

FlashDisk® HyperSAN

SF-2300 Series

Our Fastest RAID Array

4 Gb FC Host Ports, SAS or SATA Drives and Enterprise RAID 6

FlashDisk SF-2300 series is our highest performance, RAID array for high I/O and high throughput applications. Using the latest SAS (Serial Attached SCSI) technology, the SF-2300 has a sustained throughput of up to 780 MBps, while providing Enterprise RAID 6 reliability, allowing two drive failures in an array without data loss. HyperSAN, with dual hardware ASICS is actually faster than most traditional RAID 5 arrays.

HyperSAN offers fully redundant, hot swappable components and data paths. RAID 6 provides a second layer of parity protection to ensure that disk rebuilds are successful. This combination provides a system that is 200 times more reliable than RAID 5 arrays.

With SAS disks, Enterprise RAID 6, and 4 Gb Fibre Channel host ports, this product is the most reliable, high performance and affordable storage array available today.



2U enclosure supports Enterprise RAID 6 with up to 12 SAS or SATA drives for applications requiring high throughput, high sequential and random I/Os and vastly superior data protection at an affordable cost

FlashDisk HyperSAN

Performance

- Up to 99,000 IOPS reads
- Up to 780 MBps sustained throughput
- 64-bit end-to-end design
- Up to 4 GB ECC cache

Capacity & Scalability

- Up to 12 SAS dual-ported 3 Gb, or 12 SATA II dual ported disks per enclosure
- Scales to 1.75 TB with SAS, 9 TB SATA

Reliability

- RAID 6 for added data protection
- Fully redundant data paths
- Hot-swappable controllers, drives, power supplies, fans, BBUs, AC power inlets
- Hot spares with automatic drive rebuilds
- Supports multi-pathing and HBA failover
- Supports continuous media scan
- No single point of failure option

Compatibility

- Supports most O/S and servers without any host software
- Supports up to 64 hosts
- Compatible with FC switched fabric, point-to-point and FC-AL
- Cluster support: Windows, UNIX, Linux

Centralized & Remote Management

- Managed out-of-band via Ethernet, TELNET, FlashConsole appliance
- Automatic event & problem alert notification
- FlashAlert 24-hour "call-home" service
- Centrally managed with a Java-based web browser from any LAN workstation

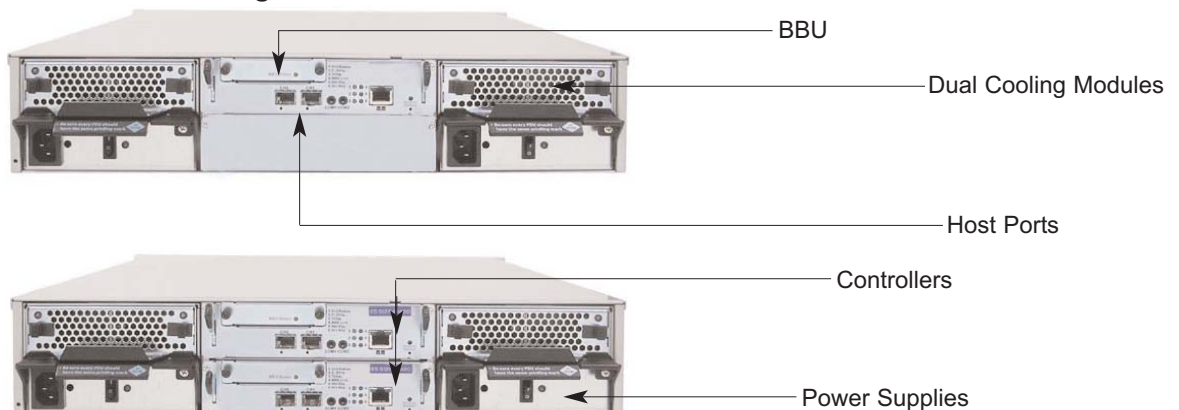
Model	SF-2372	SF-2374
Number of Controllers	Single	Dual redundant
FC Optical Host Ports	Two 4 Gb / 2 Gb	Four 4 Gb / 2 Gb

