

F5404E 4G FC-SATA-II RAID



Redefining flexibility and availability, the Xyratex F5404E offers affordable RAID data storage with high performance capabilities.

The Xyratex F5404E sets a new standard in the design of mass storage enclosures and provides unsurpassed disk storage capacity in a single enclosure. Housing 48 SATA drives in 4U of rack space, the F5404E can store 36TB of data in a single unit. With a combination of high performance controllers and high density packaging, the fully HA design of the F5404E increases the flexibility of storage deployment to the end user. The F5404E provides an ideal solution to the secondary disk storage needs of compliance, disk to disk backup, and CAS environments.

Software clearly differentiates the Xyratex F5404E over other near-line storage solutions on the market today. All models in the Xyratex 5000 series of RAID systems feature StorView for intuitive administration and performance monitoring. Automated control of individual controller's cache, arrays, and devices via a web-based interface simplifies storage administration, resulting in decreased management costs and improved storage utilization.

All models in the Xyratex 5000 RAID series come with Snapshot. Four snapshots are available to start implementing point-in-time recovery capabilities. An optional Snapshot upgrade allows for up to 24 snapshots per Logical Drive and up to 8 Logical Drives in snapshot mode. A full-function Command Line Interface (CLI) can be used to integrate array management into existing operational procedures. Available an optional upgrade to StorView, StorView Global configures, monitors, and manages Xyratex 5000 Series RAID controllers from any location, anywhere on the network.

The Xyratex F5404E provides the bandwidth needs for disk-to-disk backup, archive, and other storage intensive applications. The Xyratex F5404E leverages SAS full duplex, point-to-point architecture with dedicated connections for maximum data throughput. With maximum flexibility, superior performance and continuous availability, the Xyratex F5404E sets new standards for near-line RAID storage offerings.

Features

- RAID 1, 5, 6, 10 & 50 support
- Snapshot support for up to 192 snaps
- Four (4) 4Gb/s high speed Fibre Channel host connections per system
- Up to 48 high performance cost effective SATA drives in one system
- StorView™ controller based or host based management software
- Online capacity growth through dynamic array and LUN expansion
- Cableless, modular design and redundant, hot-swappable components for fault tolerance
- Customizable fascia, SCSI Inquiry Strings, management interface, multi-path manager

Technical Specification

General Information

Product Code	RS-4835-F4-5404E
External Interface	4G FC, point-to-point, loop and fabric (switched) topologies
Supported Operating Platforms	Windows 2003 (IA32, EM64T); RedHat Linux AS3/AS4 (IA32, EM64T); SuSE Linux 9/10 (IA32, EM64T)
Supported Hosts	256, 512 LUNs, LUN Masking, >2TB LUNs
Total Capacity per Unit	36TB
Expansion Chassis	RS-4835-E3-XP (1 maximum), SAS connected, single and dual IO Module configurations
Total Expansion Capacity	72TB, 512MB and 1G Cache per controller (selectable by volume – read, adaptive read-ahead, write through, write-back), battery backup

Disk Drives

Disk Drives Supported	Seagate SATA (7.2K/750G)
Interface Types	SATA-II (3GB/s), NCQ, dedicated bandwidth to each drive
Max Drives per Enclosure	48, 512 Logical Drives/system, automatic bad sector assignment

RAID Controllers

No. RAID Controllers	2 (dual – HA)
RAID Levels Supported	Up to 96 disk arrays with independent RAID level 0, 1, 5, 6, 10, and 50 support, selectable strip sizes (64K, 128K, and 256K), partial strip read/write
RAID Protection Features	Background initialization, background parity checking and automatic drive rebuild with redundant RAID arrays

System Management

Software	StorView, StorView Global, StorView Path Manager
Interfaces Supported	Ethernet (out-of-band), FC host based (in-band)

System Availability

Hot Swappable Components	PSU/cooling modules, disk drives, RAID controllers
Additional Reliability Features	StorView Path Manager for Windows and StorView Path Manager for Linux - host based dynamic multi-path failover

Dimensions

Height	175mm (6.89") 4 EIA Units
Width	482mm (19") (1EC Rack Compliant)
Depth	810mm (31.9") 1000mm depth rack required
Weight	74.8Kg (165 lbs) with drives
Service Clearance	559mm (22") shelf pull-out

Altitude, Power and Temperatures

Operational Altitude	2,133m (7,000 ft)
Non-operational Altitude	12,192m (40,000 ft)
Voltage	100-240VAC 5.0A maximum per input
Frequency	60/50 Hz, single-phase
Power Consumption	800W typical
Temperature Range	Operating: 5° to 35°C (41° F to 95° F)
Humidity	Operating: 10% to 80% (non condensing)

Shock and Vibration

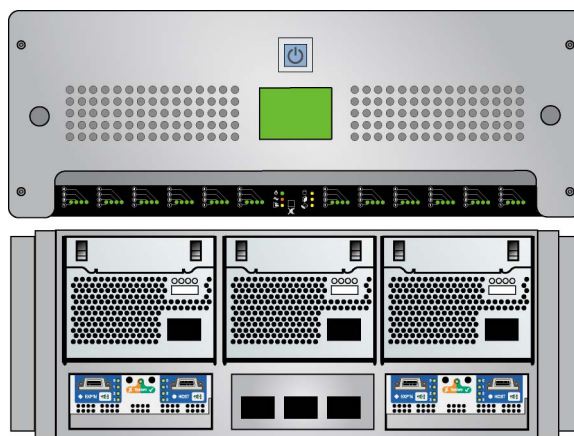
Operational Shock	5g 10ms ½ Sine
Operational Vibration	Random 0.21 grms 5-500Hz
Non-operational Shock	30g 10ms ½ Sine
Non-operational Vibration	Random 1.04 grms 2-200Hz
Relocation Vibration	Swept Sine 0.9g 2-200Hz
Acoustics	<58 dB LpA @20°C

Approvals

CCC, CE, UL, cUL, RoHS (R5)
Microsoft WHQL, Microsoft RAID System Submission – MPIO 2-Node Cluster

Warranty Information

Enclosures with drives Up to 3 years
Please contact Xyratex for detailed warranty information.



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