

E4 16-bay & 12-bay SAS RAID

SAS/SATA-II Drive Technology with Dual 4Gbit Fibre Channel Host



16x hot-swap SAS / SATA-II drives
Capacities up to 16 Terabytes

E4 HIGHLIGHTS

- *New high performance Intel IOP341 processor, with RAID-5 and RAID-6 hardware acceleration for outstanding performance levels*
- *Supports high performance SAS / SATA-II hard drives, pushing transfer rates and reliability to a new benchmark*
- *Optional multi-lane SAS connector for expandability and scalability - add JBOD storage to connect up to 128 HDDs*
- *High-end enterprise E-Series caddy system offering the best protection of hard disks and data, designed to support 10K & 15K RPM hard drives*
- *Flexibility to use SAS & SATA-II drives simultaneously in a single E4 enclosure*
- *Powerful 560W redundant PSU's - beat all competitive products offering sufficient power to support high performance HDDs and controller. With increased reliability and MTBF (mean time between failures) of critical components*
- *Supports Xsan 2 and Final Cut Studio 2, offering better performance and reliability than any comparable storage offering*
- *2GB cache as standard, providing exceptional DATA STREAMING performance & improved RANDOM access*
- *'Environmentally friendly' E4 supports industry standard MAID technology (spinning down drives when not in use), considerably reducing power consumption*
- *Intelligent cooling system which continuously adapts to environmental conditions by automatically controlling the speed of the fans for optimal cooling*
- *Unique upgradeability offering true POI (protection of investment). All E-series products can be upgraded to the newest technology:
E1 > E2 or E4 - via upgrade of backplane & controller
E2 > E4 - via upgrade of controller only*
- *Sophisticated monitoring and alert system enabling the system administrator to monitor and receive alerts via onboard Ethernet connection*
- *Built-in management software supports any internet browser and alerts can be sent via POP3 emails, SNMP or network broadcasting, ALL without any installation of software or drivers*
- *Unique hot-swap SmartLCD, push-button removal for added security and easy replacement*
- *Compatible with major brands of video editing, capture and playback cards, devices and software.*
- *Selectable RAID levels: JBOD, 0, 1, 0+1, 3, 5 plus RAID-6 for the ultimate protection of your valuable data*

Fibrenetix new E4 moves the benchmark for Commodity Enterprise RAID systems. Offering features that are only usually found in considerably more expensive systems from the bigger brands, the E4, 16-bay and 12-bay, 4Gbit FC to SAS/SATA-II storage system is simply outstanding.

Designed and developed with outstanding performance, reliability, expandability and scalability in mind, the E4 meets the needs of the most demanding enterprise environment.

The E4 combines dual 4Gbit Fibre Channel host connections, with the latest high reliability SAS / SATA-II drive technology and the 16-bay system provides up to 16 Terabytes of storage in a 3U 19" rackmount enclosure and the 12-bay, 2U enclosure offers up to 12 Terabytes.

The E4 RAID engine has been 'beefed-up' with the new Intel Xscale IOP341 processor providing true hardware acceleration, with improved performance in RAID-5 and RAID-6. As always, performance is very much dependant upon the hardware and applications being used, but in a clean Cache READ/WRITE set-up we've seen sustained transfer rates of over 750MB/s.

Enhanced Firmware enables the system to be optimized for specific environments, offering exceptional functionality and flexibility. Even the I/O random access element has been upgraded to offer improved performance in random applications.

The E4 also comes with 2GB of cache memory as standard.

The E4 has an updated management and alert system, which now has a more modern look and feel, but remains technically sophisticated and very easy to use. All monitoring software is embedded into the controller making the E4 one of the few truly heterogeneous systems on the market.



The E4 isn't just about great functionality and performance. It has much more to offer, especially when it comes to Scalability. The E4 is available with an optional multi-lane SAS expander port. This enables user's to add additional 16-bay JBOD storage systems to a single E4 master box, as and when, the need for more storage arises.

The original storage and data is not affected in any way, the server will simply see another large hard drive as soon as the additional JBOD storage unit has been initialized. All this happens in the background, without any need for the master E4 system to be taken off-line, enabling user's to continue working without interruption.

Up to 7x E4 16-bay JBOD systems can be added to an E4 master box. The interface between the subsystems is a multi-lane SAS connector, however the hard drives in the JBOD's can be SATA-II and/or SAS to suit the user requirement.



The E4 optional multilane SAS expander port enables up to 7x 16-bay JBOD systems to be added to a single E4 master box for the ultimate in Scalability.

Product Codes

E4-1662-F241-A1 (4Gbit FC to SAS/SATA-II HDDs)
E4-1262-F241-A1 (4Gbit FC to SAS/SATA-II HDDs)
E4-1662-J31-A1 (E4 16-bay JBOD)

RAID Controller

Intel IOP341 XScale Processor

RAID Design

Cableless Intelligent Backplane Integration

Max. Supported # Drives

16 or 12x SAS and/or SATA-II HDDs

High Security RAID Level

RAID-6

Supported RAID Levels

JBOD, 0, 1, 0+1, 3, 5, 6, 10, 30, 50, 60

Memory Bus

High Speed PCI bus

Memory

2GB DDR2-533 SDRAM cache memory as standard

Host Bus Interface

4Gbit Fibre Channel

Host Bus Channels

2 Channels

Disk Bus Interface

3Gbit SAS / 3Gbit SATA-II

Disk Bus Channels

16 or 12 Independent Channels

Host Requirement

Host Independent and Transparent

Operating Systems

OS Independent and Transparent

Max. HDD Capacity

1 Terabyte

Max. Subsystem Capacity

16 Terabytes (16-bay) or 12 Terabytes (12-bay)

Hot Swap Components

HDD, PSU & Fan modules and SmartLCD

Management

RS-232, Web-browser and SNMP

System Alerts

Audible alarm, LEDs, RS-232, Web-browser, POP3 Email & SNMP traps

Power Requirements

110/240VAC, 50/60Hz auto-sensing.
 Dual independent 560 watt power supplies

Form Factor

19" Rackmount - 3U (16-bay) or 2U (12-bay)

Weight

3U = 25 KG / 2U = 20KG (without disk drives)

E4 TECHNOLOGY FEATURES



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