SF-2374 Performance		
RAID levels	Reads	Writes
RAID 6 sequential	700 MBps	490 MBps
RAID 5 sequential	780 MBps	540 MBps
Peak IOPS sequential	99,000 IOPS	25,000 IOPS
Peak IOPS random	3,550 IOPS	2,350 IOPS

2U RAID Enclosure Controller Processor Maximum hosts supported RAID levels supported Multiple hot spares On-line capacity expansion Cache memory capacity Non-volatile cache Configurable LUNS LUN masking Maximum array size Host adaptors available for Power supplies AC Power Inlets Max. external cable length Operating console	Standard 19" EIA rack or standalone Single or Redundant, 64-bit RAID controllers 600MHz PowerPC with 512 kb embedded L2 cache 64 hosts 1, 1+0, 5, 50, Enterprise RAID 6 & 60 Supported on all RAID levels Automatically adds new drives to existing array 512 MB per controller, upgradable to 2 GB Hot swap Li-ION battery per controller - 72 hours 1024 Configurable using WWN (World Wide Name) Up to 64 TB per Logical Disk (host dependent) PCI-X, PCI Express Dual hot-swap redundant, 405 Watts each Dual IEC power connect, hot-swappable Up to 10 kilometers with extended optical FC SFPs View and edit logical RAID/physical drives, setup hot-spare drives, map hosts, check parity, enable write-back cache, rebuild failed drive, view logs...
SAS Disk Drives 15,000 rpm disks	36, 73, 146 GB with 3.3 ms avg. read seek time 300 GB drives available Q4 2006
SATA II Disk Drives 7200 rpm disks 10,000 rpm disks	400 & 500 GB ESATA, 100% duty cycle and 750 GB 36, 74 and 150 GB ESATA for primary storage, 100% duty cycle, 4.6 msec. read seek time

Controls and Indicators LCD front operation panel LED indicators Component failure Alerting	Control panel for setup and configuration Power, battery, controller, and system status Failure indication through LCD, RS-232C, and GUI Built-in beeper/alarm, mute button
Compatibility Operating systems (no host software drivers needed) Platforms supported Cluster support Remote monitoring ports Communication protocols Regulatory compliance	Supports 14 Operating Systems including Windows, Linux, and UNIX Intel, SUN, HP, IBM RS-6000, Apple, SGI Supports 9 industry-standards including Windows, Linux, and Veritas RJ45 10/100 Ethernet, dual RS-232 TCP/IP, SNMP, SSH, TELNET FCC, UL, CE, CSA
Options FlashNAS Appliance XOsoft WANSync	High performance NAS filer with snapshots Supports CIFS/NFS/AFP/CNP and NSPF option Replication over IP for disaster recovery
Storage Management Manage out of band Centralized management FlashConsole appliance FlashAlert call home service	Included at no charge with every system Ethernet, TELNET Manage from any LAN workstation with Java-based web browser and no additional software Automatic event and problem alert notification 24-hour FlashDisk monitoring for immediate action
General Uninterruptible power supply Redundant AC power 2U RAID chassis dimensions 2U RAID chassis weight Operating temperature Heat dissipation Cooling System Relative humidity Standard Warranty Installation and service	Required when write-back cache is enabled Dual 100-240 VAC Inlets, 47-63 Hz, 3 amps @ 115V 3.5"h x 17.6"w x 19.2"d; standard 19" rackmount Approximately 72 lbs. with drives 0° to 40° C 1200 BTU/hour Front to rear dual hot-swap blowers 5-90%, non-condensing One year, next day on-site and toll-free hotline On-site installation and 24x7 service available

Model SF-2372
Rear View
Single Controller



Model SF-2374
Rear View
Redundant Controllers

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