

SUN STORAGE 6180 ARRAY

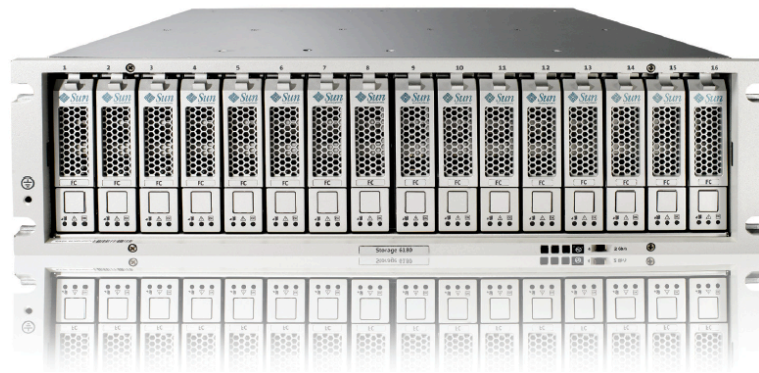
KEY FEATURES

- Data encryption services deliver government-grade, cost effective data protection throughout the lifecycle of the drive.
- Next Generation 8 Gb/s FC interfaces provide backward and forward investment protection and deliver higher performance at a lower cost
- 600GB 15K FC & 2TB 7.2K SATA drives provide more capacity than current FC and SATA drives

KEY BENEFITS

- Up to 112 intermixed drives provide the ability to combine FC and SATA disk drives to enable a tiered storage environment.
- Redundant, hot-swappable components maintain data availability by allowing components to be replaced without stopping I/O.
- Persistent cache backup ensures any data in cache is captured permanently in the event of a power outage.
- Custom XOR engine for RAID parity calculations enables exceptional disk-based performance that's ideally suited for RAID-5 and RAID-6 configurations.
- Data protection software enables remote replication, snapshot, and volume copy.
- .NEBS Level 3 certified.

Oracle's Sun Storage 6180 Array provides the power to achieve better performance with fewer drives—lowering acquisition, support, and operational costs. Further, the Sun Storage 6180 Array protects your storage investments by scaling and integrating seamlessly all the way up to Oracle's flagship Sun Storage 6780 Array. Like its trusted predecessors, the Sun Storage 6180 Array also uses proven architecture that ensures data integrity and availability—giving you the power to achieve all your datacenter goals with confidence.



The Sun Storage 6180 Array provides better performance with fewer drives.

Performance You Trust

Some of the world's leading companies rely on Sun modular storage to protect their data—the Sun Storage 6180 Array is no exception. The Sun Storage 6180 Array is architected to provide the highest reliability and availability, offering redundant components; automated I/O path failover; and extensive online configuration, reconfiguration, and maintenance capabilities to ensure your data is available 24/7. The Sun Storage 6180 Array also ensures stored data is always protected. DACstore technology stores configuration metadata on each drive, RAID-6 technology guards against concurrent drive failures and errors, and persistent cache backups ensure any data in cache is captured and safe in the event of a power outage. All these features combine to create a system you can trust with your data.

Continuous Investment Protection

The Sun Storage 6180 Array delivers flexibility, scalability, and investment protection with online data-in-place upgrades across the entire Sun modular storage line. The Sun Storage 6180 Array allows customers to scale up and across all the way to the flagship Sun Storage 6780 Array with data intact—without wasting time and money with over-the-SAN migration support for previous generations of SAN

infrastructure. Expansion trays let enterprises reuse and repurpose storage investments as their business needs change. Multidimensional scalability allows the Sun Storage 6180 Array to adapt when requirements change, ensuring it will continue to deliver the performance, capacity, and connectivity required going forward.

Simplified Management and Configuration

Compliant with the Storage Management Initiative – Specification, Sun Storage Common Array Manager (CAM) software is the array’s browser-based, application-oriented management interface. Accessible from anywhere with the use of an internet connection, Sun Storage CAM software includes built-in performance tracking and automated diagnostics so users can focus on precise, predictable, and repeatable results.

Sun Storage 6180 Array Specifications

Sun Storage 6180 Array		
	6180 – 4 Host Ports	6180 – 8 Host Ports
Cache size	4GB data cache	4GB data cache
Dynamic capacity expansion	5 to 64 drives, 1.5TB to 128TB	5 to 112 drives, 1.5TB to 224TB
Expansion tray	Up to three expansion trays	Up to six expansion trays
Maximum array capacity	128TB	224TB
Host interfaces/link speeds	Four 8Gbps FC Host Interfaces	Eight 8Gbps FC Host Interfaces
Other interfaces	<ul style="list-style-type: none"> • Four 4 Gb/sec FC expansion ports (switched loop) • Two 6-pin mini-DIN to 9-pin serial ports • Four RJ45 10/100Base-T network connectors 	
Controller card	Dual Fibre Channel (FC) RAID controller cards	
RAID level	0, 1, 3, 5, 6 (p+q), and 10	
Cache battery backup	Battery-backed cache destage to flash disk	
Integrated data services	<ul style="list-style-type: none"> • Sun Storage Domains (supports from 8 to 128 storage domains) • Sun Storage Data Replicator (supports up to 64 replicated volumes) (Optional) • Sun Storage Local Copy Services (Volume Copy & Snapshot) (supports up to 8 snapshots per volume (512 total) and 1023 total volume copies) (Optional) • Sun Storage Data Encryption Services (must be used with FDE capable drives) (Optional) 	
Dynamic reconfiguration	Volume expansion, RAID migration, capacity expansion, segment-size migration, volume/virtual disk reconfiguration, controller firmware upgrades	
Drive depopulation	Scales from 5 to 16 hard disk drives per tray	
Volume	Up to 1,024	
Global hot spares	Unlimited	

