

# EPICa

## EN-3163S6H-NQX

NAS/DAS(SAS/Fiber)/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 "EN-3163 6G SAS NAS", which combined direct access storage(DAS(SAS/Fiber target)), and 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 EN-3163 6G SAS NAS is an 6G SAS/SATA3 NAS/DAS(SAS/Fiber)/iSCSI all in one Subsystem with proNAS 1.X operating system. It enhances system availability, and manages complex storage environments easily. For improving business productivity and minimizing business risks, EN-3163 6G SAS NAS provides functionality such as volume replication and snapshot. It is also a full featured data protection system supporting RAID levels 0, 1, 10(1E), 3, 5, 6, 30, 50, 60 and JBOD. It supports hot spares, automatic hot rebuild and online capacity expansion within the enclosure.

### Features

- Configurable to 19" rack-mountable 3U chassis
- INTEL Nehalem based
- Supports up to Sixteen (16) 2.5" and 3.5" hot-swappable 6G SAS/SATA3 hard drives
- Supports RAID levels 0, 1, 10(1E), 3, 5, 6, 30, 50, 60 and JBOD
- Support NAS, DAS(SAS/Fiber) 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 Fiber target for Fiber storage environment (Optional)
- Support iSCSI target for IP storage environment
- Maximal support up to 256 6G SAS/SATA3 disks totally based on:
  - \* Support one SAS Expansion port to connect up to 7 SAS JBOD enclosures for RAID expansion (up to 128 disks)
  - \* Support one SAS HBA port to connect second DAS enclosure (EP-3163-S6S6) to expand the RAID of NAS (up to next 128 disks with next 7 SAS JBOD)
- Smart-function LCD panel for RAID & ENC status display and IP address setting
- 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
- 64 bit Linux-based embedded system
- Supports Tape/DAT backup/restore (Option)
- Centralization of Data and Storage Management
- Using Market-Leading Java Technology
- Latest volume snapshot technology
- Apply volume replication to enhance data protection
- Data Backup via backup plan and scheduling
- Enhance system configuration backup
- Local and external account management, support large account import
- Share management and permission (support ACL setting)
- Support Internet Gateway function
- Online expansion file system
- Support E-mail notification and system log information
- Multi application support via proFamily



# Series Technical Specifications

## EN-3163S6H-NQX

### Hardware Platform

Intel Quad Core Xeon 2.0G or above, single / dual Processor  
Cache memory: 3GB DDR3 SDRAM up to 32GB  
Two Gigabit Ethernet ports (10 Gigabit Ethernet for additional option)  
Up to Sixteen 1" hot-swappable 6G SAS/SATA3 (6Gb/s, NCQ support) hard drives  
Real time drive activity and status indicators  
Environmental monitoring unit  
Two(2) 460W high efficiency hot-swap power supplies with PFC  
Option: Two(2) 550W 80plus hot-swap power supplies with PFC for dual processor  
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 7 SAS JBOD enclosures, max. 128 disks)  
One(1) 4X SAS HBA port for next DAS connection (max. 128 disks with 1 RAID + 7 JBOD enclosures)

### RAID Controller Specifications

800MHz RAID-On-Chip storage processor  
Supports RAID level: RAID 0, 1, 10(1E), 3, 5, 6, 30, 50, 60 and JBOD  
Onboard 2GB ECC/Registered 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  
Local audible event notification alarm

### Storage Management

Volume Management (Support XFS, ext3 & ext4 file system)  
Disk usage statistics  
Hot spare capability  
iSCSI Target Manager: Support LUN Mapping / Initiator filter  
FC Target Manager: Support LUN Mapping

### General

File Server Independent  
Multiple language support  
Support UPS management  
Support LV encryption

### System Management

Automatic IP address configuration  
Self-contained unit - no extras needed  
Management through Web browser  
Flash upgradeable unit  
SNMP / MRTG management and notification  
Fail-free online firmware upgrade  
Unicode support  
Multi-node Management GUI  
proNAS Data and Configuration Backup

Central Management

### Networking

Supports NIC / trunking / load balance / fail over / 802.3ad  
DHCP Server / DHCP Client  
WINS Server  
Internet gateway

### Protocols

TCP/IP, SMB/CIFS, NFS, SNMP, FTP/SFTP/FXP, HTTP, HTTPS, Telnet, SSH, AFP, (Novell by TCP/IP, WebDAV)

### Client Operating Systems support

Microsoft® Windows® 98/ ME/ NT/2000 / XP / 2003 / Vista /2008  
Unix / Linux  
Mac OS

### Authentication

Local User Account/Group  
Microsoft NT Domain Controller (PDC)  
Microsoft Active Directory Authentication (ADS)  
Network Information Service (NIS)  
Support batch creating users/Group

User quota management

Share level security

File level security

User ID security for NFS

Recycle bin (Samba)

Audit file access (Samba)

Write once read many (WORM)

### Block Storage

iSCSI Target Support

Fiber Target Support (optional)

### Data Backup / Restore

Symantec BackupExec Agent (by additional installation)  
Scheduling Multi-Snapshot (Support snapshot of iSCSI & FC)  
Replication (Remote RealTime Data mirror)  
proNAS High-Availability (optional)  
Scheduling Duplication  
Scheduling Rsync Replication  
proBackup from client to NAS  
Support NetVaultR backup Client (by additional installation)  
Support CA ARCserve (by additional installation)  
Support CDP Server (by additional installation)  
Support Mac Time machine

### Power requirements

AC 100V ~ 240V Full range  
10A ~ 5A, 47~63Hz

### Physical Dimension

133(H) x 482(W) x 728(D)mm

Specification are subject to change without notice.

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