

DATA SHEET

UltraStor® RS16 IP-4 Professional iSCSI Storage



The Most Affordable and Versatile Enterprise Storage System

The Enhance Technology Ultrastor® RS16 IP-4™ has 4 iSCSI ports and accepts both high reliability SAS drives and high capacity SATA drives. By fully integrating advanced RAID controller with environmental monitoring, the 3U 16-disk Ultrastor RS16 IP-4 allows dynamic RAID expansion to an optional secondary JBOD unit through an embedded Mini-SAS expansion port. VMware certified virtualization storage and cost-effective IP SAN are just few advanced features that Ultrastor RS16 IP-4 has. The Ultrastor RS16 IP-4 outperforms other enterprise RAID systems in today's market in terms of performance, reliability, purchase value and features.

Scalability and Expandability

The advanced expandable Ultrastor RAID RS16 IP-4™ (Quad iSCSI) is utilizing an additional Mini-SAS expansion port, that allows RS16 IP-4 to have scalability and expandability by daisy chain with four RS16 JS SAS JBOD units, to have up to 80 SATA or SAS hard drives, with a maximum total capacity of 160TB⁽¹⁾. The expandable feature on RS16 IP-4 help companies reduce the total cost of ownership and benefit the customer to save more in order to form larger storage systems as storage requirements grow.

Virtualization Storage

The Ultrastor RS16 IP-4 is the only VMware certified iSCSI SAN storage system available in the market, which makes RS16 IP-4 becoming the ideal virtualization storage solution, which empowers users to aggregate memory, storage and networking resources into multiple virtual machines. The combination of VMware ESX server and Ultrastor iSCSI professional RAID allows users to make the best use of their existing server infrastructure to improve resource utilization. Customers will benefit from less energy consumption, simplify management, flexible and scalable network storage environment while having improved efficiency and performance.

IP SAN Storage

Equipping with quad-port iSCSI and compatible with the industry standard Ethernet interfaces, Ultrastor RS16 IP-4 is the ideal IP SAN storage solution for disk-to-disk backup and shared SAN environments. Certified by Microsoft Multipath I/O, Ultrastor SAN minimized downtime with clustering and makes high capacity storage available shared by multiple numbers of servers. The Ultrastor RS16 IP-4 provides perfect blends of performance, RAID protection, and manageability that designed for centralized SAN environments.

Easy Management

The Ultrastor RS series includes user-friendly web GUI management which supports a cross platform. With simple internet access and no additional software requirement, users will be able to manage storage system from virtually anywhere at anytime. Users can also create multiple RAID arrays, check physical system conditions, and easily monitor their system status with automatic event e-mail notification.

Power Redundancy

Featuring next generation dual redundant hot-swappable power supply, the Ultrastor RS series ensures system reliability and available data. Protecting system from unexpected AC surge at 24/7 basis. Optional 80 PLUS energy efficiency green power supply is also available for users who are looking for reducing electricity and cooling cost for the years to come.

Feature Highlights

- Intel IOP 81342 1.2GHz RAID processor
- Supports SATA 1.0/2.0/3.0 and SAS hard disks
- Web Storage Management makes IT stuff's work earlier
- Built in remote access for event log & e-mail notification
- Supports RAID 0,1,3,5,S,6,6+S & JBOD
- Supports up to 80 disks storage expansion via SFF8470 Mini-SAS
- Supports on-line volume expansion & migration
- Supports multiple RAID volumes & instant availability
- Dual hot-swappable redundant power supply
- Optional 80 PLUS energy efficient green power supply available
- Excellent venting and cooling design



(1) Raw storage capacity under RAID-0 configuration, formatted capacity will vary

Service and Support

The Ultrastor RS16 IP-4 support options offer flexibility and peace of mind. Customers count on Enhance Technology's enterprise-class support and world wide local based service center to keep information available and operations running. The Ultrastor RS16 IP-4 includes a standard 3-year warranty with a 30-day money back guarantee, 30-day unit exchange. Customers can also choose to upgrade to a premium level of service which includes three years of advanced parts replacement, an emergency loaner unit for populated solutions, and optional 8x5 next-business-day on-site responses.

