

Sun™ Storage 6580 Array

The power to deliver



Highlights

- High-availability architecture and nondisruptive upgrades help users meet stringent reliability requirements
- Data protection software enables replication, snapshot, and volume copy
- Powerful dual controllers and end-to-end 4 Gb/s design stand up to the most rigorous computing demands
- Sun StorageTek™ Common Array Manager (CAM) software provides a browser-based, application-oriented management console that works with all Sun Storage J4000, 2500 and 6000 Arrays
- Automated configuration uses pre-defined application profiles to enable precise, predictable, and repeatable results
- Common storage modules used across the Storage modular disk family enable users to only pay as their data requirements grow and protect their IT investments
- Application flexibility – Oracle/MySQL, online transaction processing, Web servers, tier 2 disk archive, data protection, image capture and retrieval



The Sun™ Storage 6580, part of the award-winning Sun Modular Storage 6500 family, is designed to handle large data sets in applications that target databases, virtualization, and enterprise-email applications. It delivers market-leading performance for primary storage and is a cost effective business continuity solution. Like all systems in the Sun Modular Storage 6500 family, the array is designed to deliver investment protection and exceptional data protection while applications evolve. The Sun Storage 6580 is also distinguished by high availability, extensive interoperability, easy manageability, and flexible scalability.

Boost protection with high-availability architecture

The Sun Storage 6580 array's design permits nondisruptive capacity additions and the ability to change volume characteristics on the fly to optimize protection and minimize risk.

Simplify management and configuration

The SMI-S-compliant Sun StorageTek™ Common Array Manager software is the array's browser-based, application-oriented management interface. Accessible from anywhere with the use of a secure Internet connection, CAM includes built-in performance tracking and automatedSM diagnostics so users can focus on precise, predictable, and repeatable results.

Expand capacity with online, data-in-place functionality

The Sun Storage 6580 array supports 256 drives, is upgradable, and is compatible with other members of the modular portfolio.

Users can mix SATA and Fibre Channel drives to design a tiered storage environment with centralized management and integrated data services for business continuity.

Deploy with Confidence

Architected to provide high reliability and availability, the Sun Storage 6580 offers redundant components, automated I/O path failover, and extensive online configuration, re-configuration, and maintenance capabilities designed to ensure your data is available 24x7x365. In addition, RAID 6 technology guards against concurrent drive failures and errors and persistent cache backup to ensure any data in cache is captured and safe in the event of a power outage.

Sun Storage 6580 Array Specifications

Architecture

Controller card	• Dual Fibre Channel RAID Controller with dual host interface cards
Cache size	• 8 GB dedicated data cache
Host interfaces/link speeds	• Eight 4 Gb/sec direct, arbitrated loop, or switched attached ports
Other interfaces	• Sixteen 4 Gb/sec FC expansion ports • Four 10/100 base-T Ethernet ports • Two nine-pin RS-232 serial ports
RAID	• 0, 1, 3, 5, 6 (p+q) and 10
Cache backup	• Permanent cache de-stage to Flash memory
Integrated data services/premium features	• Sun StorageTek™ Data Snapshot (optional) (supports up to 16 snaps per volume, 1,024 per array) • Sun StorageTek Data Volume Copy (optional) (supports up to eight active copies per volume, 2,048 per array) • Sun StorageTek Data Replicator (optional) (supports up to 128 replicated volumes) • Sun StorageTek Storage Domains (supports up to 512 storage domains)
Dynamic capacity expansion	• Five to 256 drives • 730 GB to 256 TB
Expansion tray	• Up to 16 CSM200 expansion trays
Dynamic reconfiguration	• Volume expansion, RAID migration, capacity expansion, segment size migration, volume and virtual disk reconfiguration, controller firmware upgrades
Drive depopulation	• Scales from 5 to 16 hard disk drives per tray
Volume	• Up to 2,048
Global hot spares	• Unlimited
Maximum array capacity	• 256 TB
Disk drives	
Form factor	• 3.5 in., low-profile
Interface	• Dual-ported Fibre Channel

Supported drives/system per tray capacity (raw, unformatted)

