

Sun StorageTek™ 2530 Array

Simple, reliable, and affordable shared storage



Small to medium businesses (SMBs) can cost-effectively take an overburdened internal storage infrastructure to the next level of data storage with the Sun StorageTek™ 2530 array. As a member of the Sun StorageTek modular series of arrays, the Sun StorageTek 2530 array provides SMBs an affordable, reliable, and robust storage solution that's designed to improve productivity through higher performance, availability, scalability, and functionality.

Highlights

- Entry-level external storage for consolidating dispersed and inefficient internal direct attached storage (DAS)
- SAS interface technology provides high performance with each SAS port 3 Gb/sec x4 wide
- Support for high-performance SAS and/or high-capacity SATA drives within the same tray addresses the needs of tiered storage and ILM solutions
- Leverages generations of Sun storage development for best-of-breed technology
- “Start small, grow big” scalability with SAS expansion supporting up to a total of 48 drives
- Sun StorageTek Common Array Manager (CAM) software—simple to implement and manage
- Solution of choice for two-node clustered topologies, providing high availability and redundancy

Growing storage requirements

SMBs face unique challenges with their data. Newly purchased servers typically house several drives, and for an SMB with a restrictive budget, this is often viewed as a convenient and low-cost solution for their data storage. However, this distributed storage strategy leads to wasted data space, duplicated functions, inefficiencies in data protection, and availability inconsistencies.

The Sun StorageTek 2530 array combines next-generation serial-attached SCSI (SAS) technology, time-proven designs for external storage, and intuitive management software to create a fully featured storage system ideally suited for SMB requirements. Its modular design creates an affordable entry point without sacrificing future scalability—enabling customers to start small and grow big when they're ready. Dual-active controllers and up to 12 SAS and/or SATA drives combine to create a highly available storage system in a 2 U enclosure. And when capacity and/or performance requirements change, the Sun StorageTek 2530 array's scalability supports up to 36 additional drives.

With up to six host-side 3 Gb/sec SAS interfaces, the Sun StorageTek 2530 array can provide support for up to three servers with redundant connections—enabling capacity-efficient

storage consolidation without the need of a storage network. Clustering further supports storage consolidation by enabling servers, typically two, to share access to data on a single storage system.

The Sun StorageTek 2530 array also provides a level of data availability not possible with internal storage. Redundant components, redundant I/O paths, automated path failover, and online administration enable the Sun StorageTek 2530 array to ensure data access is maintained at all times.

Simple installation and management

Common Array Manager's (CAM's) web-like and task-based management interface significantly reduces the complexity of installation, configuration, management, and diagnostic tasks. Online capacity expansion, data-volume creation, and host-to-volume mappings give the user control of their array and the ability to make quick changes when necessary. Accessible from anywhere in the world with use of a secure Internet connection, CAM includes automated diagnostics so users can focus on precise, predictable, and repeatable results. CAM also scales across Sun's entire modular disk portfolio and is provided at no additional cost.

Premium features provide additional functionality and replication features to an organization's storage system, only when and if their storage demands call for it. As businesses continue to grow, administrators have the flexibility to add premium features to support data utilization and protection requirements.

- Sun StorageTek Storage Domains logically divide a single array into multiple arrays by defining which host or host group can access each volume in the array. Additional domains are available through a licensable upgrade.
- Sun StorageTek Data Snapshot creates capacity-efficient, point-in-time volume images, providing a logical volume for such uses as file restoration and backup.

Learn More.

For more information about the Sun StorageTek 2530 array visit sun.com/st2500

Sun StorageTek 2530 Array Specifications

Sun StorageTek 2530 array

Controller card	• Dual and single SAS RAID controller
Cache size (with ECC protection)	• 512 MB or 1 GB/controller (up to 2 GB/system)
Host interfaces / link speeds	• Three to six 3 Gb/sec SAS host ports per controller tray
Other interfaces	• Up to two 10/100 Base-T Ethernet • Up to two nine-pin RS232 serial ports per dual controller tray
RAID levels	• 0, 1, (1+0), 3, 5, 6 (p+q)
Cache battery backup	• Up to 72 hours (depending on cache size)
Integrated data services	• StorageTek Data Snapshot (optional) – Basic: 4 snaps/vol, Enhanced: 8 snaps/vol • Sun StorageTek Volume Copy (optional) • StorageTek Storage Domains – 2 domains included; (optional 4, 8, 16 or 32)
Dynamic capacity expansion	• Five to 48 drives – 730 GB to 48.0 TB
Expansion tray	• Up to three expansion trays
Drive depopulation	• Scales from five to 12 hard disk drives per tray
Volume	• Up to 256 (32/host)
Global hot spares	• Up to 30
Maximum array capacity	• 21.6 TB (450 GB SAS drives) • 48.0 TB (1.0 TB SATA drives)

