



NIVEO Network Attached Storage Series

NNAS-D5

NNAS-R8

NNAS-R12

NNAS-R12E / NNAS-E12

More information:

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Product Specification

Introduction

The NIVEO NNAS series is specifically designed for optimal performance Data Storage in Custom Electronics Setup. The Network Attached Storage Range provides high-end and very reliable storage for performance demanding Multimedia streaming and completes the best quality designed AV-set ups available and allows for almost unlimited enjoyment of your Multimedia collection in your home, office or hotel.

The Niveo NAS range starts at a 5 bay desktop version, allowing up to 15TB of data storage (Up to 3000hrs of HD Blu Ray movies) up to the 120 Bay Expandable NAS System, providing up to 360TB of Data Storage.

Securing your valuable Multimedia library

The Niveo NNAS systems are built with the most reliable components and the high speed data access allows for flawless multiple simultaneous media streams in even the highest definition.

The hot swappable bays and the flexible raid control secures your precious multimedia from loss. With the optional remote monitoring and redundant raid control and power supply you media will have the optimal protection and can be enjoyed unlimited.

NNAS-D5



The Niveo NNAS-D5 is a professional SATA II NAS Subsystem. It is a stylish and compact size design for home and small business environment. It provides reliable, cost-effective way to add storage on the network. It comes with 5 3,5" drive trays accommodating SATA II drives and achieves true hot swap capability. Built-in PowerPC processor, support up to 4GB DDR2 SDRAM and two Gigabit Ethernet ports for offers high performance of NAS platform.

Embedded OS design provides quickly booting and high reliability.

The NNAS-D5 system is managed and configured by Flex / Ruby browser based software, including pre-configure disk capacity, users setting, volume management, quick installed on popular network platform, Multi protocol support, etc.



The NNAS-D5 is equipped with a hardware RAID engine to offer fault tolerant of data protection. It is a full featured data protection supporting RAID levels 0,1,5,6,10 Linear(JBOD) System reliability is ensured by an environmental monitoring unit, which tracks the enclosure temperature as well as individual disk temperatures. If any irregularity in these systems occurs, the monitoring unit alerts the administrator.

NNAS-R8



The NNAS-R8 (SATA II NAS Subsystem) is a reliable, cost-effective way to add storage to the network. It comes with 8 drive trays

accommodating 3.5" SATA II drives while the SATA single connector architecture enables true hot swap capability. The NNAS-R8 is designed the fit any regular 19" rack, using just 2U of space.

Built-in Intel Celeron 1.6G CPU, 2GB DDR2-667MHz SDRAM and two Gigabit Ethernet ports offers high performance NAS platform. Linux based embedded OS design within Disk on Module for guarantee reliability and boot quickly. The NNAS-R8 system is managed by proNAS 1.x operating system, it enhances system availability, and manages complex storage environments easily. The NNAS-R8 is equipped with a RAID function to offer fault tolerant data protection. It is a full featured data protection supporting RAID levels 0, 1, 5, 10, JBOD.

NNAS-R12



The NNAS-R12 is a SATA II NAS Subsystem with proNAS 1.3 operating system. It enhances system availability, and manages

complex storage environments easily. For improving business productivity and minimizing business risks, NNAS-R12 provides a volume replication and a volume snapshot function. It is also a full featured data protection system supporting RAID levels 0,1,3,5,6,0+1 and JBOD. It supports hot spares and automatic hot rebuild.

Its Intel Dual Core 3.3G (i3-2120) processor and 12 hot swappable bays allow for optimal performance in Media streaming with a capacity up to 36 TB.



NNAS-R12E & NNAS-E12



The NAS-R12E is a best in class SAS/SATA II NAS Subsystem with proNAS 1.3x operating system. Its high end component build

maximises system availability, and manages complex storage environments easily. For the highest performance in the most demanding AV-environment its is composed of the best available components and designed for ultimate Media experience. The NNAS-R12E 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.

The NNAS-E12 expansion enclosure seamlessly integrates with the system. The expansion capabilities allow for scaling up to 120 hard drives allowing storage for up to 360TB of media.