Specifications

Form Factor: 3U 16 disks low profile 19" Rackmount

EnhanceRAID RAID Controller:

- Intel IOP 81342 1.2GHz
- 1GB ~ 2GB DDRII 533 DIMM
- UARTs for serial console management and UPS
- Dedicated Fast Ethernet port For Web-UI
- Backend: SAS 3.0Gb/s, SATA 1.0, 1.5Gb/s or SATA 2.0, 3Gb/s disks
- LCM supported for easy management use
- Battery backup support (Optional)

RAID:

- RAID level: 0,1,0+1,3,5,6,10,30,50, 60 and JBOD
- Up to 1024 logical volumes in the system
- Global and dedicated hot spare disks
- Write-through or write-back cache policy for different application usage
- Dedicated or shared cache allocation for volume usage
- Multiple RAID volumes support
- Configurable RAID stripe size
- Online volume expansion
- Instant RAID volume availability
- Auto volume rebuilding
- On-line volume migration

Advanced Data Protection

- QSnap – built in snapshot with rollback enabled
- Local N-way mirror
- Off-line array roaming
- Smart faulty sector relocation
- Battery backup support (optional)

Host Interface:

- Four GbE Ethernet ports and one Mini-SAS SFF8470 expansion port

Storage Capacity:

- Scaleable up to 32TB raw (16x2TB) per system
- Maximum expandable capacity up to 80 disks with 160TB raw (80x2TB)

Management:

- Management UI via: Serial console, SSH telnet, or HTTP Web UI
- Event notification via: Email, SNMP trap, Browser pop-up windows, Syslog, or Windows Messenger
- Online system firmware upgrade mechanism
- Built-in LCD module to control most enclosure components
- iSNS & DHCP support
- CHAP authentication mechanism support

Supported Operating System:

- Windows Server 2000, Windows Server 2003, Windows Server 2008, Windows XP, Windows Vista
- Mac OSX 10.4, Mac OSX 10.5, Xserver, VMware ESX 3.0, Red Hat Enterprise

Physical & Environment:

- Operating Temperature 10°C ~ 35°C
- Non-Operating Temperature -10°C ~ 50°C
- Relative Humidity 5% to 95% non-condensing

Power Supply:

- Hot swappable dual redundant power (Standard)
- AC Input: 90-264V 47/63 Hz - Output: 2x460W

Cooling:

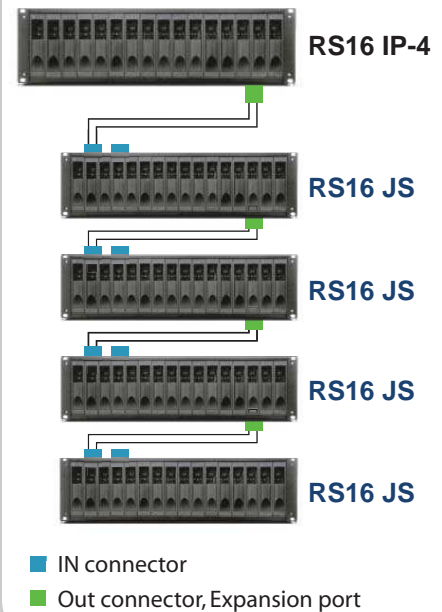
- Three hot-swappable high-speed cooling fans

Dimension (H x W x D): 5.25" x 19" x 21.5"

Weight (w/o disks): 60Lbs

Safety Regulations: CE, FCC, UL, RoHS

Storage Expansion



Cross-platform Web Management

The user-friendly Web Graphical User Interface(GUI) allows users to deploy and manage the disk array from virtually anywhere at anytime with simple internet access, no additional management software ever needed.