

IP SAN iSCSI R-US-208i

- ▶ Dual 1Gb iSCSI-to-SATA 3Gb/s RAID 6 Storage System IP-SAN Simplicity, Proven RAID Architecture

Performance

- Single Channel: 150MB/s (read/write full-duplex)
- Dual Channel: 300MB/s (read/write full-duplex)
- IOPS: 40,000



R-US-208i

IP-SAN flexibility and value

Promise RAID STORE iSCSI products are a new generation of our technology that provides wide interoperability with rich iSCSI features including immediate data, CHAP, VLAN, Link Aggregation, Jumbo Frame, iSNS for network device discovery and near wire speed performance. These functions give network administrators the flexibility to solve tough storage problems with minimum disruption to clients.

High storage density for flexibility and economy

Seagate® Barracuda® ES hard drives are reliable as they have features like workload management, which reduces drive failure & lowers system heat levels by verifying data integrity when drive is thermally stressed.

Barracuda ES drives have IRAW (Idle Read After Write), which verifies the integrity of recently written data during idle time.

ERC (Error Recovery Control), another very important feature, which reduces unnecessary RAID rebuilds to drive error recovery times exceeding system timeout period.

The Barracuda ES drive is a best fit for nearline storage applications because of improved rotational vibration, PowerTrim™ technology, and quick and robust download FIW security.

RAID 6 reliability

RAID 6 (double-parity) delivers the highest level of reliability and data protection in a cost-effective solution. As the capacity of storage arrays increases, so does the risk of encountering unrecoverable errors. RAID 6 has two sets of parity from which the array can be rebuilt; it also remains available through up to two drive failures. This improves overall data protection, without adversely affecting performance and dramatically reduces the risk of catastrophic data loss during RAID rebuilds.

Highlights

- ▶ 8 hot-swappable Seagate® Barracuda® ES SAS/SATA hard drives in a robust 2U chassis
- ▶ RAID 0, 1, 5, 6, 10, and 50 support
- ▶ Hardware based TCP/IP and iSCSI offload engine
- ▶ Comprehensive embedded web-based management
- ▶ LCD Panel support
- ▶ Intelligent enclosure management, including thermal, voltage, and fan speed monitor and adjustment Automation



Key Components	RAID & Volume Operation	Advanced Data Protection
<ul style="list-style-type: none"> ▶ CPU: Intel Xscale IOP341 ▶ Memory: 512MB ~ 2GB DDRII 533 DIMM supported ▶ UARTs: support for serial console management and UPS ▶ Fast Ethernet port for web- based management use ▶ Backend: SATA 1.0, 1.5GB/s or SATA 2.0, 3GB/s disks supported ▶ Front-end: One Intel 82571EB GbE controller with two gigabit Ethernet ports ▶ LCM supported for easy management use ▶ Battery backup support (Optional) ▶ NVRAM for IO transaction record 	<ul style="list-style-type: none"> ▶ RAID level: 0,1,0+1,3,5,6,10,30,50, 60 and JBOD ▶ Up to 256 logical volumes in the system ▶ Up to 16 Pds can be included in one volume group ▶ Up to 32 R-US-208i logical volumes in one logical volume ▶ 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 	<ul style="list-style-type: none"> ▶ R-US-208i - built-in snapshot with rollback enabled ▶ Up to 32 snapshot volume for one logical volume ▶ Local N-way mirror ▶ Off-line array roaming ▶ Smart faculty sector relocation ▶ Battery backup support(optional)
Feature Highlights	Power & Environment	Dimensions/Host Connection
<ul style="list-style-type: none"> ▶ 2GbE Load-balancing & fail-over ▶ iSCSI jumbo frame support ▶ RAID 6, 60 ready ▶ R-US-208i ▶ Host access control ▶ On-line volume migration ▶ HDD S.M.A.R.T. Enabled ▶ Global/dedicated cache 	<ul style="list-style-type: none"> ▶ AC Input: 100-240V ~ 6A-3A 300W 1+1 with PFC(Auto Switching) ▶ DC Output: 3.3V-15A; 5V-25A; 12V-18A ▶ Operating Temperature: 0°C to 40°C ▶ Relative Humidity: 5% to 95% non-condensing 	<ul style="list-style-type: none"> ▶ 2U 19-inch rackmount chassis 431(W) x 516(D) x 87.5(H) mm (16.9 x 20.3 x 3.44 inches) ▶ 802, 3ad port trunking, LACP ▶ MC/S feature support ▶ Microsoft Multiparath IO (MPIO)support ▶ iSCSI jumbo frame support with MTU <=8000 Bytes ▶ CHAP authentication enabled ▶ LUN Access control: Read-Write & Read-Only ▶ Up to 32 hosts connection ▶ Windows Linux, Mac & Solaris ▶ Data/header digest support
Enclosure Monitoring	Management Interface	Drive Support
<ul style="list-style-type: none"> ▶ S.E.S. support for standard enclosure management ▶ UPS management via the specific serial port ▶ Fan speed monitoring fan x2 ▶ Redundant power supply monitor ▶ 3.3V, 5V and 12V voltage monitor ▶ Thermal sensors x 3 on the controller BOARD (for CPU, bridge and host channel chip) ▶ Thermal sensor x 3 (up to 24) in enclosure. 	<ul style="list-style-type: none"> ▶ Management UI via serial console, SSH telnet, HTTP/HTTPS ▶ Online system firmware upgrade mechanism ▶ Event notification via Email , SNMP trap , windows & browser pop-up , Syslog ▶ Run-time IO transactions recording ▶ Built-in LCD module to control most enclosure components ▶ ISNS & DHCP support ▶ CHAP authentication mechanism support 	<ul style="list-style-type: none"> ▶ SCSI-3 compliant ▶ Multiple IO transaction processing ▶ Tagged command queuing ▶ HDD S.M.A.R.T. Enabled

Seagate Barracuda ES Specs

▶ Capacity-SATA 3Gb/s, 1.5Gb/s	- 2TB, 1 TB, 750 GB, 500 GB, 250 GB
▶ Spindle Speed (RPM)	- 7200
▶ Cache, Multisegmented (MB)	- 32 (SATA), 16 (SAS)
▶ Seek Time, Read/Write (average, msec)	- 8.5/9.5
▶ Mean Time Between Failures (MTBF) (hours)	- 1.2 million
▶ Reliability Rating at Full 24x7 Operation (AFR)	- 0.73%
▶ Transfer Rate, Sustained (MB/s)	- 105
▶ Power Consumption (W, idle)	- 8.0
▶ Rotation Vibration @ 1500 Hz max (rad/sec ²)	- 12.5

*Specification are subject to change without notice. All company and product names are trademarks of their respective owners.