Simbolo

Serial ATA II RAID 6 subsystem



Highest Density Available

- 3U chassis with 16 bays carriers.
- Over 4 Terabytes per chassis.

Extraordinary fault tolerance

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

Unparalleled Aluminum material

- Aluminum is an Excellent Thermal Conductor.
- Aluminum Exhibits HighStrength-to-Weight Ratio.

Extraordinary performance

- Serial ATA II: The Next Generation Internal Storage Interconnect.
- Better connectivity, higher data transfer rates.

Features

- ▶ Supports RAID levels 0, 1, 0+1, 3, 5, 6 and JBOD.
- Supports hot spare and automatic hot rebuild.
- ▶ Allows online capacity expansion within the enclosure.
- Local audible event notification alarm.
- Supports password protection and UPS connection.
- ▶ Built-in serial port interface for remote event notification.
- Dual host channels support clustering technology.
- ► The RAID subsystem is made by aluminum Aluminum is an excellent thermal conductor and Aluminum offers a unique combination of light weight and high strength.
- ▶ Tagged command queuing for 256 commands, allows for overlapping data streams.
- Transparent data protection for all popular operating systems.
- RAID ADG provides the highest level of data protection.
- ► RAID ADG can tolerate multiple simultaneous drive failures without downtime or data loss.
- Supports multiple array enclosures per host connection.
- ▶ Online RAID level migration.

RAID Management

- Smart-function LCD panel.
- Environmental monitoring unit .
- Real time drive activity and status indicators.
- Browser-based GUI management utility.



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Series Technical Specifications







Model	SB-3163SA	SB-3163FA
Form - factor	3U 19-inch rackmount chassis	3U 19-inch rackmount chassis
RAID processor	Intel 80321 64 bit RISC	Intel 80321 64 bit RISC
RAID level	0, 1, 0+1, 3, 5, 6, JBOD	0, 1, 0+1, 3, 5, 6, JBOD
Cache memory	128MB ~ 1024MB	128MB ~ 1024MB
No. of channels (host + drive)	2 + 16	2 + 16
Host bus interface	Ultra 320 LVD	FC-AL x 2 (2Gb/s)
Drive bus interface	S - ATA II	S - ATA II
Data transfer rate	Up to 320MB/Sec	Up to 200MB/Sec
Back plane board	S - ATA II	S - ATA II
Hot-swap drive trays	Sixteen (16) 1-inch trays	sixteen (16) 1-inch trays
Hot-swappable power supplies	Three (3) 300W power supplies w / PFC	Three (3) 300W power supplies w / PFC
Cooling fans	2 (blower)	2 (blower)
Battery backup	Option	Option
Fibre Hub	No	Yes
R-Link support	Yes	Yes
SNMP Protocol Support	Yes	Yes
Background RAID Initialization	Yes	Yes
S.M.A.R.T	Yes	Yes
Array roaming	Yes	Yes
Power requirements	AC 90V ~ 254V Full Range	AC 90V ~ 254V Full Range
	12A / 6A at 110V / 220V, 50Hz / 60Hz	12A / 6A at 110V / 220V, 50Hz / 60Hz
Environmental		
Relative Humidity:	10% ~ 85% Non-condensing	10% ~ 85% Non-condensing
Operating Temp:	10°C ~ 50°C (50°F ~ 122°F)	10°C ~ 50°C (50°F ~ 122°F)
Physical Dimensions:	133 (H) x 482 (W) x 609 (D) mm	133 (H) x 482 (W) x 609 (D) mm
	5.24 (H) x 18.98 (W) x 23.98 (D) inches	5.24 (H) x 18.98 (W) x 23.98 (D) inches
Weight	20.5kgs / 45.1Lbs (without drives)	20.5kgs / 45.1Lbs (without drives)
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◆ New disk auto spare ◆ Host independent ◆ Environment monitor ◆ Online expansion ◆ Continuous rebuild ◆ Online consistency check ◆ Failed drive auto rebuild ♦ Failed drive indicators ♦ Audible alarm ♦ Password protection ♦ UPS connection ♦ Bad block auto-remapping ♦ Multiple RAID selection

◆ Online RAID level migration ◆ E-mail Notification

Specification are subject to change without notice.

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Proprietary elastic reactance design Smooth tray-swap experience.

Excellent heat exchangers Hollow tray's panel.

(B)

Pure Aluminum Case & component Lightweight & Excellent Thermal Conductor

(Exceptional Bellows enclosure

Specially designed airflow passages dissipate heat from the hard disks and the controller.

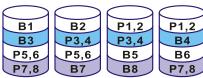
Field Proven Power Supplies
N+1 hot swappable and redundant Load Sharing PFC Power Supplies ensure system uptime for enterprise class reliability.

6

Innovative Modular architecture Swappable power supplies, cooling fans and controller module.

The benefits of RAID ADG(RAID6)are:

- $\ \, \mbox{\ \, } \mbox{\ \,$ level of data protection amount RAID levels .
- RAID ADG can tolerate multiple simultaneous drive failures without downtime or data loss. Greater fault tolerance than RAID 0+1 or RAID 5.



B means data blocks

Any two drives can fail without loss of critical data at same time

Probability of logical drive failure for different RAID levels