Disk drives

Form factor	• 3.5-in., low-profile
Interface	• Dual-ported SAS
Supported drives/system per tray capacity, raw, unformatted: SAS drives	• 146 GB, 15,000 rpm, 3 Gb/sec, 1.75 TB per tray • 300 GB, 15,000 rpm, 3 Gb/sec, 3.6 TB per tray • 400 GB, 10,000 rpm, 3 Gb/sec, 4.8 TB per tray • 450 GB 10,000 rpm, 3 Gb/sec, 5.4 TB per tray
SATA drives	• 500 GB 7,200 rpm 3 Gb/sec, 6.0 TB per tray • 750 GB 7,200 rpm 3 Gb/sec, 9.0 TB per tray • 1.0 TB 7,200 rpm 3 Gb/sec, 12.0 TB per tray

Supported software

- Sun Cluster Software
- Sun StorageTek™ Enterprise Backup Software (EBS)
- Veritas NetBackup (NBU)
- Oracle® Database – Oracle Real Application Clusters (RAC)
- Red Hat Enterprise Linux – Red Hat Cluster Suite
- Windows Server 2003 – Server Cluster

Management software support

StorageTek Common Array Manager (CAM) – included

Operating system support

- Solaris™ 10 Operating System – and x86
- Microsoft Windows 2003, 2008
- SUSE Linux 9, 10
- Red Hat Enterprise Linux 4, 5

Host connectivity

- Host/HBA/IP switches
- Multipath driver
- The Solaris OS, as well as native drivers for other operating systems including Windows. RDAC drivers for Linux
- All HBAs supported in SAN 4.4.12

Warranty

Duration	• Three years (parts exchange)
Phone support	• 8 a.m.-5 p.m., Mon.-Fri.
Other	• Additional support and extended on-site coverage available through Sun Services

Dimensions

Height x width x depth	• 86.1 mm (3.39 in.) x 448.6 mm (17.66 in.) x 540 mm (21.26 in.)
Weight (maximum)	• 59.55 lbs.

Power requirements

AC power	• 515 W (+5V @ 19A/+12V @35A)
DC power	• 17A max operating (-42 to -60 V DC)

Environmental (operating)

Temperature	• 10°C to 40°C (50°F to 104°F) without battery • 10°C to 40°C (50°F to 104°F), 10°C to 35°C (50°F to 95°F) with battery
Relative humidity	• 20-80% noncondensing
Operating altitude	• 68.3 kPa (3,200m), 40°C, four-hour dwell
Operating shock	• 5.5Gs, 11 ms, half-sine, 10 shocks per direction, all six directions
Operating vibration	• All three axes: 0.25Gs, 5 to 500 Hz, swept-sine, five sweep cycles, one octave per minute
Heat output	• 460 W (1,570 BTU/hr.)

Environmental (nonoperating)

Temperature (storage)	• 10°C to 50°C (-14°F to 122°F) without battery -10°C to 45°C (-14°F to 113°F), with battery (three month maximum)
Temperature (transit)	• 40°C to 60°C (-40°F to 140°F) without battery -20°C to 60°C (-4°F to 113°F) with battery (one week maximum)
Humidity (storage)	• 10-90%, max dew point is 26°C (79°F), 10% per hour gradient
Humidity (transit)	• 5-95%, max dew point is 26°C (79°F), 10% per hour gradient
Altitude	• 18.8 kPa (12,200m), 40°C, four-hour dwell
Shock (storage)	• 20Gs, 8.0 ms square wave in each direction along x, y, and z axes
Shock (transit)	• 33Gs, 11 ms, half-sine, three shocks per direction, all six directions
Vibration	• All three axes: 1.2 Gs, 5 to 500 Hz, swept-sine, five sweep cycles, one octave per minute

Regulations

Safety and emissions	• FCC Class A, VCCI Class A, EN55022 Class A, EN 55024 UL BSM, C-Tick, RoHS, and WEEE
NEBS Level 3	• GR-63 CORE requirements, GR-1089 CORE requirements