

# ULTRASTOR™ RS16 IP Intelligent iSCSI RAID Storage System

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## Overview

The RS16 IP, intelligent iSCSI RAID System, is the latest addition to the award-winning ULTRASTOR family with a built-in 64-bit RAID controller for mission critical applications. Utilizing the cost-effective 3Gbps Serial ATA disks, the ULTRASTOR™ RS16 IP offers Enterprise-grade solution for applications that demand nothing short of superior reliability. Designed to meet the challenge of high impact/high volume network storage requirements, the new ULTRASTOR™RS16 IP 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 two GbE ports (iSCSI), the RS16 IP runs 10 times faster than a NAS system and provides versatility critical to a company's IT infrastructure. ULTRASTOR™ RS16 IP is powered by a cutting edge 64-bit RAID engine, up to 1GB cache, and 3.0 Gbp/s disks, which maximizes disk performance (110MB/s single channel) allowing for a broader range of storage possibilities. Built-in enterprise feature such as Snapshot, providing point-in-time recovery that safeguard accidental deletion, makes the new ULTRASTOR™RS16 IP 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.

## Controls & Indicators

A comprehensive LCD control panel facilitates the setup process and lets users reconfigure the system as their needs change. LED based indicators provide easy visual monitoring and system status at a glance. The RS16 IP also provides an audible alarm in the event of a component failure.

## Features

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

## High Data Availability

The RS16 IP 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. Dynamic 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 tim.

## Storage Management

The RS16 IP 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.



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## Form Factor

- 3U low profile 19" rackmount
- 16 SATA / Serial ATA disk drive bays

## System Architecture

- SATA-to-GbE (10/100 Ethernet support)
- Dual channel (2) GbE ports

## Disk Drive Interface

- HDD SATA 1.5Gb/s or 3Gb/s
- Form Factor 3.5" SATA disks
- RPM 7,200 / 10,000 / 15,000
- Max. Capacity Up to 24TB RAW (1.5TB HDD x 16)

## Controller Architecture

- Dedicated RAID processor
- Dual PCI bus architecture
- 64-bit 133MHz PCI-X bridge
- 512MB cache (upgradeable to 2G)
- Upgradeable firmware in flash ROM

## Controls and Indicators

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

## 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 (2x460Watt)
- 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 98, ME, 2000, XP, 2003, Vista, 2008
- Mac 9.X, 10.X
- Red Hat Enterprise Linux 5
- VMware ESX 3.5

## 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
- DNI BFB0712H brushless blowers
- 12V DC, 0.36A, 3-pin connector

## Manufacturer Warranty

- 3-year warranty
- Advanced Replacement 30 days

To find an authorized dealer

Contact us at: [info@enhance-tech.com](mailto:info@enhance-tech.com)

