

# Sun StorageTek™ L1400 Tape Library

Flexible, reliable tape storage that  
grows with your business.



Your storage needs are constantly evolving, and your tape library must evolve with them — especially for such critical applications as backup/restore, consolidation, and archiving.

The Sun StorageTek™ L1400 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.

## Highlights

- **Manage growth easily** – The Sun StorageTek L1400 tape library's standard installation procedures and manageable upgrade paths help make your tape storage solution easy and cost effective. Plus, with StorageTek Continuous Capacity technology, you purchase only the capacity you need today and add incremental storage over time.
- **Consolidate your tape storage** – Gain flexibility for growing, managing, and controlling your tape library backup applications, so you can react quickly to changing business conditions. With native logical partitioning, the StorageTek L1400 library can be shared easily among multiple applications, enhancing asset utilization and productivity.
- **Opt for reliability** – Sun is committed to delivering reliable solutions for your storage needs, with industry-leading interoperability engineering and design support. The StorageTek L1400 device is designed from the same components as StorageTek enterprise-class solutions.
- **Simplify your tape technology choices** – Support multiple drive technologies and ease the transition to new tape solutions: You can tune the system to your precise needs, using the highly efficient StorageTek T10000, the high-performance StorageTek T9840, the high-capacity StorageTek T9940, or the cost-effective StorageTek Super DLT (SDLT) or StorageTek Linear Tape Open (LTO) Ultrium tape drives.

### Grow with flexibility

The StorageTek L1400 system lets you configure storage easily, with just a few keystrokes. And with Sun's powerful StorageTek Any Cartridge Any Slot™ and StorageTek Continuous Capacity™ technologies, you can add the storage systems and functionality you need: high capacity and throughput with the StorageTek T10000, fast access with the StorageTek T9840, high capacity with the StorageTek T9940, or midrange capacity with the StorageTek LTO and StorageTek SDLT tape drives. With its proven self-calibrating robotics, hot-swappable components, and powerful monitoring and management software, the StorageTek L1400 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 StorageTek L1400 single-frame library scales from 200 to 678 slots, nondisruptively, allowing you to expand your storage seamlessly. Plus, it's built on successful StorageTek L700e tape technology, so you know it's been field-tested and proven around the globe.

### Go with the consolidation platform

The StorageTek L1400 device offers choices for your tape consolidation, including native logical partitioning and ACSLS media pooling. You can easily share the StorageTek L1400 system among multiple applications to increase asset utilization and productivity — and because the device can partition nondisruptively, you can structure the StorageTek L1400 library to meet your storage and platform needs in minutes.

### Take advantage of our expertise

Right from the start, Sun's StorageTek Implementation Services can help you realize the full benefit of your storage solution investments. These services include establishing host connectivity to the library and integrating it into your existing backup operation — including setting up media controls.

# Sun StorageTek™ L1400 Tape Library Specifications

## Performance

Throughput per hour, native (uncompressed)	<ul style="list-style-type: none"> <li>StorageTek T10000 drive (12 drives, 120 MB/sec) – 5.18 TB/hr (single-frame)</li> <li>StorageTek T10000 drive (24 drives, 120 MB/sec) – 10.37 TB/hr (dual-frame)</li> <li>StorageTek T9840B drive (12 drives, 19 MB/sec) – 820.8 GB/hr (single-frame)</li> <li>StorageTek T9840B drive (24 drives, 19 MB/sec) – 1.64 TB/hr (dual-frame)</li> </ul>
	<ul style="list-style-type: none"> <li>StorageTek T9840C drive (12 drives, 30 MB/sec) – 1.296 TB/hr (single-frame)</li> <li>StorageTek T9840C drive (24 drives, 30 MB/sec) – 2.592 TB/hr (dual-frame)</li> </ul>
	<ul style="list-style-type: none"> <li>StorageTek T9940B drive (12 drives, 30 MB/sec) – 1.296 TB/hr (single-frame)</li> <li>StorageTek T9940B drive (24 drives, 30 MB/sec) – 2.592 TB/hr (dual-frame)</li> </ul>
	<ul style="list-style-type: none"> <li>StorageTek LTO 2 drive (20 drives, 30–35 MB/sec) – up to 2.52 TB/hr (single-frame)</li> <li>StorageTek LTO 2 drive (40 drives, 30–35 MB/sec) – up to 5.04 TB/hr (dual-frame)</li> <li>StorageTek LTO 3 drive (20 drives, 80 MB/sec) – 5.75 TB/hr (single-frame)</li> <li>StorageTek LTO 3 drive (40 drives, 80 MB/sec) – 11.52 TB/hr (dual-frame)</li> </ul>
	<ul style="list-style-type: none"> <li>StorageTek SDLT 320 drive (20 drives, 16 MB/sec) – 1.152 TB/hr (single-frame)</li> <li>StorageTek SDLT 320 drive (40 drives, 16 MB/sec) – 2.304 TB/hr (dual-frame)</li> <li>StorageTek SDLT 600 drive (20 drives, 36 MB/sec) – 2.59 TB/hr (single-frame)</li> <li>StorageTek SDLT 600 drive (40 drives, 36 MB/sec) – 5.18 TB/hr (dual-frame)</li> </ul>
Audit time	<4 min
Average cell to drive time	4.0 sec

