

## EP-4604S/D-G1S6 EP-4604S/D-GAS6

4U 60Bay iSCSI-6G SAS 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 1/10 Gigabit ports on each controller to increase system efficiency and performance. It features high capability of expansion, with 60 hot-swappable 6Gb SAS/SATA 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 INTEL 64-bit RAID processor

#### **Unsurpassed Data Availability**

- RAID 6 capability provides the highest level of data protection
- Supports Snapshot, Volume cloning, Replication, Thin Provision
- 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 6Gb SAS/SATA disks
- Supports iSCSI jumbo frame
- Supports Microsoft Multipath I/O (MPIO), MC/S
- 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 64 snapshot)
- Snapshot rollback mechanism
- On-line volume migration with no system down-time
- Online volume expansion
- Instant RAID volume availability and background initialization
- Automatic synchronization of firmware version in the dual-active mode
- 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-G1S6	EP-4604S/D-GAS6	EP-4604J/JD-S6S6
RAID Controller	iSCSI-6G SAS	iSCSI-6G SAS	JBOD
Controller	Single or Redundant	Single or Redundant	Single or Redundant
lost Interface	6 x 1Gb Ethernet (per Controller)	2 x 10Gb & 2 x 1Gb Ethernet (per Controller)	One 6Gb/s SAS (SFF-8088) (per Controller)
Disk Interface	6Gb SAS or 6Gb SATA*	6Gb SAS or 6Gb SATA*	6Gb SAS or 6Gb SATA*
SAS expansion	One 6Gb SAS (SFF-8088) (per Controller)	One 6Gb SAS (SFF-8088) (per Controller)	One 6Gb/s SAS (SFF-8088) (per Controller)
Processor Type	INTEL Xeon processor	INTEL Xeon processor	-
	4GB ~ 8GB DDR3 ECC SDRAM	4GB ~ 8GB DDR3 ECC SDRAM	
Cache Memory	(per Controller)	(per Controller)	-
Battery Backup	Optional Hot Pluggable BBM	Optional Hot Pluggable BBM	
Management Port support	Yes	Yes	
Monitor Port support	Yes	Yes	
	Yes	Yes	
UPS connection			-
RAID level	0, 1, 0+1, 3, 5, 6, 10, 30,	0, 1, 0+1, 3, 5, 6, 10, 30,	-
	50, 60 and JBOD	50, 60 and JBOD	
ogical volume	Up to 4096	Up to 4096	-
SCSI Jumbo frame support	Yes	Yes	-
Supports Microsoft	Yes	Yes	-
Multipath I/O (MPIO)			
802.3ad Port Trunking,	Yes	Yes	
LACP Support	res	165	
lost connection	Up to 128	Up to 128	-
Host clustering	Up to 16 for one logical volume	Up to 16 for one logical volume	-
Manual/scheduling			
volume snapshot	Up to 64	Up to 64	=
Hot spare disks	Global and dedicated	Global and dedicated	_
•	Read-Write & Read-Only	Read-Write & Read-Only	
Host access control		·	-
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	Yes	Yes	=
Shadow Copy Services (VSS)			
Supports CHAP authentication	Yes	Yes	-
Thin Provision	Yes	Yes	Yes
₋ocal Clone	Yes	Yes	Yes
Remote Replication	Yes	Yes	Yes
VAAI (vStorage APIs for Array			
ntegration)	Yes	Yes	Yes
S.M.A.R.T. support	Yes	Yes	Yes
Snapshot rollback	103		
•	Yes	Yes	-
mechanism support			
Platform	Rackmount	Rackmount	Rackmount
Form Factor	4U	4U	4U
f 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
f of Fans	11	11	11
	AC 90V ~ 264V Full Range,	AC 90V ~ 264V Full Range,	AC 90V ~ 264V Full Range,
Power requirements	12A ~ 6A, 47Hz ~ 63Hz (each module)	12A ~ 6A, 47Hz ~ 63Hz (each module)	12A ~ 6A, 47Hz ~ 63Hz (each module)
Default Slide Rail: Poet to Boet 900mm		5 : 53: 150mm ·300mm (23 ~35 )	
Default Slide Rail: Post to Post 800mm	. , , , ,	10% ~ 85% Non condensing	10% ~ 85% Non condensing
Relative Humidity	10% ~ 85% Non-condensing	10% ~ 85% Non-condensing	10% ~ 85% Non-condensing
	. , , , ,	10% ~ 85% Non-condensing 10°C ~ 40°C (50°F ~ 104°F) 860(L) x 482.5(W) x 177(H) mm	10% ~ 85% Non-condensing 10°C ~ 40°C (50°F ~ 104°F) 860(L) x 482.5(W) x 177(H) mm

<sup>\*</sup> In dual controller mode, SAS drives are recommended since they are dual ported.

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

UNIFOSA CORP.

Tel:886-2-2914-8001(Rep.) Fax:886-2-2914-7975

http://www.proware.com.tw E-mail:info@proware.com.tw

