native/Compressed/Deduped (TB/hr):	1.08 / 2.70 / 21.60	1.08 / 2.16 / 21.60	1.08 / 2.16 / 21.60

LTO MEDIA SPECIFICATIONS

Media Type:	LTO-9	LTO-8	LTO-7 M8[2]	LTO-7
Capacity (raw / compressed):[1]	18 / 45 TB	12 / 30 TB	9 / 22.5 TB	6 / 15 TB

[1]Assumes 2.5:1 compression. [2]New, unused LTO generation 7 cartridges can be initialized as LTO-8 type M media (M8). [3]See compatibility guide for Quantum compatible media: www.quantum.com/swcompguide.aspx

ADDITIONAL SUPERLOADER 3 SPECIFICATIONS

OPERATIONS

Cartridge Loader:	Single front-loader slot (import port) and bulk cartridge loading in removable active magazines
On-board Remote Management Tools:	10 BASE-T / 100 BASE-T Ethernet
Available Operations:	Review System Status, Remote Diagnostics, Browse System, Logs, Configuration, Firmware Upgrades, Drive Operations, Remote Management, Check Inventory, System Upgrade
Barcode Reader:	Standard
Host Interface Type:	Mini-SAS-HD 2.1 8644 SAS

RELIABILITY:

MSBF:	1.5 million
MTTR:	<30 Minutes
Power:	90-256 VAC
Management Requirements:	Integrated web-based management standard on all SuperLoader 3 products
Load/Unload Life:	80,000 cycles
Non-Recoverable Error Rate:	1 in 1 x 1019 bits (LTO-9, LTO-8, LTO-7 non-media error, clean drive)
Archive Storage:	30 Years

BACKUP SOFTWARE

Included Software:	DATASTOR Shield Single-Server Backup
Deduplication Rate:	20:1 (typical)
Software Compatibility:	Windows only
Backup Methods:	Disk-to-disk-to-tape, disk-to-tape, archive-to-tape in native format
Upgradeable:	Yes to multiple servers, SQL, Exchange, SharePoint, Bare Metal, Cloud, and other functionality

TAPE FORMAT

Recording Density:	LTO-9: 21,459 KB/mm, LTO-8: 20,579 KB/mm, LTO-7: 19,107 KB/mm
Encoding Density:	LTO-9, LTO-8, LTO-7: 32 Channel 32/33 RLL
Data Compression:	LTO-9, LTO-8, LTO-7: 2.5:1

SAFETY STANDARDS AND CERTIFICATIONS

Safety Standards: IEC 60950-1 and IEC 62368-1 with worldwide deviations, EN62368-1, UL 62368-1, CNS14336-1
Emissions Standards: FCC Part 15 Class A, EN 55032 Class A, KN 32, VCCI, EN 300 386, CNS 13438 Class A, ICES-003 Class A
Immunity Standards: EN 55024, KN 35; KN24
International Certifications: cTUVus (US and Canada), FCC (US), ICES (Canada), CE (Europe), GS (Germany), VCCI (Japan), KC (Korea), RCM (Australia/New Zealand), BIS (India)

Agency Markings:	CD, VCCI, UL, FCC, CSA

*Compatibility: OS: Microsoft Windows, Red Hat Linux, SUSE Linux, Mac OS. Software/Hardware: For the most up-to-date tested solutions, visit www.quantum.com. Please see www.quantum.com for more drive specifications.

OPERATIONAL/STORAGE ENVIRONMENTAL REQUIREMENTS

Environmental Factor:	Recommended[1]	Allowable[2]	Shipping[3]
Dry-Bulb Temperature:	LTO-6, LTO-7, LTO-8: 16 to 25 °C (61 to 77 °F) LTO-9: 15 to 25 °C (59 to 77 °F)	LTO-6, LTO-7, LTO-8: 16 to 35 °C (61 to 95 °F) LTO-9: 15 to 35 °C (59 to 95 °F)	-23 to 49 °C (-9 to 120 °F)
Relative Humidity:	20 to 50% (non-condensing)	20 to 80% (non-condensing)	5 to 80% (non-condensing)
Maximum Temperature Change:	5 °C / hour	5 °C / hour	n/a
Maximum Humidity Change:	5% / hour	5% / hour	n/a
Temperature Limitation for Humidity Conditions:	LTO-6, LTO-7, LTO-8: Wet Bulb Temperature <= 26 °C (79 °F) LTO-9: Max Dew Point 22 °C (72 °F)	LTO-6, LTO-7, LTO-8: Wet Bulb Temperature <= 26 °C (79 °F) LTO-9: Max Dew Point 22 °C (72 °F)	Wet Bulb Temperature <= 26 °C (79 °F)
Maximum Altitude:	3,048 m (10,000 ft)	3,048 m (10,000 ft)	12,192 m (40,000 ft)

[1]Recommended: The recommended operational/storage environmental envelope provides guidance on the environmental range for optimal performance and high reliability. This environmental range protects for 30-year archival storage. (Derate the maximum recommended dry-bulb temperature by 1 °C/300 m above 1,800 m (1.8 °F/1,000 feet above 6,000 feet)).
[2]Allowable: The allowable operational/storage environmental envelope defines the test limits to verify that the equipment will function within the environmental envelope. This environmental range is defined for operational storage of less than 6 months. (Derate the maximum dry-bulb temperature by 1 °C/300 m above 900 m (1.8 °F/1,000 feet above 3,000 feet)).
[3]Shipping: When shipping media over extended environmental ranges, shipping times should be limited to minimize the duration of media being exposed to varying environmental conditions at lower and upper ranges. LTO tape media specifications provided by the LTO program at www.lto.org or specifications provided by the media manufacturer.
Note: The prolonged exposure to conditions outside the recommended range, especially approaching the extremes of the allowable operating environment, can result in decreased equipment reliability and longevity. An occasional short-term excursion into the allowable envelope is generally acceptable but may result in performance and reliability implications and higher power consumption. For additional information regarding tape cartridge storage, shipping and operational requirements, including acclimation requirements, please visit www.quantum.com/lto-media, or refer to specific LTO tape media specifications provided by the LTO consortium at www.lto.org or specifications provided by the media manufacturer.

Quantum.

Quantum delivers end-to-end data management solutions designed for the AI era. With over four decades of experience, our data platform has allowed customers to extract the maximum value from their unique, unstructured data. From high-performance ingest that powers AI applications and demanding data-intensive workloads, to massive, durable data lakes to fuel AI models, Quantum delivers the most comprehensive and cost-efficient solutions. Leading organizations in life sciences, government, media and entertainment, research, and industrial technology trust Quantum with their most valuable asset – their data. Quantum is listed on Nasdaq (QMCO). For more information visit www.quantum.com.