EPICa

EP – 4643S2/D2-FGSC
EP – 4643S2/D2-SCSC

4U 64-Bay Redundant Controller RAID Subsystem

The EP-4643 series RAID subsystem features 16G FC-AL or 12Gb SAS host performance to increase system efficiency and performance. The EP-4643 systems are equipped with 64 hot swappable SAS3/SATA3 hard disk drive bays. It can connect with expansion enclosures to accommodate up to 256 drives. The EP-4643D2 series also supports dual redundant controllers which provide better fault tolerance and higher reliability of system operation.

Controller Redundancy

• Dual-active RAID controller with cache mirroring through dedicated high speed bus
• Automatic synchronization of firmware version in the dual-active mode
• Redundant controller operation with active/active and failover/failback function
• Redundant flash image for controller availability
• Management port seamless take-over

High availability

• DataBolt™ Bandwidth Optimizer for balance faster host and slower SAS or SATA devices
• RAID level 0, 1,10(1E), 3, 5, 6, 30, 50, 60, 00, 100, Single Disk and JBOD

Unparalleled Drive Support

• Support for native 4K and 512 byte sector SAS and SATA devices
• Support HDD firmware update
• SSD automatic monitor clone (AMC) support
• S.M.A.R.T. support

Energy Saving

• Low power consumption & Low heat production
• Support intelligent power management to save energy and extend service life

RAID Management

• Access terminal menu by telnet via a LAN port
• API library for customer to write its own monitor utility
• Field-upgradeable firmware in flash ROM
• Firmware-embedded manager via RS-232 port
• Firmware-embedded Web Browser-based RAID manager allows local or remote management and configuration
• SAP management utility to easily manage multiple RAID units in the network

Series Technical Specifications

Model	EP-4643S2/D2-FGSC	EP-4643S2/D2-SCSC
RAID Controller	16G FC – 12Gb SAS	12Gb SAS – 12Gb SAS
Controller	Single or Redundant	Single or Redundant
Host Interface	Four / Eight FC-AL (16G FC) Optional: 32G FC SFP+ module	Two / Four 4x mini SAS HD (12Gb) (SFF-8644)
Disk Interface	12Gb SAS, 6Gb SATA HDD/SSD	
SAS expansion	One / Two 12Gb SAS (SFF-8644)	
- Direct Attached	64 Disks	
- Expansion	Up to 256 Disks	
Processor Type	1.2GHz Dual Core RAID-On-Chip processor	
Cache Memory	2GB ~ 8GB / 4GB ~ 16GB DDR3-1866 ECC SDRAM	
Management Port Support	2 x RJ11 Serial Ports; 1 x RJ45 Ethernet Port	
Battery Backup Module(BBM)	Optional	
Flash-based Backup module (FBM)	Optional	

RAID Features

RAID level	0, 1,10(1E), 3, 5, 6, 30, 50, 60, 00, 100, Single Disk and JBOD
LUNs	Up to 128
Hot Spare	Global and Dedicated
Stripe Size	Up to 1024KB
Cache writing approaches	Write-through or write-back
Online Rebuild	Yes
Automatic drive insertion/ removal detection	Yes
Multiple RAID selection	Yes
Online Array roaming	Yes
Online RAID level / stripe size migration	Yes
Online capacity expansion	Yes
Online volume set growth	Yes
SNMP manager	Yes
E-mail Notification	Yes
Instant availability and background initialization	Yes
HDD Xfer Speed Test	Yes
Real time clock support	Yes
RAID clock Synchronization	Yes (Using NTP)
Multiple pairs SSD/HDD disk clone	Yes
Multi-Path I/O (MPIO) Support	Yes

Enclosure

Platform	Rackmount
Form Factor	4U
# of Hot Swap Trays	64
Tray Lock	Yes
Disk Status Indicator	Access / Fail LED
Disk Backplane	SAS3 BP
# of PS / Fan Modules	1100W 80plus x 2 w/PFC
# of Fans	15
Power Requirements	AC 100V ~ 240V Full Range 15A ~ 7.5A, 47Hz ~ 63Hz

Default Slide Rail: Post to Post 800mm~1090mm (32"~42") / Option: Post to Post 750mm~900mm (29"~35")

Environmental

Relative Humidity	10% ~ 85% Non-condensing
Operating Temperature	10°C ~ 40°C (50°F ~ 104°F)
Physical Dimension	880(L) x 482.6(W) x 177(H) mm
Weight (Without Disk)	43.5 / 45Kg

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

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