

Sun StorageTek™ SL500 Modular Library System

Reliable, scalable, simple rackmounted
tape automation



Highlights

- Improve reliability with superior robotics and easy serviceability
- Scale without decreasing reliability or performance to meet changing requirements in high-availability environments
- Simplify and accelerate consolidation by creating up to eight native partitions
- Create a policy-managed tiered storage solution by combining the StorageTek SL500 with Sun StorageTek VTL systems



The most scalable rackmounted solution on the market, the Sun StorageTek™ SL500 modular library system also raises the bar on reliability and simplicity. When you need to accommodate growth in a small- to medium-sized business or corporate department, the StorageTek SL500 library helps you accelerate consolidation and support applications such as email, databases, and file servers.

Scalable

The StorageTek SL500 scales from 30 to 575 LTO slots (or 24 to 494 mixed media slots) with a maximum capacity of more than 460 terabytes of uncompressed data — more than 40% more capacity than other libraries in this class. The library also allows you to use up to 18 tape drives with a native throughput rate of more than 7 terabytes per hour.

In addition, the StorageTek SL500 is complemented by the Sun StorageTek VTL Plus or Sun StorageTek VTL Value virtual solutions, which integrate seamlessly with physical tape. As a result, you gain a no-compromise solution that balances the performance, reliability, and ease of management of VTL to enable tape consolidation with the low cost, cartridge removability, and long-term retention capabilities of the StorageTek SL500. This tiered storage solution is managed by policies on the VTL, so the overall solution reduces your labor costs for virtual and physical tape management.

Reliable

To help you maintain uninterrupted access to your data, the StorageTek SL500

leverages components, including robotics and firmware, from the enterprise-class Sun StorageTek SL8500 modular library system. The robotic mechanism maintains reliability regardless of the number of expansion modules and helps to increase the stability and predictability of backups. Redundant, hot-swappable components, such as power supplies and fans, minimize disruption. An advanced digital vision system automatically calibrates the library to reduce wear and tear on the cartridge, drive, and robot. Dynamic worldwide naming and firmware code uploads eliminate single points of failure.

Simple

The StorageTek SL500 library expands to higher slot and drive counts using the same robotics and library automation architecture. Simple library upgrades extend the useful life of the equipment and preserve your investment. Standard interfaces and the library control software enable resource sharing by connecting to other devices across Solaris™, Windows, UNIX®, or Linux environments. All major parts, including the robotics, are field replaceable in less than 30 minutes.

Any Cartridge Any Slot™ technology helps you meet changing storage requirements with StorageTek LTO, SDLT, and DLT-S4 tape drive technology. Encryption-capable HP LTO4 drives work in tandem with the Sun StorageTek Crypto Key Management system to protect sensitive data and meet compliance requirements.

The library's native partitioning via the Streamline Media Console helps you save time, space, and energy by consolidating multiple libraries and applications into a central location. Library partitioning, a licensed feature, allows you to create up to eight partitions after it is enabled by a Sun service representative.

Engage the storage experts

Purchase a Sun System Pack with the StorageTek SL500 and go beyond the traditional warranty. You'll receive 24-hour technical support by phone, extended on-site coverage hours, Sun Vendor Integration Platform (SunVIP™) problem management, and access to online learning resources. Sun assessment and professional services can help you get the most out of your storage investment.

Learn More

For more information about the Sun StorageTek SL500 modular library system, visit sun.com/storagetek or contact your local sales representative.