## Capacity

Capacity, native (uncompressed)	<ul style="list-style-type: none"> <li>StorageTek T10000 drive (500 GB/cart) – 339 TB (single-frame); 672 TB (dual-frame)</li> <li>StorageTek T9840B drive (20 GB/cart) – 13.56 TB (single-frame); 26.88 TB (dual-frame)</li> <li>StorageTek T9840C drive (40 GB/cart) – 27.12 TB (single-frame); 53.76 TB (dual-frame)</li> <li>StorageTek T9940B drive (200 GB/cart) – 135.6 TB (single-frame); 268.8 TB (dual-frame)</li> </ul>
	<ul style="list-style-type: none"> <li>StorageTek LTO 2 drive (200 GB/cart) – 135.6 TB (single-frame); 268.8 TB (dual-frame)</li> <li>StorageTek LTO 3 drive (400 GB/cart) – 271.2 TB (single-frame); 542.4 TB (dual-frame)</li> </ul>
	<ul style="list-style-type: none"> <li>StorageTek SDLT 320 drive (160 GB/cart) – 108.48 TB (single-frame) ; 215.04 TB (dual-frame)</li> <li>StorageTek SDLT 600 drive (300 MB/cart) – 203.4 TB (single-frame); 406.8 TB (dual-frame)</li> </ul>
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 StorageTek T10000, T9840, and T9940 drives (single-frame) 1–20 StorageTek LTO 2 and 3, StorageTek SDLT 320 and 600 drives, or a combination (single-frame) 1–24 StorageTek T10000, T9840, and T9940 drives (dual-frame) 1–40 StorageTek LTO 2 and 3, StorageTek SDLT 320 and 600 drives, or a combination (dual-frame)
Cartridge access port (CAP)	Standard 20-cartridge-slot CAP. Second CAP for additional 20 cartridges optional – 80 CAP slots maximum
Pass-through port (PTP)	2-cartridge transport mechanism (dual-frame)

## 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
Nondisruptive	Hot-swappable drives with power supply and fan, plus Ethernet serviceability and serial ports for diagnostics and reporting; optional universal power supply

## 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 technology	Simultaneous support of multiple tape and media types

## Management

LSeries™ Library Admin software	Embedded Web-based library administration tool (standard with the L1400M and L1400)
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

## Dimensions and Weight

Library	
H:	72.0 in (182.9 cm)
D:	37.5 in (95.3 cm)
W:	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 port (PTP)	
H:	7.0 in. (17.8 cm) (dual-frame)
D:	17.25 in. (43.8 cm) (dual-frame)
W:	12.0 in. (30.5 cm) (dual-frame)
Unit height	4u* (dual-frame)
Weight	92 lb. (43 kg) (dual-frame)

## Environmental

Temperature	
Operating	+59°F to +90°F (+15°C to +32°C)
Nonoperating	+50°F to +104°F (+10°C to +40°C)
Humidity	
Operating	20% to 80%
Nonoperating	10% to 95%

## Power

Voltage	100–127 VAC, 200–240 VAC @ 50–60 Hz single phase (auto-ranging)
Library (operating maximum continuous — not peak)	1.75A @ 120V, 0.88A @ 240V, 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 EN60950

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