

EonStor® S16F-R/G1430

3U Profile, Redundant/Single RAID Controller,
FC-4G Host Channels, 16 SAS/SATA drives



HIGHLIGHTS

- Dual-active or single RAID controller configurations
- Fault-tolerant enclosure design
- Infortrend's fifth-generation ASIC400 RAID engine
- Two (2) FC-4G host channels per controller
- SAS or SATA-II disk drives in the sixteen (16) drive bays
- Hardware RAID5 and RAID6
- Supports expansion to a maximum of 80 disk drives through expansion enclosures
- Simple management via SANWatch
- Intelligent load-balancing between host links by the EonPath multi-path driver

The EonStor S16F-R1430 and S16F-G1430 are designed for speed, integrity, and always-on availability using the latest FC-4G and SAS technologies. The dual-controller S16F-R1430 provides full-featured hardware redundancy, extra-wide host links via eight (8) host ports, and easy expansion through fault-tolerant, full-duplex, SAS wide port external links. The S16F-G1430 is a cost-effective option with single RAID controller for less critical storage applications.

Reliability

The S16F series fully supports advanced, enterprise-class RAID features. With configuration levels starting from RAID0 up to the multi-level RAID60, the S16F systems ensure data integrity during failure of up to two disk drives. From host links to the hot-swap mechanisms, the subsystem guarantees data safety by supporting numerous measures including intelligent battery backup with charge level awareness and FRU feedback, and a multi-path driver with failover and load-balancing capabilities. A configured RAID array is not only protected by disk redundancy, but also by the rich variety of protection measures ranging from media error recovery to proactive measures for dealing with faulty components.

Availability

The S16F subsystem inherited high availability EonStor architecture with enhancements such as RoHS compliance and redesigned modules. Constructed for component-level redundancy, electrical and signal paths are strung across a common backplane and interfaced with critical components using quality connectors. The highly integrated design allows all critical components such as disk drives, RAID controllers, power supplies, cooling modules, sensors, and detection circuitry to function as an organic whole. A fault condition triggers reactive and preventive measures, for example, forcing cache flush to reduce the chance of data loss or further damages.

Manageability

The subsystem's built-in Ethernet port ensures easy access to the Java-based SANWatch (Storage Management Suite) for remote configuration, management, and monitoring functions. SANWatch Manager provides "Install Once, Run Anywhere" convenience with a user-friendly graphical user interface. Additionally, the subsystem can be accessed through the LCD keypad panel, RS-232C terminal, and Telnet. The SANWatch Configuration Client sub-module gives system managers the power of real-time monitoring even when they are away from the subsystem by providing a variety of notification methods and the configuration utility screen.

AVAILABLE MODELS

Models	Controller	Host Channels	Host Ports	Drive Bays	Max. Disks Supported	Corresponding JBOD
S16F-R1430	Dual	4	8	16	1 RAID + 3 JBOD (64HDD)	S16S-J1000-R
S16F-G1430	Single	2	4	16	1RAID + 4 JBOD (80HDD)	S16S-J1000-S

SPECIFICATIONS

Subsystem Characteristics

- ASIC400 RAID engine
- Default DDR cache memory (per controller) 512MB
- FC-4G host channels (per controller) 2
- SAS 4x wide link expansion (per controller) 1
- BBU (per controller, optional on G model) 1
- COM ports (per controller) 2
- 10/100 Ethernet port (per controller) 1
- Total capacity w/expansion R: 64TB
G: 80TB
- LCD keypad panel 1
- PSUs 2
- Cooling module 2
- Diagnostic LEDs on all FRUs

Drive Interface

- Number of disk trays 16
- SAS/SATA-II
- Total no. of HDD w/ expansion R: 64
G: 80
- Drive-side expander
- Drive-side SES service

Host Connection Ports

- SFP ports per controller 4
- Data single channel bandwidth 4Gb
- Tag command queuing 256
- Multiple target IDs

RAID Configurations

- RAID levels 0, 1(0+1), 3, 5, 6, 10, 30, 50, 60, NRAID
- Up to 32 logical drives (varies by memory size)
- Up to 1024 LUNs (varies by memory size)
- Up to 2GB cache per controller

High Availability

- Redundant, hot-swappable FRUs
- Subsystem self-diagnostics
- Li-Ion battery backup unit
- UPS status detection
- Multiple local, global, and enclosure-specific hot-spares

Management

- Java-based SANWatch software
- Terminal via RS-232C
- Telnet over Ethernet
- Event notification methods:
Email/Fax/LAN broadcast/ SNMP traps/SMS/MSN

Approvals

- BSMI, CB, CE, FCC, UL, cUL, RoHS
- Microsoft WHQL- Windows Server 2003
- Microsoft Multi-Cluster Submission- w/MPIO

OS Support

- Microsoft Windows Server 2003/2008
- Red Hat Linux ver. 5.2/5.3
- Novell SUSE 11
- Sun Solaris ver.10
- Mac OS X ver.10.5
- HP-UX 11i

Requirements

- AC Input: 100VAC ~ 240VAC 530W with PFC
- DC Output: 12V-32A; 5V-32A; 3.3V-30A
- Relative Humidity: 5% to 95% non-condensing
- Operating Temperature:
0°C to 40°C (without BBU)
0°C to 35°C (with BBU)

Dimensions

- 3U, 19-inch rackmount chassis
- Without handles:
445(W) x 130(H) x 488.2(D) mm
(17.5 x 5.1 x 19.2 inches)
- With handles:
482.6(W) x 131(H) x 504.3(D) mm
(19 x 5.1 x 19.9 inches)

© 2010 Infortrend Technology, Inc. All rights reserved.

· Any information provided herein is without warranties of any kind of and is subject to change without prior notice.
· Infortrend, SANWatch and EonPath are registered trademarks of Infortrend Technology, Inc.

· Infortrend logo is a trademark of Infortrend Technology, Inc.
· All other names, brands, or services are trademarks or registered trademarks of their respective owners.