

# iR16IS4ER

## iStoragePro Rackmount 16 bay Enterprise iSCSI 4 Port RAID System



### Product Overview

iStoragePro R16 Rackmount Enterprise iSCSI 4 Port RAID system is equipped with the high performance iSCSI Technology designed with multiple iSCSI Network connection to host computers or switches which is capable of providing high speed storage solution. The efficient iSCSI interface setup provides cost effective solution without compromising performance. The system can easily be configured as a RAID 0, 1, 5, 6, 10, 30, 50, 60 & JBOD which is capable of providing performance and fault-tolerance to protect your data. iR16IS4ER is designed for expansion up to 96 hard disk drives by daisy chain multiple SAS JBODs together.

### Key Components

- CPU : Intel Xscale IOP 81342
- Memory : 1GB ~ 2 GB DDRII 533 DIMM supported
- 32MB flash
- UARTs : support for serial console management and UPS
- Fast Ethernet port for web-based management use.
- Backend : Up to 24 SAS 3.0Gb/s, or SATA 1.5Gb/s or SATA 3Gb/s disks supported on the controller board
- Front-end : Two Intel GbE NIC controllers
- LCM supported for easy management use
- Battery backup support (Optional)

### Key Features

- Front-end 4-port iSCSI GbE ports with load-balancing & failover for high availability
- Hardware iSCSI off-load engine enabled
- RAID 6, 60
- QSnap
- iSCSI jumbo frame support
- Header/Data digest support
- SATAII drive backward-compatible
- One logic volume can be shared by as many as 16 hosts
- Host access control
- Configurable N-way mirror for high data protection
- On-line volume migration with no system down-time
- HDD S.M.A.R.T. enabled for SATA drives
- SAS JBOD expansion support
- Windows VSS support
- Disk auto spindown support

### Enclosure Monitoring

- S.E.S. support for standard enclosure management
- UPS management via the specific serial port
- Fan speed monitoring fan x3
- Redundant power supply monitor
- 3.3V, 5V and 12V voltage monitor
- Thermal sensors x 3 on the controller BOARD
- Thermal sensor x 3 (up to 24) in enclosure.
- Status report of the managed J200C SAS/SATA JBODs

### Performance

- Throughput : 600 MB/sec

## RAID & Volume Operation

- RAID level: 0,1,0+1,3,5,6,10,30,50, 60 and JBOD
- Up to 1024 logical volumes in the system
- Up to 16 PDs can be included in one volume group
- Global and dedicated hot spare disks
- Write-through or write-back cache policy for different application usage
- Multiple RAID volumes support
- Configurable RAID stripe size
- Online volume expansion
- Instant RAID volume availability
- Auto volume rebuilding
- Online volume migration

## Advanced Data Protection

- Qsnap
  - (a) Built-in snapshot with rollback enabled
  - (b) Snapshot enabled up to 16 volumes, each logical volume supports up to 32 snapshot volumes, total 512 snapshot volumes per controller
- Microsoft Windows Volume Shadow Copy Services
- Local N-way mirror
- Offline array roaming
- Smart faulty sector relocation
- Battery backup support (optional)

## Management Interface

- Management UI via serial console, SSH telnet, HTTP Web UI, and secured Web (HTTPS).
- Online system firmware upgrade mechanism
- Event notification via Email, SNMP trap, browser pop-up windows, Syslog, and Windows Messenger.
- Run-time IO transactions recording
- Built-in LCD module to control most enclosure components
- iSNS and DHCP support
- CHAP authentication enabled

## Host Connection

- 4 x GbE ports support independent access, failover and load-balancing (802.3ad port trunking, LACP)
- Multiple iSCSI target nodes support
- Microsoft MPIO enabled
- iSCSI jumbo frame support
- Header/Data digest support
- LUN access control: Read-Write and Read-Only
- Up to 32 host connections
- Up to 16 hosts clustered for one volume
- Support Windows, Linux and MAC OS
- Drive Support

## Drive Support

- SCSI-3 compliant
- Multiple IO transaction processing
- Tagged command queuing
- Hard drive S.M.A.R.T. enabled for SATA drives
- The total SAS/SATA drives is up to 80 SAS/SATA drives
- The maximum capacity : 128 TB

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