

Simbolo Series

SB-3163S-F4S3

4Gb Fibre-SAS/SATA RAID Subsystem

SB-3163S-S3S3

3Gb SAS-SAS/SATA RAID Subsystem



SAS for Maximum Flexibility, Scalability and Performance

- ◎ SAS interface supports both SAS disk drives, with advanced enterprise level reliability and functionality, for data-intensive application and SATA disk drives for low-cost bulk storage of reference data
- ◎ Features the 4x mini SAS port for external JBOD expansion
- ◎ Using Intel newest IOP for optimum RAID performance

Unsurpassed Data Availability

- ◎ Advanced Data Guarding technology (RAID ADG) provides the highest level of data protection
- ◎ RAIDADG can tolerate two simultaneous drive failures without downtime or data loss

Exceptional Manageability

- ◎ The firmware-embedded Web Browser-based RAID manager allows local or remote management and configuration
- ◎ The firmware-embedded SMTP manager monitors all system events and user notification automatically
- ◎ The firmware-embedded SNMP agent allows remote to monitor events via LAN with no SNMP agent required
- ◎ Menu-driven front panel display
- ◎ Innovative Modular architecture

Features

- ◎ Supports RAID levels 0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD
- ◎ Supports online Array roaming
- ◎ Online RAID level/stripe size migration
- ◎ Online capacity expansion and RAID level migration simultaneously
- ◎ Online Volume Set Expansion
- ◎ Supports multiple array enclosures per host connection
- ◎ Supports greater than 2TB per volume set (64-bit LBA support)
- ◎ Supports 4K bytes/sector for Windows up to 16TB per volume set
- ◎ Supports up to 128 LUNs per RAID set
- ◎ Transparent data protection for all popular operating systems
- ◎ RAID ADG provides the highest level of data protection
- ◎ Instant availability and background initialization
- ◎ Supports S.M.A.R.T, NCQ and OOB Staggered Spin-up capable drives
- ◎ Local audible event notification alarm.
- ◎ Supports password protection and UPS connection
- ◎ Serial port interface for remote event notification
- ◎ Redundant flash image for high availability



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Series Technical Specifications



Model	SB-3163S-F4S3	SB-3163S-S3S3
Form-factor	3U 19-inch rackmount chassis	3U 19-inch rackmount chassis
RAID processor	Intel IOP341 64-bit	Intel IOP341 64-bit
RAID Level	0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD	0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD
Cache memory	512MB ~ 2GB DDR-II SDRAM	512MB ~ 2GB DDR-II SDRAM
Host bus interface	Two FC-AL (4Gb/s)	Two 4x mini SAS (3Gb/s)
Drive bus interface	SAS or 3Gb/s SATA II	SAS or 3Gb/s SATA II
Data transfer rate	Up to 400MB/sec per channel	Up to 300MB/sec per channel
Expansion	One 4x mini SAS (SFF-8088)	One 4x mini SAS (SFF-8088)
Controller Redundancy	Option	Option
Hot-swap drive trays	Sixteen (16) 1-inch trays	Sixteen (16) 1-inch trays
Online capacity expansion, RAID level/stripe size migration	Yes	Yes
Online Volume sets expansion	Yes	Yes
Online Array roaming	Yes	Yes
Online consistency check	Yes	Yes
SMTMP manager and SNMP agent	Yes	Yes
E-mail Notification	Yes	Yes
Redundant Flash image	Yes	Yes
R-Link support	Yes	Yes
Support over 2TB per volume	Yes	Yes
Instant availability and background initialization	Yes	Yes
S.M.A.R.T. support	Yes	Yes
New disk insertion / removal detection	Yes	Yes
Failed drive auto rebuild	Yes	Yes
Continuous rebuild	Yes	Yes
Multiple RAID selection	Yes	Yes
Bad block auto-remapping	Yes	Yes
Audial alarm	Yes	Yes
Password protection	Yes	Yes
UPS connection	Yes	Yes
SES2 enclosure management	Yes	Yes
Hot-swap power supplies	Two (2) 460W power supplies w/PFC	Two (2) 460W power supplies w/PFC
Cooling fans	4	4
Battery backup	Option	Option
Power requirements	AC 90V ~ 264V full range 8A ~ 4A, 47Hz ~ 63Hz	AC 90V ~ 264V full range 8A ~ 4A, 47Hz ~ 63Hz
Environmental		
Relative Humidity:	10% ~ 85% Non-condensing	10% ~ 85% Non-condensing
Operating Temp:	10°C ~ 40°C (50°F ~ 104°F)	10°C ~ 40°C (50°F ~ 104°F)
Physical Dimensions:	133 (H) x 482 (W) x 600 (D)mm 5.24 (H) x 18.98 (W) x 23.62 (D)inches	133 (H) x 482 (W) x 600 (D)mm 5.24 (H) x 18.98 (W) x 23.62 (D)inches
Weight	24.7kgs / 54.34Lbs (without drives)	24.7kgs / 54.34Lbs (without drives)

Specification are subject to change without notice.
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Serial Attached SCSI Advantages

Four-wire Replacement for Parallel SCSI	
Software compatible "drop in" replacement	Low voltage (1600 mV max) differential signaling (8b10b encoding)
"Star" Topology (Point-to-Point)	
Each device gets full bandwidth	Minimum arbitration overhead
SAS Attributes Extend Capabilities beyond Parallel SCSI	
Dual-porting	Native support for either SATA or SAS drives
16K devices (per domain)	Wide ports and rate matching