



SUN STOREDGE™ A1000/D1000 ARRAYS

Proven performance, reliability, and versatility for demanding storage environments.

The Sun StorEdge™ A1000/D1000 arrays offer performance and flexibility for a wide variety of computing environments. From simple deskside units to high capacity RAID cabinets capable of supporting close to 4 TB of storage, the Sun StorEdge A1000/D1000 arrays will meet your continually growing storage requirements. Designed for high data integrity and availability, the Sun StorEdge A1000/D1000 arrays provide full

RAID functionality. The Sun StorEdge D1000 array is available with cost efficient server based software RAID, while the Sun StorEdge A1000 array has a dedicated 70 MIPS processor managing and controlling all RAID functions. For fast growing, I/O intensive networks, the Sun StorEdge A1000/D1000 arrays provide proven performance, reliability, and versatility that will easily support your demanding storage requirements.

HIGHLIGHTS

- Up to 436 GB of storage (12 x 36 GB) in a single Sun StorEdge A1000/D1000 array.
- Up to 3.92 TB (nine Sun StorEdge A1000/D1000 arrays) in a single rack cabinet.
- Sun StorEdge A1000 array—hardware RAID controller with dedicated 70 MIPS processor and up to 80 MB of cache memory.
- Two node Sun™ server cluster support.
- Dual redundant hot-swap fans and power supplies.
- Single- and dual-channel SCSI backplane configurations.

Performance Monitor							
Devices	Total I/Os	Read %	Cache Hit %	Current KB/sec	Max. KB/sec	Current I/O/sec	Max. I/O/sec
Controller A:	0	0	0	0.0	0.0	0	0
LUN 0	0	0	0	0.0	0.0	0	0
LUN 1	0	0	0	0.0	0.0	0	0
LUN 2	0	0	0	0.0	0.0	0	0
LUN 3	0	0	0	0.0	0.0	0	0
Module Totals: 0 0 0 0.0 0.0 0 0							

RAID MANAGER 6.22 BENEFITS

- In-depth performance monitoring of RAID controller/LUNs: displays total I/Os, cache hit percentage, current KB/sec, etc.
- Allows RAID levels of existing LUNs to be reconfigured dynamically.
- New drives can be added to existing drive groups without having to bring the system offline.

With RAID Manager 6.22, system administrators can effectively monitor and optimize the performance of Sun StorEdge A1000 arrays.

SUN STOREDGE A1000/D1000 ARRAYS SPECIFICATIONS

HOST SYSTEM INTERFACE

Single-port	SBus card
Dual-port	PCI card

ULTRA SCSI, DIFFERENTIAL INTERFACE

Standard	ANSI (x3.131-1994, x3.277-1996)
Maximum length	20 m

SOFTWARE

RAID Manager (graphical user interface): Specific to Sun StorEdge A1000 array

DISK DRIVES

Form factor	3.5 in., low profile or half-height Ultra SCSI
Interface	Ultra SCSI
Supported drives	9.1 GB, 7,200 rpm
	9.1 GB, 10,000 rpm
	18.2 GB, 7,200 rpm
	18.2 GB, 10,000 rpm
	36.4 GB, 10,000 rpm

CONFIGURATIONS

Workgroup	Up to 12 (1.0 in.) hot-swap, Ultra SCSI drives
	Two hot-swap, high-reliability power supplies
	Four variable-speed, hot-swap fans
	One HW RAID controller or one interface card (SW RAID)
Data center	Up to nine arrays (with 9.1-GB, 18.2-GB, or 36.4-GB drives)
	Sun Enterprise™ expansion cabinet

RELIABILITY, AVAILABILITY, SERVICEABILITY

Redundancy	Power supplies
	Variable speed fans
High availability	RAID 0, 1, 1+0, 3, 5
Battery backed-up cache	Minimum 72-hour hold time
Online serviceable components	AC/DC power supplies
	Variable speed fans
	Ultra SCSI disk drives

ELECTRICAL SPECIFICATIONS

Input voltage	100-240 VAC, single phase
Power requirements	90-132 VAC (50-60 Hz) or 180-264 VAC (50-60 Hz)
Input current	5 A at 100 VAC or 2.5 A at 200 VAC

ENVIRONMENT—WORKGROUP

Operating	5°C to 40°C (41°F to 104°F)
	20% to 80% relative humidity, noncondensing
Altitude	-30 m to 3048 m (-100 to 10,000 ft.)
Vibration	1.0 G, 5-500 Hz swept sine
Shock	15 Gs, 11-ms, half sine

Nonoperating	-20°C to 60°C (-4°F to 140°F)
	93% relative humidity, noncondensing
Altitude	-30 m to 3048 m (-100 to 10,000 ft.)
Vibration	1.0 G, 5-500 Hz swept sine
Shock	15 Gs, 11-ms, half sine
Operating acoustic noise	6.6 bels (at 25°C) (63.7 dB measured sound power)
Idling acoustic noise	6.4 bels (at 25°C) (61.0 dB measured sound power)
Heat output	1092 BTUs/hour

REGULATIONS—WORKGROUP

Meets or exceeds the following requirements:	
Safety	UL 1950, CSA C22.2-No. 950, TUV EN 60950
Emission	FCC Part 15 B Class B, CISPR 22 Class B, VCCI Class 2
Immunity	EMC Directive (89/336/EEC), EN50082-1
Harmonics	EMC Directive (89/336/EEC), EN60555-2

DIMENSIONS AND WEIGHT—WORKGROUP

Height	17.7 cm (7.0 in.)
Width	53.3 cm (21.0 in.)
Depth	44.7 cm (17.6 in.)
Weight (without drives)	19.3 kg (42.5 lb.)
Weight (with drives)	28.4 kg (62.5 lb.)
Power cord	2 m (6.5 ft.)

ENVIRONMENT—DATA CENTER

AC power	200-240 VAC, 47-63 Hz, 24 A
Input power	4500 W
Operating	5°C to 35°C (41°F to 95°F)
	20% to 80% relative humidity, noncondensing
Nonoperating	-20°C to 60°C (-4°F to 140°F)
	93% relative humidity, noncondensing
Operating acoustic noise	7.3 bels (at 25°C)
Heat output	15,400 BTUs/hour

REGULATIONS—DATA CENTER

Meets or exceeds the following regulations:	
Safety	UL 1950, CSA C22.2-No. 950, TUV EN 60950
Complies with the following when installed in a Sun data center cabinet:	
Emission	FCC Part 15 B Class B, CISPR 22 Class B, VCCI Class 2
Immunity	EMC Directive (89/336/EEC), EN55082-1
Harmonics	EMC Directive (89/336/EEC), EN60555-2

DIMENSIONS AND WEIGHT—DATA CENTER

Height	187 cm (73.5 in.)
Width	61 cm (24 in.)
Depth	93 cm (36.5 in.)
Weight	432 kg (950 lb.)
Power cord	4.6 m (15 ft.)

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