StorageTek SL500 Modular Library System Specifications

Performance

Throughput per hour, maximum native (uncompressed)	LTO 4 (18 drives, 120 MB/s) — over 7.7 TB/hr
	LTO 3 (18 drives, 68 to 80 MB/s) — over 5 TB/hr
	DLT-S4 (18 drives, 60 MB/s) — over 38 TB/hr
	SDLT 600 (18 drives, 36 MB/s) — over 2 TB/hr
	SDLT 320 (18 drives, 16 MB/s) — over 1 TB/hr

Capacity

Capacity, maximum native (uncompressed)	LTO 4 (800 GB/cart) — 460 TB (575 cartridges)
	LTO 3 (400 GB/cart) — 230 TB (575 cartridges)
	DLT S-4 (800 GB/cart) 395 TB (494 cartridges)
	SDLT 600 (300 GB/cart) — 148 TB (494 cartridges)
	SDLT 320 (160 GB/cart) — 79 TB (494 cartridges)

Number of cartridge slots	LTO: 30 to 575 slots
	Mixed media: 24 to 494 slots
	Base module: LTO: 30 slots Mixed media: 24 slots

Cartridge expansion module	LTO: 120 slots
	Mixed media: 113 slots

Number of tape drives/types	LTO: 1-18
	SDLT/DLT-S4: 1-18
	Mixed media: 1-18

Cartridge access port (CAP)*	Base module:
	5-cartridge capacity (LTO)
	4-cartridge capacity (mixed media)

Availability

Mean exchanges/swaps between failure (MEBF/MSBF)	2 million
Mean time to repair (MTTR)	<30 min
Nondisruptive serviceability	Hot-swappable drives; Ethernet and serial ports for diagnostics and reporting; redundant hot-swappable power supplies with redundant fans

Compatibility

Supported host platform Software	Solaris, UNIX, Windows, Linux Refer to the Sun StorageTek Interop Tool: extranet.storitek.com/interop/interop
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Robotics control interfaces	Robotics control interfaces Small Computer System Interface (SCSI)-3 Media Changer command set; low-voltage differential (LVD) or 4-GB Fibre Channel
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Any Cartridge Any Slot technology	Simultaneous nonpartitioned support of multiple tape and media types
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Management

Digital vision system	Unique digital vision camera system that performs continuous calibration and reads bar codes
Operator panel	Optional user-friendly configuration and diagnostic controls, status display, and viewing window
Automatic clean	Configurable cleaning cartridge slot for tape drive cleaning by library or software command
Automatic self-discovery	Self-configuring for cells, drives, and cartridge access ports
Continuous automation calibration	No periodic maintenance or alignment required

Mechanical

Base module	(Minimum configuration)
Height	14.0 in. (35.6 cm)
Depth	33.14 in. (81.1 cm)
Width	18.9 in. (48.0 cm)
Unit height	8U**
Weight	76.4 lb (34.56 kg)

Drive expansion module	
Height	14.0 in. (35.6 cm)
Depth	33.14 in. (81.1 cm)
Width	18.9 in. (48.0 cm)
Unit height	8U**
Weight	59.0 lb (26.9 kg)

Cartridge expansion module	
Height	14.0 in. (35.6 cm)
Depth	31.62 in. (80.3 cm)
Width	18.9 in. (48.0 cm)
Unit height	8U**
Weight	44.2 lb (20.1 kg)

Environmental

Temperature	
Operating	50° F to 104° F (10° C to 40° C), 20% to 80% relative humidity, noncondensing
Non-operating	-40° F to 140° F (-40° to 60° C) 10% to 95% relative humidity, noncondensing

Power

Voltage	100-127 VAC, 200-240 VAC @ 50-60 Hz single phase (autoranging)
Library (operating maximum continuous — not peak)	1.42 A @ 120 V or 0.75 A @ 240 V, 614 BTU/hr
Drives	Drive power consumption varies; refer to individual drive specifications.

Regulatory compliance

Electromagnetic compatibility	FCC (47 CFR 15, Subpart B) Class A; CE (EN5022 Class A, EN55024, EN61000-3-2, EN61000-3-3); VCCI (CISPR 22) Class A; Canada (ICES-003) Class A
Safety	UL 1950 CAN/CSA 22.2 No. 950; EN60950

*CAP slots can be configured as data cartridge slots.

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

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