# EP-46045/D-G153

EP-4604S/D-GAS3

4U 60Bay iSCSI-SAS/SATAII Redundant RAID Subsystem

### EP-4604J/JD-S6S6

4U 60Bay 6Gb SAS JBOD Enclosure



The EP-4604 series RAID subsystem features high density disks capacity with 10 Gigabit ports on each controller to increase system efficiency and performance. It features high capability of expansion, with 60 hot-swappable SAS hard disk drive bays in a 19-inch 4U rackmount unit, scaling to a maximum storage capacity in the terabyte range. The EP-4604D series also supports Dual-active controllers which provide better fault tolerance and higher reliability of system operation.

#### **Unparalleled Performance & Reliability**

- Supports Dual-active controller
- Supports 802.3ad port trunking, Link Aggregation Control Protocol (LACP)
- High data bandwidth of system architecture by powerful 64-bit RAID processor

#### **Unsurpassed Data Availability**

- RAID 6 capability provides the highest level of data protection
- Supports snapshot-on-the-box w/o relying on host software
- Supports Microsoft Windows Volume Shadow Copy Services (VSS)

#### Exceptional Manageability Menu-driven front panel display

- Management GUI via serial console, SSH telnet, Web and secure web(HTTPS)
- Event notification via Email and SNMP trap
- Menu-driven front panel display

#### Features

- 60 hot-swappable disk drive bays which support SAS/SAS2 disks
- Supports iSCSI jumbo frame
- Supports Microsoft Multipath I/O (MPIO)
- Supports RAID levels 0, 1, 0+1, 3, 5, 6, 10, 30, 50, 60 and JBOD
- Local N-way mirror: Extension to RAID 1 level, N copies of the disk
- Global and dedicated hot spare disks
- Write-through or write-back cache policy for different application usage
- Supports greater than 2TB per volume set (64-bit LBA support)
- Supports manual or scheduling volume snapshot (up to 32 snapshot)
- Snapshot rollback mechanism
- On-line volume migration with no system down-time
- Online volume expansion
- Instant RAID volume availability and background initialization
- Supports S.M.A.R.T, NCQ and OOB Staggered Spin-up capable drives
- High efficiency power supply which compliant with 80plus



## Series Technical Specifications

Model	EP-4604S/D-G1S3	EP-4604S/D-GAS3	EP-4604J/JD-S6S6
RAID Controller	iSCSI-SAS	iscsi-sas	JBOD
Controller	Single or Redundant	Single or Redundant	Single or Redundant
Host Interface	Four 1Gb/s Ethernet	Two 10Gb/s Ethernet	One 6Gb/s SAS (SFF-8088)
	(/Controller)	(/Controller)	(/Controller)
Disk Interface	SAS 3Gb or SATA II*	SAS 3Gb or SATA II*	SAS 6Gb or SATA3
SAS expansion	-	-	One 6Gb/s SAS (SFF-8088)
Processor Type	Intel IOP342 64-bit	Intel IOP342 64-bit	
	(Chevelon dual core)	(Chevelon dual core)	-
Cache Memory	2GB ~ 4GB DDR-II ECC SDRAM	2GB ~ 4GB DDR-II ECC SDRAM	
	(/Controller)	(/Controller)	
Battery Backup	Optional Hot Pluggable BBM	Optional Hot Pluggable BBM	-
Management Port support	Yes	Yes	-
Monitor Port support	Yes	Yes	-
UPS connection	Yes	Yes	-
RAID level	0, 1, 0+1, 3, 5, 6, 10,	0, 1, 0+1, 3, 5, 6, 10,	
	30, 50, 60 and JBOD	30, 50, 60 and JBOD	-
Logical volume	Up to 1024	Up to 1024	-
iSCSI Jumbo frame support	Yes	Yes	-
Supports Microsoft Multipath I/O (MPIO)	Yes	Yes	
802.3ad Port Trunking, LACP Support	Yes	Yes	-
Host connection	Up to 32	Up to 32	-
Host clustering	Up to 16 for one logical volume	Up to 16 for one logical volume	
Manual/scheduling volume snapshot	Up to 32	Up to 32	-
Hot spare disks	Global and dedicated	Global and dedicated	-
Host access control	Read-Write & Read-Only	Read-Write & Read-Only	
Online Volume migration	Yes	Yes	
Online Volume sets expansion	Yes	Yes	
Configurable stripe size	Yes	Yes	-
Auto volume rebuild	Yes	Yes	-
N-way mirror (N copies of the disk)	Yes	Yes	-
Microsoft Windows Volume Shadow	Yes	Yes	-
Supports CHAP authentication	Yes	Yes	-
S.M.A.R.T. support	Yes	Yes	Yes
Snapshot rollback mechanism support	Yes	Yes	-
Platform	Rackmount	Rackmount	Rackmount
Form Factor	4U	4U	4U
# of Hot Swap Trays	60	60	60
Tray Lock	Yes	Yes	Yes
Disk Status Indicator	Access / Fail LED	Access / Fail LED	Access / Fail LED
# of PS Modules	700W x 3 w/PFC	700W x 3 w/PFC	700W x 3 w/PFC
# of Fans	11	11	11
Power requirements	AC 90V ~ 264V Full Range,	AC 90V ~ 264V Full Range,	AC 90V ~ 264V Full Range,
		12A ~ 6A, 47Hz ~ 63Hz (each module)	•
Default Slide Rail: Post to Post 800mm~1			
Relative Humidity	10% ~ 85% Non-condensing	10% ~ 85% Non-condensing	10% ~ 85% Non-condensing
Operating Temperature	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 Dimension	860(L) x 482.5(W) x 177(H) mm	860(L) x 482.5(W) x 177(H) mm	, , , , , , , , , , , , , , , , , , ,
Weight (Without Disk)	43.5/45Kg	43.5/45 Kg	860(L) x 482.5(W) x 177(H) mm 43.5/45 Kg

\* Request optional dongle board for SATAII/III hard drive.

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