



Overview

The RS16 IP-4, the quad intelligent iSCSI RAID System, is equipped with a built-in 64-bit RAID controller for mission critical applications. Utilizing enterprise SAS or high-capacity 3Gbps SATA disks, its speed, scalability, reliability and functionality provide a perfect blend of performance, RAID protection and easy to use interface which is ideal for centralized IP SAN storage. Designed to meet the challenge of high impact/high volume network storage requirements, the new ULTRASTOR™RS16 IP-4 can be configured in minutes and is becoming the new standard for simplified SAN storage. With hundreds of installations worldwide Enhance Technology's ULTRASTOR™ product line has built a solid reputation in markets spanning from video broadcasting to emerging disk based backup & recovery infrastructures.

Enterprise Feature and Performance

Featuring four (4) GbE ports (iSCSI), the RS16 IP-4 provides versatility critical to a company's IT infrastructure. ULTRASTOR™RS16 IP-4 is powered by a cutting edge Intel based RAID engine, up to 2GB cache, and 3.0 Gbp/s disks, which maximizes disk performance (300MB/s via four iSCSI GbE ports) allowing for a broader range of storage possibilities. Built-in enterprise feature such as Enhance Snapshot, providing point-in-time remote recovery that safeguard accidental deletion, makes the new ULTRASTOR™RS16 IP-4 an ideal solution for server storage such as Microsoft Exchange & SQL Server, as well as professional storage applications such as Disk-to-Disk backup, database pools, image acquisition, near line storage, data centers, media & asset management libraries and shared SAN networks. Dynamic on-line RAID expansion allows additional capacity to be added without total system downtime, increasing your department's productivity.

UltraStor Storage Expansion

By fully integrating advanced RAID controllers with environmental monitoring, the 3U 16-drive UltraStor RS16 IP-4 primary RAID unit allows dynamic RAID expansion to an optional secondary JBOD unit, the RS16 JS, through an embedded Mini-SAS expansion port. The embedded expansion port on the advanced UltraStor models helps reduce your total cost of ownership and protects your investment.

Features

- 3U, 16 SATA disks external storage
- Multiple RAID configuration options
- Embedded hardware RAID controller
- 4 GbE full iSCSI offload with load-balancing & fail-over
- One logical volume shared by as many as 16 hosts
- Windows VDS/VSS/MPIO support
- Hot swappable components
- Secure control panel with backlit LCD
- Host access control & CHAP

High Data Availability

The RS16 IP-4 offers a wide range of RAID settings including 0, 1 (0+1), 3, 5, 6, 30, 50 and JBOD. Support for multiple array configurations are included to allow added flexibility ensuring your investment will be in use years down the line. Drive failure detection, automatic drive rebuild, hot spare assignment and background rebuild, make it possible for users to monitor and address system conditions. On-line RAID expansion allows additional capacity to be added without total system downtime, adding piece of mind knowing your data is protected at all time.

Storage Management

The RS16 IP-4 system is unparalleled in its simplicity, ease of use, installation, and storage management. Our user friendly Web Graphical User Interface allows one to deploy and manage the disk array from virtually anywhere in the world with simple internet access, no additional management software ever needed. With the "Quick Install" wizard, the storage administrator can get the system up and running in a few minutes; and setting up RAID level, volume, cache, etc. can all be done and monitored through the Web GUI.



Form Factor

- 3U low profile 19" rackmount
- 16x SAS / SATA disk drive bays

System Architecture

- SATA-to-GbE (10/100 Ethernet support)
- SAS-to-GbE (10/100 Ethernet support)
- Quad channel (GbE ports x4)

Disk Drive Interface

- HDD: SATA/Serial ATA 1.5Gb/s or 3Gb/s
- HDD: SAS/Serial Attached SCSI 15K RPM
- RPM: 7200-15,000

Controller Architecture

- Dedicated RAID processor
- Dual PCI bus architecture
- 64-bit 133MHz PCI-X bridge
- 2GB cache
- Upgradeable firmware in flash ROM

Controls and Indicators

- Backlit LCD control panel
- Power and drive failure indicators
- Built-in alarm with mute button

RAID Operation

- RAID level 0 (0+1), 3, 5, 6 and JBOD
- Multiple array support (up to 8 separate arrays)
- Hot-swap drive support
- Hot/global spare drive support
- Online capacity expansion

Management

- User configurable via control panel
- Web browser remote management
- RS232 VT100 ANSI terminal emulation
- Event & fault notification to e-mail

Enclosure Specification

- **Hot-Swappability** 16 x Removable HDD Tray
- **Drive Failure** 16 x LED Indicator for each HDD
- **System Fan** 2 hot-swappable blowers
- **Status LEDs** 1 x access LED for each HDD
- **Fan-fail LED** 1 x fan-fail LED for system
- **Mute Button** 1 x mute button for fan & temp alarm
- **Power Supply** 1+1 Hot-swap Redundant (2x 460Watt)
- **Dimension (H x W x D)** 5.25" x 19" x 21.5"
- **Weight (without disk)** 60 Lbs

Physical & Environment

- **Temperature** built in thermal & fan sensor
- **Operating Temperature** 10°C ~ 35°C
- **Non-Operating Temperature** -10°C ~ 50°C
- **Operating Humidity** 20% to 90% non-condensing

Supported Operating System

- Windows 95, 98/98SE, NT, 2000, Millennium, XP, 2003
- Mac 9.1 and above with ATTO iSCSI initiator
- Linux (all latest builds) which support iSCSI initiator
- And all other systems supporting iSCSI protocol

Power Supply

- Dual redundant removable power modules
- 1+1 hot swappable
- AC input: 90 ~ 264 VAC, 47Hz ~ 63Hz
- Continuous output power: 460W

Cooling

- Three hot swappable fan modules
- 12V DC, 0.36A, 3-pin connector

Manufacturer Warranty

- **System Warranty** 3 years
- **Advanced Replacement** 30 Days
- **Certification** FCC, CE, UL, TUV, BSMI, VCCI

For more information please

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