

# Simbolo NAS Series

## SN-3163S3H-QX

**NAS / DAS / iSCSI All in One RAID Subsystems**



Companies are looking for cost-effective storage solutions which can offer the best 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. Proware delivers the Simbolo SN-3163S3H-QX, which combined direct access storage(DAS), iSCSI target device and network attached storage (NAS) solution for flexible and expandable application, and also together with the proNAS management solution, proNAS 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 SN-3163S3H-QX is an SAS / SATA II NAS / DAS / iSCSI all in one Subsystem with proNAS 1.1 operating system. It enhances system availability, and manages complex storage environments easily.

For improving business productivity and minimizing business risks, SN-3163S3H-QX provides a volume replication and a volume snapshot function. It is also a full featured data protection system supporting RAID levels 0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD. It supports hot spares, automatic hot rebuild and online capacity expansion within the enclosure.

### NAS Features

- ▶ Configurable to 19" rack-mountable 3U chassis
- ▶ Supports up to Sixteen (16) 1" hot - swappable SAS / SATA II hard drives
- ▶ Supports RAID levels 0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD
- ▶ Support NAS, DAS and iSCSI in one system
- ▶ Support two Gigabit Ethernet port for NAS file-sharing application
- ▶ Support one SAS port for direct access of RAID host connection
- ▶ Support iSCSI target for IP SAN environment
- ▶ Maximal support up to 224 SAS/SATAII disks totally based on:
  - \* Support one SAS Expansion port to connect up to 6 SAS JBOD enclosures for RAID expansion (up to 112 disks)
  - \* Support one SAS HBA port to connect second DAS enclosure (SB-3163S-S3S3) to expand the RAID of NAS (up to next 112 disks with next 6 SAS JBOD)
- ▶ Smart-function LCD panel for RAID setting & ENC status
- ▶ Supports hot spare and automatic hot rebuild.
- ▶ Allows online capacity expansion within the enclosure
- ▶ Support spin down drives for power saving (MAID) and disk drive power cycle
- ▶ Schedule volume check data correctness by RAID 3/5/6
- ▶ Linux-based embedded system (128MB Disk on Module)
- ▶ Supports Tape / DAT backup / restore
- ▶ Centralization of Data and Storage Management
- ▶ Using Market - Leading Java Technology
- ▶ Latest volume snapshot technology
- ▶ Apply volume replication to enhance data protection
- ▶ Support logical volume over 2TB
- ▶ Data Backup via backup plan and scheduling
- ▶ Enhance system configuration backup
- ▶ Local and external account management
- ▶ Large account import
- ▶ Share management and permission
- ▶ Advance ACL setting for project share
- ▶ Support Internet Gateway function
- ▶ Online expansion file system
- ▶ Support E-mail notification and system log information
- ▶ Multi application support via proFamily
- ▶ Support Samba "MediaHarmony" VFS for allows multiple editing clients to interoperate with the media files



**Proware Technology Corp.**

Tel:886-2-2914-8001(Rep.) Fax:886-2-2914-7975  
http://www.proware.com.tw E-mail:info@proware.com.tw



# Series Technical Specifications



**Model Number : SN-3163S3H-QX**

## Hardware Platform

Intel Quad Core Xeon 2.0G or above, single / dual Processor  
Cache memory : 2GB DDR II 533 FBDIMM up to 32GB  
Two Gigabit Ethernet ports(10 Gigabit Ethernet for additional 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  
One(1) 4X SAS Host port for RAID Host connection  
One(1) 4X SAS Expansion port for JBOD connection (up to 6 SAS JBOD enclosures, max. 112 disks)  
One(1) 4X SAS HBA port for next DAS connection (max. 112 disks with 1 DAS + 6 JBOD enclosures)

## RAID Controller

Intel 80341 64 bit RISC  
RAID level RAID 0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD  
Supports 512MB up to 4GB of ECC cache memory  
Supports hot spare and automatic hot rebuild  
Support MAID (spin down drives when not in use to extend service)  
Allows online capacity expansion within the enclosure  
Built-in serial port interface for remote event notification  
Local audible event notification alarm

## Storage Management

Volume Management  
Disk usage statistics  
Hot spare capability  
Volume Snapshot  
Volume Replication

## Connectivity

iSCSI target  
SMB, CIFS over TCP/IP  
NFS over UDP/IP  
Cross platform data access  
Novell Netware 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

## Macintosh Support

AFP over Apple Talk  
AFP over TCP/IP  
Mac zones

## General

File Server Independent  
Peer-to-peer operation  
Localized language support  
Supports NIC / trunking / load balance / fail over  
Support UPS management  
Support Samba "MediaHarmony"

## System Management

Automatic IP address configuration  
Self-contained unit - no extras needed  
Management through Web browser  
Flash upgradeable unit  
Supports Microsoft ADS / 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

## Data Protection

proNAS High Availability (option)  
proBackup Client Backup  
proNAS Data and Configuration Backup  
Support Veritas BackupExec Agent

## Power requirements

AC 90V ~ 264V Full range  
10A ~ 5A, 47~63Hz

## Physical Dimension

133(H) x 482(W) x 716(D) mm

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