

# EPICa

**EP-4423S/D-S3S3**

**EP-4423S/D-F4S3**

*4U SAS-SAS/FC-SAS Redundant  
RAID Subsystem*



The EP-4423 series RAID subsystem features 3Gb SAS or 4Gb FC-AL host performance to increase system efficiency and performance. It features high capacity expansion, with 42 hot-swappable SAS/SATA II hard disk drive bays in a 19-inch 4U rackmount unit, scaling to a maximum storage capacity in the terabyte range. The EP-4423D series also supports dual controllers which provide better fault tolerance and higher reliability of system operation.

## **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 dual controller for features redundant RAID
- 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
- Supports up to 128 LUNs
- 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
- Serial port interface for remote event notification
- Redundant flash image for high availability
- Support spin down drives when not in use to extend service (MAID)
- Supports Bad Blocks auto remapping and schedule volume check
- Redundant active-active controller functionality ensures zero downtime or data loss
- Fully redundant with hot swappable Controller, disks, cooling fans and power supplies
- Supports hot spare and automatic hot rebuild



# Series Technical Specifications

|  | <b>EP-4423S/D-S3S3</b>                  | <b>EP-4423S/D-F4S3</b>                  |
|--|---|---|
| <b>RAID Controller</b>   | SAS-SAS                                 | FC-SAS                                  |
| <b>Controller</b>  | Single or Redundant                     | Single or Redundant                     |
| <b>Host Interface</b>  | Two 4x mini SAS (3Gb/s)                 | Two FC-AL (4 Gb/s)                      |
| <b>Disk Interface</b>  | SAS 3Gb or SATA II                      | SAS 3Gb or SATA II                      |
| <b>SAS expander</b>  | 4x mini SAS (3Gb/s)                     | 4x mini SAS (3Gb/s)                     |
| <b>Capacity</b>  |   |   |
| <b>- Direct Attached</b>   | 42 Disks                                | 42 Disks                                |
| <b>- Expansion</b>   | Up to 84 Disks                          | Up to 84 Disks                          |
| <b>Processor Type</b>  | Intel IOP341 64-bit                     | Intel IOP341 64-bit                     |
| <b>Cache Memory</b>  | 512MB ~ 4GB DDR-II ECC SDRAM            | 512MB ~ 4GB DDR-II ECC SDRAM            |
| <b>Battery Backup</b>  | Optional                                | Optional                                |
| <b>Management Port support</b>   | Yes                                     | Yes                                     |
| <b>Monitor Port support</b>  | Yes                                     | Yes                                     |
| <b>RAID Features</b>   |   |   |
| <b>RAID level</b>  | 0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD | 0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD |
| <b>Array Group</b>   | Up to 128                               | Up to 128                               |
| <b>LUNs</b>  | Up to 128                               | Up to 128                               |
| <b>Hot Spare</b>   | Yes                                     | Yes                                     |
| <b>Drive Roaming</b>   | Yes                                     | Yes                                     |
| <b>Online Rebuild</b>  | Yes                                     | Yes                                     |
| <b>Variable Stripe Size</b>  | Yes                                     | Yes                                     |
| <b>E-mail Notification</b>   | Yes                                     | Yes                                     |
| <b>Online capacity expansion,<br/>RAID level / stripe size migration</b> | Yes                                     | Yes                                     |
| <b>Online Array roaming</b>  | Yes                                     | Yes                                     |
| <b>Online consistency check</b>  | Yes                                     | Yes                                     |
| <b>SMTP manager and SNMP agent</b>                                       | Yes                                     | Yes                                     |
| <b>Redundant Flash image</b>   | Yes                                     | Yes                                     |
| <b>Instant availability and<br/>background initialization</b>            | Yes                                     | Yes                                     |
| <b>S.M.A.R.T. support</b>  | Yes                                     | Yes                                     |
| <b>MAID</b>  | Yes                                     | Yes                                     |
| <b>Bad block auto-remapping</b>  | Yes                                     | Yes                                     |
| <b>Enclosure</b>   |   |   |
| <b>Platform</b>  | Rackmount                               | Rackmount                               |
| <b>Form Factor</b>   | 4U                                      | 4U                                      |
| <b># of Hot Swap Trays</b>   | 42                                      | 42                                      |
| <b>Tray Lock</b>   | Yes                                     | Yes                                     |
| <b>Disk Status Indicator</b>   | Access / Fail LED                       | Access / Fail LED                       |
| <b>Backplane</b>   | SAS / SATA II Single BP                 | SAS / SATA II Single BP                 |
| <b># of PS/Fan Modules</b>   | 1100W x 2 w/PFC                         | 1100W x 2 w/PFC                         |
| <b># of Fans</b>   | 11                                      | 11                                      |
| <b>Power requirements</b>  | AC 90V ~ 254V Full Range, 50Hz~60Hz     | AC 90V ~ 254V Full Range, 50Hz~60Hz     |
| <b>Environmental</b>   |   |   |
| <b>Relative Humidity</b>   | 10% ~ 85% Non-condensing                | 10% ~ 85% Non-condensing                |
| <b>Operating Temperature</b>   | 10°C ~ 40°C (50°F ~ 104°F)              | 10°C ~ 40°C (50°F ~ 104°F)              |
| <b>Physical Dimension</b>  | 810(L) x 482.6(W) x 176(H) mm           | 810(L) x 482.6(W) x 176(H) mm           |
| <b>Weight (Without Disk)</b>   | 48.5 Kg                                 | 48.5 Kg                                 |

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