

Sol Array SA12i

SA12i-F4 4Gb Fibre Channel to SATA II
SA12i U320 SCSI to SATA II

Fibre Channel
Performance
Availability
Scalability
Reliability
Capacity
Flexibility

The Sol™ Array SA12i series of disk array is the best choice for today's applications requiring very high performance, the highest



level of data integrity, and easy upgrades path of capacity. Based on the advanced RAID technology, Sol Array SA12i series is designed to provide high reliability and unmatched performance for data intensive environment. Supports most platforms and operating systems with standard Fibre Channel or Ultra320 SCSI interface. By hardware based and host independent design, no OS or system driver modifications required.

By integrated the RAID-6 engine and very high throughput, Sol Array SA12i series is the most ideal storage for Replication Staging, Backup Staging, ILM (Information Lifecycle Management), HSM Data Migration, RIS (Reference Information Storage), FCS (Fixed Content Storage), X-ray medical scanning, CAD /CAM and other engineering drawing, VOD, and media streaming consist of any UNIX, Workstation, and PC servers. The strength has been making Solkenix unmatched insight in the disk array solutions available today.

Advanced Features

- 400Mhz, 64-bit RISC RAID Processor (Intel IOP321)
- 128MB and Up to 1GB ECC Data Cache using DDR DIMM
- RAID levels 0, 1, 0+1, 3, 5, 6, and JBOD, Global hot-spare supported.
- Built-in environmental sensors for temperature/voltage/predictive analysis capability for Self-Diagnostics
- 2U 12-bay SATA II 3Gb HDD bay supporting hot swap and auto-rebuild
- 2 x 4Gb Fibre Channel (SA12i-F4) host channels support SAN infrastructure of Fabric, FC-AL, and point-to-point. Or dual U320 SCSI (SA12i) host channels with 320MB/s x 2, support clustering/failover servers
- Any fault from HD/controller/power/fan will be isolated automatically
- Embedded S.M.A.R.T. features support HDD bad sector reallocation and disk error recovering from most HDD manufacturers
- Web browser based GUI management through RJ45 port, management through Command Line Interface also supported via RS232
- RAID Roaming, RAID capacity expansion, and email notification supported
- Intuitive/Self-Explaining user interface for easy use and configuration
- ADG-Advanced Data Guardian Dual Parity RAID Scheme-RAID 6, with two XOR processor for mission critical server and no data lose even two HDD failed simultaneously in any RAID group
- Ideal for Storage Area Network (SAN) high performance and Network Attached Storage (NAS) data intensive applications

General

RAID processor	Intel IOP321 400Mhz 64-bit RISC Processor with hardware XOR engine
RAID level	0, 1, 3, 5, 6, and 0+1, JBOD plus hot-spare and auto-rebuild
Host Bus Interface	SA12i : Two U320 SCSI (320MB/sec x 2) SA12i-F4 : Two 4Gb Fibre Channel (400MB/sec x 2), backward compatible with 2Gb and 1Gb Fibre Channel
Disk Bus Interface	12 x SATA II (3Gb/sec) supporting NCQ, hot swap, staggered spin up
Multiple RAID/Volume/LUN	Yes, up to 16 Array Groups
Cache	128MB standard, up to 1GB ECC supported
RAID initialization	Yes, foreground and background initialization are supported and selectable
Operating System Supported	Any O/S supporting standard FC/SCSI with block size of 512bytes and SCSI LUNs
Platform Supported	Any platform with Fibre Channel Interface, no additional software driver needed
SAN	Support point-to-point direct attachment, FC_AL, and Fabric
Online Modifications	On-line RAID set expansion, RAID level migration, and firmware upgrades
Environmental Monitoring	FAN, Temperature, Voltage, plus individual temperature sensor for each HDD
Hot swap components	90-260V AC 400W x 2 power supply, FAN, hard drives
Alarm	Visual and audio alarms for HD, failover controllers, power, fan, and temperature
FAN	2 x high speed blower FANs
Hard Drive Connections	Passive Backplane for SCA Hot-swap HDD. Optional SCSI Wide 68pin cables.

Environmental

Temperature	Operating - 5°C to 55°C	Storage - -25°C to 85°C
Relative Humidity	5%-95% Non-Condensing	
Altitude	Operating – 0 ft. to 10,000 ft.	Storage - 0 ft. to 30,000 ft.

Physical

Installation	19" RETMA rack mount with slide railss
Dimensions	19" W x 23.23"D x 3.46"H (2U)
Weight	48.4Lbs / 22Kg (without HDD)

Electrical

AC Input Power	Voltage : 90VAC to 260 V AC (PFC) Frequency : 47Hz to 63Hz
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Optional

SAN Storage Area Network	4Gb SFP, FC HBA, FC Hub/Switch, FC-to-SCSI Bridge, Volume Management Software, Data Sharing Software, Online or serverless Backup Control, ...
UPS	Supply power for writing from data in cache to disks
HA	High Availability Software, for Stand-by or Dual-Active Servers