

NAS R-NS-316

► NAS SAS/ SATA II RAID Subsystems



R-NS-316

Companies are looking for cost-effective storage solutions which can offer the high performance, high scalability and reliability. As the number of users and the amount of data grows, Network Attached Storage is becoming a critical technology and the need for an optimized solution is becoming an important requirement. Raidstore delivers the NAS subsystem together with the NASP management solution, NASP High-Availability and proBackup client backup solution to provide Businesses with the most flexible, scalable, securable and manageable NAS environment. It helps to control the total cost of ownership for data management.

The R-NS-316 is an SAS/SATA II NAS Subsystem with NASP 1.2 operating system. It enhances systems availability, and manages complex storage environments easily. For improving business productivity and minimizing business risks, R-NS-316 provides a volume replication and a volume snapshot function. It is also a full featured data protection system supporting RAID levels 0, 1, 5, 6, 10, 50 and 60. It supports hot spares, automatic hot rebuild and online capacity expansion within the enclosure.

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.

Highlights

- Configurable to 19" rack-mountable 3U chassis
- Supports up to Sixteen (16) 1" hot-swappable SAS/SATA II hard drives
- Supports Tape / DAT backup / restore (option)
- Supports RAID levels 0, 1, 5, 6, 10, 50 and 60
- Smart-function LCD panel for ENC status
- Supports hot spare, automatic hot rebuild and online expansion file system
- Allows online capacity expansion within the enclosure
- Two Gigabit Ethernet ports, Supports optional 10 Gigabit Ethernet
- Linux-based embedded system
- Centralization of Data and Storage Management
- Using Market-Leading Java Technology
- Apply volume replication to enhance data protection
- Support logical volume over 2TB
- Support iSCSI Target and iSCSI Target trunking - Option
- Support SFTP file transmission
- Support SNMP remote monitor systems with hardware status
- Support Ethernet trunking to 8 ports
- Data Backup via backup plan and scheduling
- Enhance system configuration backup
- Local an external account management, support large account import
- Share management and permission (Support ACL setting)
- Support E-mail notification and system log information
- Multi application support via proFamily



Hardware Platform	RAID Controller	Storage Management
<ul style="list-style-type: none"> ▶ Intel Quad Core Xeon 2.0G or above, single / dual processor ▶ Cache Memory: 2GB DDR2 533/667 ECC REG DIMM up to 12GB ▶ Two Gigabit Ethernet ports (10 Gigabit Ethernet option) ▶ Up to Sixteen 1" hot-swappable SAS/SATA II (3Gb/s, NCQ support) hard drives ▶ Real time drive activity and status indicators ▶ Environmental monitoring unit ▶ Two (2) 700W hot-swap power supplies with PFC ▶ Expansion PCI slot for H/W upgrade 	<ul style="list-style-type: none"> ▶ LSI SAS 8704 EM2 500MHz PowerPC ▶ RAID level RAID 0, 1, 5, 6, 10, 50 and 60 ▶ Supports 128MB 667DDRII cache memory ▶ Supports hot spare and automatic hot rebuild ▶ Allows online capacity expansion within the enclosure ▶ Local audible event notification alarm 	<ul style="list-style-type: none"> ▶ Volume Management ▶ Disk usage statistics ▶ Hot spare capability ▶ Volume Snapshot ▶ Volume Replication

Connectivity	Macintosh Support	General
<ul style="list-style-type: none"> ▶ SMB, CIFS over TCP/IP, iSCSI ▶ NFS over UDP/IP ▶ Cross platform data access ▶ Novell Network Support ▶ FTP, HTTP file transfer ▶ DHCP ▶ NAT ▶ Internet gateway ▶ WINS Server ▶ Unit acts as a DHCP Server ▶ Unit acts as a master browser ▶ Share level security ▶ File level security ▶ User ID security for NFS 	<ul style="list-style-type: none"> ▶ AFP over Apple Talk ▶ AFP over TCP/IP ▶ Mac Zones 	<ul style="list-style-type: none"> ▶ File Server Independent ▶ Peer-to-peer ▶ Localized language support ▶ Supports NIC/ trunking / load balance/ fail over ▶ Supports UPS Management

System Management	DATA Protection	Power Requirements
<ul style="list-style-type: none"> ▶ Automatic IP address configuration ▶ Self-contained unit – no extras needed ▶ Management through Web browser ▶ Flash upgradeable unit ▶ Supports Microsoft ADS (2000/2003/2008) / PDC and Unix NIS accounts import ▶ SNMP /MRTG management and notification ▶ Fail-free online firmware upgrade ▶ Unicode Support ▶ Multi-node Management GUI ▶ CLI management via Telnet or SSH 	<ul style="list-style-type: none"> ▶ NASP High Availability (option) ▶ proBackup Client Backup ▶ NASP Data and configuration backup ▶ Support Veritas BackupExec Agent ▶ Support CA AR Cserver Agent ▶ Support Netvault Agent ▶ Support Acronics True Image backup software 	<ul style="list-style-type: none"> ▶ AC 90V ~ 264V Full range, 10A ~ 5A, 47Hz ~ 63Hz ▶ 133 (H) x 482 (W) x 730 (D) mm

▶ Capacity-SATA 3Gb/s, 1.5Gb/s	- 2 TB, 1 TB, 750 GB, 500 GB
▶ Capacity-SAS	- 600 GB, 450 GB
▶ Spindle Speed (RPM)	- 7200, 15000
▶ 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