

Sun™ Storage 6780 Array

The power to deliver



Highlights

- Common expansion modules offer an affordable entry-point while offering seamless “pay- as-you- grow” scalability as requirements change
- Data reliability and availability 24x7x365 through redundant components, automated I/O path failover, extensive online configuration and reconfiguration/maintenance capabilities
- Optimized to power faster, more responsive applications and increase productivity, improve customer satisfaction and meet demanding SLA requirements
- Data protection software enables replication, snapshot, and volume copy
- 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
- Application flexibility – Database (Oracle/MySQL), Virtualization (VMware/xVM), Email (MS Exchange/ Java Messenger Server)



The Sun™ Storage 6780 Arrays are enterprise-class modular storage systems which provide the winning combination of best performance, best price/performance, enterprise-class availability and scalability for customers who need to support business critical, enterprise applications and expect best-in-class investment protection. The systems include a rich set of data management features and data services at no extra cost, dramatically improving datacenter economics. With its relentless data density (up to 448 drives as a future option), performance and 7th generation architecture, the Sun Storage 6780 provides the highest reliability and availability in it's class.

Scalability without sacrifice

The Sun Storage 6780's advanced architecture enables multidimensional, linear scalability in IOPs, bandwidth and capacity so datacenters can scale their enterprise, database, virtualization and email applications in any dimension without having to sacrifice, features, functions, data protection or cost effectiveness.

Improve productivity and drive top-line growth

The Sun Storage 6780 enables organizations to cost-effectively manage and protect more data in the same foot print. Customers achieve greater productivity through improved consolidation and power efficiencies, additional cooling and rack space and higher

revenue and ROI on their initial storage investments. Furthermore, Sun's Common Array Manager (CAM) Software provides enterprise-class management tools and a robust suite of data services at no additional cost, dramatically improving datacenter economics.

Deploy with confidence

The Sun Storage 6780 is the newest member of a family of proven, bullet-proof storage solutions that have been used in leading enterprises, application and operating system environments across the globe. Sun customers can deploy the new Arrays with confidence knowing they have been certified by Sun for their needs.

Sun Storage 6780 Array Specifications

Architecture

Controller card	<ul style="list-style-type: none"> • 8 GB – Dual Fibre Channel RAID Controller with dual host interface cards • 16 GB – Dual Fibre Channel RAID Controller with quad host interface cards
Cache size	• 8 GB or 16 GB dedicated cache (future option 32 GB dedicated cache)
Host interfaces/link speeds	• Eight or sixteen 4 Gb/sec direct, arbitrated loop, or switched attached ports
Other interfaces	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Five to 256 drives • 730 GB to 256 TB • Future option: 448 drives, 448 TB
Expansion tray	• Up to 16 CSM200 expansion trays (future option: 28 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 (future option: 448 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	<ul style="list-style-type: none"> • 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)
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SATA II drives	<ul style="list-style-type: none"> • 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)
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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 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

Learn More

For more information about the Sun Storage 6780 Array please visit sun.com/6780

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.

Power requirements

AC power

Controller unit	<ul style="list-style-type: none"> • 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