Fibre Channel drives	• 146 GB 15,000 rpm, 4 Gb/sec, 2,336 GB per tray (3 RU) • 300 GB 15,000 rpm, 4 Gb/sec, 4,800 GB per tray (3 RU) • 400 GB 10,000 rpm, 4 Gb/sec, 6,400 GB per tray (3 RU) • 450 GB 15,000 rpm, 4 Gb/sec, 7,200 GB per tray (3 RU)
SATA II drives	• 500 GB 7,200 rpm, 3 Gb/sec, 8,000 GB per tray (3 RU) • 750 GB 7,200 rpm, 3 Gb/sec, 12,000 GB per tray (3 RU) • 1,000 GB, 7,200 rpm, 3 Gb/sec, 16,000 GB per tray (3 RU)

Supported software

- Sun StorageTek QFS Software
- Sun StorageTek SAM-FS Software
- Sun™ Cluster Software
- Sun StorageTek Enterprise Backup Software (EBS)
- Solstice™ DiskSuite 4.2.1 (in conjunction with the Solaris™ 8 Operating System)
- Solaris Volume Manager (embedded in the Solaris 9 Operating System)
- Symantec NetBackup (NBU)
- Symantec Volume Manager with DMP (VxVM)
- Symantec File System (VxFS)
- Symantec Storage Foundation

Management software support

- Sun StorageTek Common Array Manager (included)
- SANtricity Storage Manager (optional)

Operating system support

- Solaris™ Operating System 8, 9, 10, and x64
- Microsoft Windows 2003 Server Standard, Enterprise, and Web editions
- Microsoft Windows 2008 Server
- HP-UX 11.23/11.31
- IBM AIX 5.3, 5.4
- Red Hat Linux AS/ES/WS Enterprise edition 4.6/5.1
- SUSE Linux LES 9 and 10
- Netware 6 SP5, Netware 6.5 SP3, Netware 6.5 SP7
- VMware ESX 3.0

Host connectivity

- <https://extranet.stortek.com/interop/interop>

Warranty

Duration	• Three years
Phone support	• 8 a.m.-8 p.m., Mon.-Fri.
On-site service	• Next business day, 8 a.m.-5 p.m., Mon.-Fri.
On-site response time	• Next business day, local business hours
Service upgrade	• SunSpectrum™ service upgrades are available

Dimensions

Height x width x depth	
Controller module	• 6.87 in (17.45 cm) x 17.5 in (44.45 cm) x 24 in (60.96 cm)
Expansion module	• 5.1 in (12.95 cm) x 17.6 in (44.70 cm) x 22.5 in (57.15 cm)
Rack (Sun Rack II)	• 60m x 1200m
Weight (maximum)	
Controller module	• 81.1 lbs. (36.8 kg)
Expansion module	• 95 lbs. (43 kg)* (depends on the number and types of drives installed)
Cabinet	• 420 lbs.

Learn More

For more information about the Sun Storage 6580 array please visit sun.com/6580

Power requirements

AC power	
Controller unit	• 2.65A maximum operating @ 240 VAC (180 to 264 VAC, 50/60 HZ) • 5.53A maximum operating @ 115 VAC (90 to 136 VAC, 50/60 HZ)
Expansion tray	• 1.97A maximum operating @ 240 VAC (180 to 264 VAC, 50/60 HZ)

Environment

Operating temperature	• 32°F to 104°F (10°C to 40°C)
Relative humidity	• 20% to 80% non-condensing
Altitude	• 30.5m (100 ft. below sea level) to 3,058m (10,000 ft.) above sea level
Shock	• 25g @ 3.75 ms, triangular
Vibration	• Random vibration to specified power spectral density
Heat Output	• 540 Watts (1842 BTU/hour)

Regulations

Safety and	• IEC 60950-1, UL/CSA 60950-1, EN 60950-1, CB Report with all national differences
Emissions	• FCC Class A (47 CFR 15, Subpart B), ICES-003 Class A, EN55022 Class A, VCCI Class A, CNS13438 Class A, CISPR22 Class A
Immunity	• EN55024