

Sol Array 2U RAID System Datasheet

SAS12-F4



Preliminary

Reliability, Scalability, Flexibility and High Performance

SAS12-F4 is a high-availability, cost-effective 2U 4Gb FC to SAS (Serial Attached SCSI)/SATAII RAID System, which provides 12 pcs 3.5" hard disk carriers to support various types of hard disks, including 3Gb SAS hard disks, and 1.5G/3G SATAII hard disks with Interposer Card.

High Reliability: Redundant RAID Control Modules, Power Supplies and Cooling Modules design secures "No Single Point Failure". Active-Active Dual Controller Architecture, Hot Swappable Hard Disk, and Dual SAS Path and SATAII Path with Interposer Card provide SAS12-F4 System's high reliability to achieve 24 x 7 Availability.

High Scalability: Each SAS12-F4 System supports up to 12 pcs SAS or SATAII hard disks, provides 1.75 TB storage capacity with SAS hard disks (147GB per Disk) or 6 TB storage capacity with SATAII hard disks (500GB per Disk). Daisy chaining with SAS JBODs can support up to 60 pcs hard disks, provides 8.8 TB storage capacity with SAS hard disks (147GB per Disk) or 30 TB storage capacity with SATAII hard disks (500GB per Disk).

High Flexibility: SAS12-F4 System supports both SAS and SATAII hard disks according to customer's needs. This feature provides the most cost-effective storage pools for different kinds of data and provides a better management for the ILM (Information Life Cycle Management) applications.

High Performance: SAS12-F4 System provides total four 4G FC ports, up to 16 GB/s data throughput for front end connection and two SAS wide ports, up to 2.4 GB/s data throughput for back end connection. Active-Active Dual Controller Architecture also ensures the system's high performance.

Feature Highlights

High Level Features:

- Redundant Controllers or Single Controller Configuration
- Active-Active LU Access
- Hot Swappable Controllers
- Active-Active Software Cache Mirroring
- Up to 4GB Cache Memory
- Battery Backup Write Cache for 72 hours
- UPS Support
- Hardware Parity Generation

Connectivity Features:

- Four 4G FC Host Interface
- Up to 32 Concurrent Hosts
- Support up to 256 LUNs
- Redundant Disk Access Path for Both SAS/SATA HDD

RAID Features:

- Support RAID Levels: 0, 1, 10, 3, 5, 6
- Support Global Hot Spare and Dedicate Hot Spare
- Automatic RAID Reconstruction
- Configurable Cache Buffer Size: 4k, 16k, 64k
- Configurable Block Size: 4k, 8k, 16k, 32k, 64k, 128k
- Support Online JBOD Expansion
- Support Cache Resizing
- Support Cluster Environment
- Support Long LBA CDB

Advanced Storage Features:

- Support Snapshot, Mirrors, Online storage group expansion and Online Volume Expansion
- VSS, VDS Support

<p>Host Interface:</p> <ul style="list-style-type: none"> ■ Two 4G FC ports on each Controller. <p>Hard Disk Interface:</p> <ul style="list-style-type: none"> ■ 12 x dual ported SAS (3Gb/s) or SATAII hard disks with interposer board (1.5Gb/s or 3Gb/s) ■ Up to a maximum of 12 disks, provide 1.75 TB capacity with SAS hard disks and 6 TB capacity with SATAII hard disks per system. ■ For Daisy Chaining SAS JBODs, with a total maximum of 60 hard disks, provides 8.8 TB storage capacity with SAS hard disks or 30 TB capacity with SATAII hard disks. <p>Redundant, Hot Swappable Components:</p> <ul style="list-style-type: none"> ■ 2 RAID Control Modules ■ 2 Power Modules ■ 2 Cooling Modules ■ up to 12 SAS/SATAII hard disks <p>Form Factor:</p> <ul style="list-style-type: none"> ■ Internal Bays: 12 Hard Disks ■ Rack Mount: 19 in. ■ Dimensions: 445 (W) X 87.4 (H) X 596mm (D) (Chassis, sheet metal case only, not including bezel and rear module handle). 	<p>Management Features:</p> <ul style="list-style-type: none"> ■ Web Based Management Interface ■ SMI-S Compliant ■ VSS, VDS Supported ■ Online Firmware upgrade ■ Performance Monitoring ■ SNMP Supported ■ Email Alert ■ LED Indicators for RAID Control Modules, Power Modules, Cooling Modules, and Hard Disks Status. <p>Disk Drives:</p> <ul style="list-style-type: none"> ■ SAS Hard Disk Capacity: 73.4GB, 146.8GB. ■ Rotational velocity (SAS): 15K RPM. ■ SATAII Hard Disk Capacity: 250GB, 500GB ■ Rotational velocity (SATAII): 7.2K RPM ■ 3.5-inch form factor, 1.0-inch height 	<p>AC Power:</p> <ul style="list-style-type: none"> ■ Input Voltage: Auto ranging, 100–240 VAC ■ Input Frequency: 50–60Hz ■ Input Current: 100–240 VAC @ 9A ■ Output Power: 500 W <p>Operating Environment:</p> <ul style="list-style-type: none"> ■ Operating Temperature: 0 to 35 degree Celsius ■ Operating Humidity: 5% to 95% (non-condensing) ■ Altitude: –50 to 10,000 feet ■ Shock: 31G @ 2.6ms, ½ sine wave pulse ■ Vibration: 0.25G @ 3Hz to 200Hz <p>Electromagnetic Emissions Standards:</p> <p>FCC– class A CE VCCI– for Japan CCC– for China BSMI– for Taiwan/CNS/3438 C–TICK– for Australia and New Zealand</p> <p>Safety Standards:</p> <p>UL/CUL: for U.S. with Canada / UL60950–1 TUV: for Germany / EN60950–1 CB (by TUV): IEC60950–1 BSMI: Taiwan / CNS14336 CCC: for China</p>
--	--	--

