

# L1400M

## TAPF LIBRARY

## Key benefits

#### Reduce risk

Gain flexibility for monitoring, managing and controlling your tape library backup applications, so you can react quickly to changing business conditions.

#### Reduce cost

Purchase only the capacity you need today and then add incremental storage over time. The L1400M tape library is a small-footprint, integrated solution that will increase your asset utilization and staff efficiency.

#### Improve service levels

With its soft partitioning capability, the L1400M can be easily shared with multiple applications, improving service levels and minimizing interruptions.

#### Improve backup success rates

Monitor your entire backup infrastructure — drives, library assets and switches — from a central console. Quickly diagnose and troubleshoot the causes of backup failures. Save time and reduce possible risk by using historical trend analysis to forecast your capacity and media needs.

#### Simplify tape technology choices

Support multiple drive technologies and ease the transition to new tape technologies. Tune the system to your precise needs, using StorageTek's high-performance T9840, high-capacity T9940, Super DLT or Linear Tape Open (LTO) Ultrium tape drives.



## Grow with flexibility

Storage needs evolve constantly, and your tape library needs to evolve with you — especially for such critical applications as backup/restore, consolidation and archiving. The L1400M tape library is a popular and reliable choice to help you grow, adapt and manage change in larger distributed UNIX, Linux and Windows NT environments.

The L1400M lets you easily configure storage, with just a few keystrokes. And with StorageTek's powerful Any Cartridge Any Slot™ technology and Continuous Capacity™ technology, you can add the storage of your choice — fast-access T9840, high-capacity T9940 or mid-range LTO/SDLT tape drives.

With its proven and self-calibrating robotics, hot-swappable components, and powerful monitoring and management software, the L1400M tape library is truly a storage solution that embraces change — so you can, too.

### Boost expandability and reliability

Buy only the storage you need, when you need it — the L1400M single-frame library scales from 200 to 678 slots, non-disruptively, to seamlessly expand your storage. It's the evolution of StorageTek's successful L700e tape technology, field-tested and proven around the globe.

### Engage the storage experts

StorageTek's Global Services professionals help you address storage challenges by delivering integrated solutions that optimize and manage storage performance over the life of your data. Focused on cost management, reliability and flexibility, our proven methodologies and commitment to best-in-class, global professional services and multivendor support help you gain and sustain measurable results. Covering over 50 countries, more than 2,100 service professionals deliver solutions that support more than 17,000 customer data centers worldwide.

# L1400M tape library specifications

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Performance	
Throughput per hour, native (uncompressed)	T9840B (12 drives, 19 MB/sec) – 820.8 GB/hr (single-frame) T9840B (24 drives, 19 MB/sec) – 1.64 TB/hr (dual-frame)
	T9840C (12 drives, 30 MB/sec) – 1.296 TB/hr (single-frame) T9840C (24 drives, 30 MB/sec) – 2.592 TB/hr (dual-frame)
	T9940B (12 drives, 30 MB/sec) – 1.296 TB/hr (single-frame) T9940B (24 drives, 30 MB/sec) – 2.592 TB/hr (dual-frame)
	LTO Gen 2 (20 drives, 30–35 MB/sec) – up to 2.52 TB/hr (single-frame) LTO Gen 2 (40 drives, 30–35 MB/sec) – up to 5.04 TB/hr (dual-frame) LTO Gen 3 (20 drives, 80 MB/sec) – 5.75 TB/hr (single-frame) LTO Gen 3 (40 drives, 80 MB/sec) – 11.52 TB/hr (dual-frame)
	SDLT 320 (20 drives, 16 MB/sec) – 1.152 TB/hr (single-frame) SDLT 320 (40 drives, 16 MB/sec) – 2.304 TB/hr (dual-frame) SDLT 600 (20 drives, 36 MB/sec) – 2.59 TB/hr (single-frame) SDLT 600 (40 drives, 36 MB/sec) – 5.18 TB/hr (dual-frame)
Audit time	<4 min
Average cell to drive time	4.0 sec

