

Simbolo Series

SB-2123SA SB-2123-S3A3 SB-2123-F4A3

Serial / Parallel ATA RAID 6



Highest Density Available

- ◆ 2U chassis with 12 bays carriers.
- ◆ Over 3 Terabytes per chassis.

Extraordinary performance

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

Exceptional Manageability

- ◆ GUI for remote management and configuration.
- ◆ Menu-driven front panel display.

Unsurpassed value

- ◆ RAID ADG offers lower implementation costs and greater usable capacity per U than RAID 1.

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.
- ▶ 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 Java GUI management utility.



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Series Technical Specifications

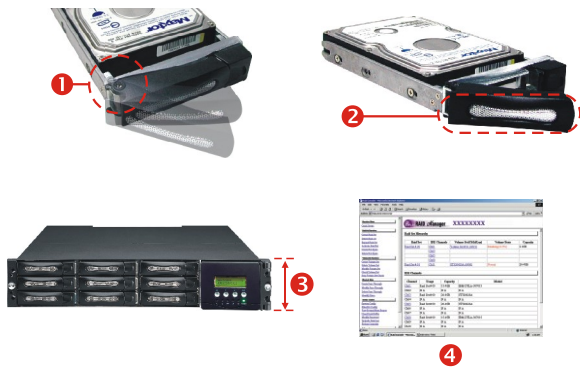


Model	SB-2123SA	SB-2123-S3A3	SB-2123-F4A3
Form - factor	2U 19-inch rackmount chassis	2U 19-inch rackmount chassis	2U 19-inch rackmount chassis
RAID processor	Intel 80321 64 bit RISC	Intel 80321 64 bit RISC	Intel 80321 64 bit RISC
RAID level	0, 1, 0+1, 3, 5, 6 and JBOD	0, 1, 0+1, 3, 5, 6 and JBOD	0, 1, 0+1, 3, 5, 6 and JBOD
Cache memory	128MB ~ 1024MB	256MB ~ 1024MB	128MB ~ 1024MB
No. of channels (host + drive)	2 + 12	2 + 12	2 + 12
Host bus interface	Ultra 320LVD	Two 4x mini SAS (3Gb/s)	FC-AL x 2 (4Gb/s)
Drive bus interface	SATA II	SATA II	SATA II
Data transfer rate	Up to 320MB/Sec	Up to 300MB/Sec	Up to 400MB/Sec
Back plane board	SATA II	SATA II	SATA II
Hot-swap drive trays	Twelve (12) 1-inch trays	Twelve (12) 1-inch trays	Twelve (12) 1-inch trays
Hot-swappable power supplies	350W x 2 power supplies w / PFC	350W x 2 power supplies w / PFC	350W x 2 power supplies w / PFC
Cooling fans	2	2	2
Battery backup	Option	Option	Option
R-Link Support	Yes	Yes	Yes
SNMP Protocol Support	Yes	Yes	Yes
Array Roaming	Yes	Yes	Yes
Power requirements	AC 90V ~ 264V Full Range 8A / 5A at 115V / 230V, 47Hz ~ 63Hz	AC 90V ~ 264V Full Range 8A / 5A at 115V / 230V, 47Hz ~ 63Hz	AC 90V ~ 264V Full Range 8A / 5A at 115V / 230V, 47Hz ~ 63Hz
Environmental			
Relative Humidity:	10% ~ 85% Non-condensing	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)	10°C ~ 40°C (50°F ~ 104°F)
Physical Dimensions:	88(H) x 482(W) x 650(D) mm	88(H) x 482(W) x 650(D) mm	88(H) x 482(W) x 650(D) mm
Weight	15.5kg (without drives)	15.5kg (without drives)	15.5kg (without drives)

Function:

- ◆ 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 ◆ E-mail notification ◆ UPS connection ◆ Bad block auto-remapping ◆ Multiple RAID Selection ◆ Online RAID level migration ◆ Background RAID Initialization ◆ S.M.A.R.T.

Specification are subject to change without notice. All company and product names are trademarks of their respective owners.

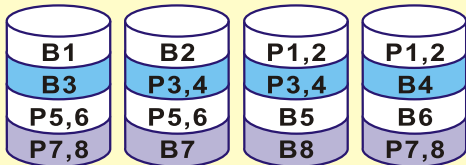


- Proprietary elastic reactance design** : Smooth tray-swap experience.
- Excellent heat exchangers** : Hollow tray's panel.
- Innovative Modular architecture** : Swappable power supplies and cooling fans.
- WEB Based GUI RAID Manager**: Remote Access status via TCP/IP & Internet



The benefits of RAID ADG (RAID6) are :

- ◆ Advanced Data Guarding technology (RAID ADG) provides the highest 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 **P** means parity data

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

Probability of logical drive failure for different RAID levels