Disk Drives	
Form factor	• 3.5 in., low profile
Interface	• Dual-port Fibre Channel
Supported Drives / System per Tray Capacity (Raw, Unformatted)	
Fibre Channel drives	<ul style="list-style-type: none"> • 300GB 15,000 rpm, 4Gbps, 4,800GB per tray (3 RU) • 600GB 15,000 rpm, 4Gbps, 9,600GB per tray (3RU): FDE Capable
SATA II drives	<ul style="list-style-type: none"> • 1TB, 7,200 rpm, 3Gbps, 16,000GB per tray (3 RU) • 2TB, 7,200 rpm, 3Gbps, 32,000GB per tray (3 RU)
Supported Software	
<ul style="list-style-type: none"> • Legato NetWorker 7.3 • Sun Cluster 3.0, 3.1 • Sun StorageTek QFS software 4.0 minimum • Sun StorageTek SAM-FS software 4.0 minimum • Sun StorageTek Availability Suite 3.2 minimum • Sun StorageTek Enterprise Backup software 7.3 • Solaris Volume Manager (embedded in the Solaris 9 and 10 OSs) • VERITAS Storage Foundation (VxVM/VxFS) 5.0 • VERITAS Cluster Server (VCS) 5.0 • VERITAS NetBackup 6.0 or higher 	
Management Software Support	
<ul style="list-style-type: none"> • Sun Storage CAM software (included) 	
Operating System Support	
<ul style="list-style-type: none"> • Solaris Operating System 9 & 10 • Microsoft Windows 2003 SP2 & R2, 2008 SP2 & R2, Hyper V • OEL 5.5, 5.6, 6.0 (RDAC Only) • OVM 2.2 • HP-UX 11.23 & 11.31 • IBM AIX 6.1 • RHEL 5.5, 5.6, 6.0 (RDAC Only) • Linus SuSE 11.1 • VMware ESX 3.5u5 & 4.1 	
Dimensions	
(Height x Width x Depth)	
Controller module	12.95 cm (5.1 in.) x 44.7 cm (17.6 in.) x 57.15 cm (22.5 in.)
Expansion module	12.95 cm (5.1 in.) x 44.7 cm (17.6 in.) x 57.15 cm (22.5 in.)
Weight (Maximum)	
Controller module	38.15 kg (84.1 lb.)
Expansion module	42.18 kg (93 lb.)
Power Requirements	
AC Power	
Controller unit	50/60 Hz, 3.96 A max. operating at 115 V AC, 2.06 A max. operating at 230 V AX (115 V AC to 230 V AC range)
Expansion module	50/60 Hz, 3.90 A max. operating at 115 V AC, 2.06A max. operating at 230 V AX (90 V AC to 264 V AC range)
DC Power	

Controller unit	17 A max. operating (– 36 V DC to – 72 V DC range)
Expansion module	17 A max. operating (– 36 V DC to – 72 V DC range)
Environment	
Operating temperature	50°F to 95°F (10°C to 35°C)
Relative humidity (operating)	20% to 80%, noncondensing
Altitude (operating)	100 ft. (30.5 m) below sea level to 9,840 ft. (3,000 m) above sea level
Shock	10 G, 11 ms half-sine
Vibration	Random vibration to specified power spectral density
Heat output	<ul style="list-style-type: none"> • Controller module: 600 W (2,047 BTU/hr.) • Expansion module: 444 W (1,517 BTU/hr.)
Regulations	
Safety and emissions	IEC 60950, EN 60950, UL/CSA 60950, FCC Part 15 47 CFR 15B), CISPR 22 (EN55022—RF Radiated
Immunity	CISPR 24 (EN55024), IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000
Ruggedized	NEBS Level 3 (GR-63-CORE, GR-1089-CORE), ETSi EN 300 386

Warranty

The Sun Storage 6180 Array comes with a one-year warranty. Visit <http://www.oracle.com/goto/sun/warranty> for more information about Oracle's hardware warranty.

Support

With Oracle Premier Support, our customers get complete, integrated support to maximize the return on their Oracle investment—from software updates and operational best practices to proactive support tools and rapid problem resolution. For more information visit <http://www.oracle.com/support>

Contact Us

For more information about Oracle's Sun Storage 6180 Array, please visit oracle.com/sun or call +1.800.786.0404 to speak to an Oracle representative.



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