Capacity	
Capacity, native (uncompressed)	T9840B (20 GB/cart) — 13.56 TB (single-frame); 26.88 TB (dual-frame) T9840C (40 GB/cart) — 27.12 TB (single-frame); 53.76 TB (dual-frame) T9940B (200 GB/cart) — 135.6 TB (single-frame); 268.8 TB (dual-frame)
	LTO Gen 2 (200 GB/cart) – 135.6 TB (single-frame); 268.8 TB (dual-frame) LTO Gen 3 (400 GB/cart) – 271.2 TB (single-frame); 542.4 TB (dual-frame)
	SDLT 320 (160 GB/cart) — 108.48 TB (single-frame); 215.04 TB (dual-frame) SDLT 600 (300 MB/cart) — 203.4 TB (single-frame); 406.8 TB (dual-frame)
Number of cartridge slots	200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1344 (dual-frame required beyond 678 slots)
Number of tape drives/types	1—12 T9840 and T9940 drives (single-frame) 1—20 LTO Gen 2 and Gen 3, SDLT 320 and 600 drives or a combination (single-frame) 1—24 T9840 and T9940 drives (dual-frame) 1—40 LTO Gen 2 and Gen 3, SDLT 320 and 600 drives or a combination

Cartridge access port Standard 20-cartridge-slot CAP. Second CAP for additional 20

cartridges optional – 80 CAP slots maximum (CAP) Pass-through port (PTP) 2-cartridge transport mechanism (dual-frame)

#### **Availability**

Availability	
Mean exchanges/swaps between failures (MEBF/MSBF)	2,000,000
Mean time between failures (MTBF)	360,000 hr (full operation)
Mean time to repair (MTTR)	<30 min
Non-disruptive serviceability	Hot-swappable drives with power supply and fan, plus Ethernet and serial ports for diagnostics and reporting; optional universal power supply

technology

Compatibility	
Supported host platforms	UNIX, Windows NT, Novell, Linux
Robotics control interfaces	SCSI-3 media changer command set, 2-GB Fibre channel (default and only option)
Any Cartridge Any Slot™	Simultaneous support of multiple tape and media types

#### Management

L-Series™ Library Admin software	Embedded Web-based library administration tool (standard with the L1400M and L1400 libraries)
Digital vision system	Unique digital vision camera system performs continuous calibration and reads bar codes
Operator panel	User-friendly configuration and diagnostic controls, status display and viewing window
Automatic clean	Dedicated cleaning cartridge slot for tape drive cleaning by library or software command $$
Automatic self-discovery	Self-configures the drives, slots and CAP; also identifies drive and media types
Continuous automation calibration	No periodic maintenance or alignment required

#### Mechanical

Library	
Height	72.0 in (182.9 cm)
Depth	37.5 in (95.3 cm)
Width	61.3 in (155.7 cm) (single-frame), 135.81 in (344.95 cm) (dual-frame)
Unit height	41.1u*
Weight	First frame 840.0 lb (381.0 kg) with expansion frame and covers plus second frame weight (single-frame) 761.0 lb (345.0 kg) without expansion frame — 840.0 lb (381.0 kg) with expansion frame and covers (dual-frame)

#### Pass-through nort (PTP)

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Height	7.0 in (17.8 cm) (dual-frame)
Depth	17.25 in (43.8 cm) (dual-frame)
Width	12.0 in (30.5 cm) (dual-frame)
Unit height	4u* (dual-frame)
Weight	92 lb (43 kg) (dual-frame)

Environmental		
Temperature		Ī
Operating	+59° to +90° F (+15° to +32° C)	
Non-operating	+50° to +104° F (+10° to +40° C)	

Humidity Operating 20%-80% Non-operating 10%-95%

#### Power

Voltage	100–127 VAC, 200–240 VAC @ 50–60 Hz single phase (auto-ranging)
Library (operating maximum continuous — not peak)	1.75 A @ 120 V, 0.88 A @ 240 V, 716 BTU/hr
Drives	Drive power consumption varies. Refer to individual drive specifications

#### Regulatory compliance

Electromagnetic compatibility	FCC #47, part 15, subpart B, class A; VCCI class A European Union CE emissions standards; AS/NZS 3548; 1996 (Australia, N.Z.); ICES-003 (Canada)
Safety	UL 1950 CAN/CSA 22.2 No. 950

<sup>\*</sup> Rack space is measured in height and expressed as a u. One u is 1.75 in (4.45 cm) in height.



#### ABOUT STORAGETEK®

Storage Technology Corporation (NYSE: STK) is a \$2 billion global company that enables businesses, through its information lifecycle management strategy, to align the cost of storage with the value of information. The company's innovative storage solutions manage the complexity and growth of information, lower costs, improve efficiency and protect investments. For more information, visit www.storagetek.com, or call 1.800.275.4785 or 01.303.673.2800.

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