Specification

| Model No. | NNAS-D5 | NNAS-R8 | NNAS-R12 | NNAS-R12E |
|-------------------------------|---|--|--|--|
| Platform | Tower | Rack | Rack | Rack |
| Form Factor (Height) | 261mm | 2U | 2U | 2U |
| CPU | Intel Atom Dual Core 1.8G | Intel Celeron 1.6G CPU (or above) | Intel Dual Core 3.3G (i3-2120) | Intel Quad Core Xeon 3.1G (E3-1220) |
| Memory | 2GB DDR3 SDRAM or up to 4GB | 2GB DDR2 SDRAM | 4GB DDR3 SDRAM | 4GB DDR3 SDRAM |
| Ethernet Port | 1GbE * 2 | 1GbE * 2 | 1GbE * 3 | 1GbE * 3 |
| Disk Interface | SATA II | SATAII | SATAII | SASII/SATAIII |
| Hot Swap Tray | 5 | 8 | 12 | 12 |
| Power Supply | 270W power supply with PFC | 400W x 1 power supply w/PFC (upgradeable to redundant power supply) | 400W x 2 power supply w/PFC | 650W x 2 power supply w/PFC |
| SCSI Interface for Tape | N/A | Option | Option | Option |
| NAS OS | proNAS v.2.x | proNAS v.1.3.x | proNAS v.1.3.x | proNAS v.1.3.x |
| CDP Server software | N/A | Yes | Yes | Yes |
| CDP agent | N/A | 100 agent default for trial, max. 20 agent supported | 100 agent default for trial, max. 50 agent supported | 100 agent default for trial, max. 100 agent supported |
| NAS OS upgrade | Web browser | Web browser | Web browser | Web browser |
| H/W RAID support | N/A | Yes | Yes | Yes |
| RAID level | 0,1,5,6,10 and JBOD | 0,1,5,10,JBOD | 0,1,3,5,6,0+1,JBOD | 0,1,5,6,10,50,60,JBOD |
| SAS expander | N/A | N/A | N/A | Yes, up to 120 x HDD in total |
| Network Client Support | Windows, Unix/Linux, Macintosh | Windows, Unix/Linux, Macintosh | Windows, Unix/Linux, Macintosh | Windows, Unix/Linux, Macintosh |
| Protocol Support | TCP/IP, DHCP, Apple talk/MAC zone, AFP over TCP/IP, SMB/CIFS, NFS, SNMP, FTP, Telnet, NAT, SSH, NTP, DAAP | TCP/IP, DHCP, SMB/CIFS, NFS, SNMP, FTP, SFTP, HTTP, Telnet, SSH, AFP | TCP/IP, DHCP, SMB/CIFS, NFS, SNMP, FTP, SFTP, HTTP, Telnet, SSH, AFP | TCP/IP, DHCP, SMB/CIFS, NFS, SNMP, FTP, SFTP, HTTP, Telnet, SSH, AFP |
| Volume Management | Yes | Yes | Yes | Yes |
| Multiple Volume Group | N/A | Yes | Yes | Yes |
| Online Logic Volume Expansion | Yes | Yes (max. up to 8 ExaBytes) | Yes (max. up to 8 ExaBytes) | Yes (max. up to 8 ExaBytes) |
| Disk Roaming | Yes | Yes | Yes | Yes |
| RAID expansion | Yes | Yes | Yes | Yes |
| RAID Level Migration | N/A | Yes | Yes | Yes |
| Veritas BackupExec Agent | N/A | Yes, (by option) | Yes, (by option) | Yes, (by option) |
| Backup/Restore support | Yes | Yes | Yes | Yes |
| Backup to USB | Yes | Yes | Yes | Yes |
| Backup to Remote Share | Yes (SMB/NFS) | Yes (SMB/NFS) | Yes (SMB/NFS) | Yes (SMB/NFS) |
| Backup to Tape | N/A | Yes | Yes | Yes |
| proBackup support | N/A | Yes | Yes | Yes |



| Model No. | NNAS-D5 | NNAS-R8 | NNAS-R12 | NNAS-R12E |
|--|-----------------------------|-----------------------------|---|---|
| Multi-Snapshot with Scheduling | N/A | Max. 8 | Max. 16 (need to enlarge memory to 32GB to support max. 64) | Max. 16 (need to enlarge memory to 32GB to support max. 64) |
| Multi-Snapshot with Scheduling over iSCSI target | N/A | Ready in Q3/2011 | Ready in Q3/2011 | Ready in Q3/2011 |
| Multi-Snapshot with Scheduling over FC target | N/A | Ready in Q3/2011 | Ready in Q3/2011 | Ready in Q3/2011 |
| Replication / Cluster (2 nodes active, standby) | N/A | 2 nodes | 2 nodes | 2 nodes |
| Rsync (server or client) | File level (local & remote) | File level (local & remote) | File level (local & remote) | File level (local & remote) |
| Duplication | N/A | File level (local) | File level (local) | File level (local) |
| SNMP/MRTG support | SNMP only | Yes | Yes | Yes |
| Trucking/load balance/fail over | Yes | Yes | Yes | Yes |
| DHCP server | Yes | Yes | Yes | Yes |
| Monitor / Management | Single node | Multiple nodes | Multiple nodes | Multiple nodes |
| iTunes server | Yes | N/A | N/A | N/A |
| Printer server | Yes | N/A | N/A | N/A |
| BT download | Yes | N/A | N/A | N/A |
| PHP server | Yes | N/A | N/A | N/A |
| MySQL Server | Yes | N/A | N/A | N/A |
| DLNA (UPNP) | Yes | N/A | N/A | N/A |
| P2P | Yes | N/A | N/A | N/A |
| MAC Time Machine | Yes | Yes | Yes | Yes |
| World Wide Web Server | Yes | N/A | N/A | N/A |
| Photo Album | Yes | N/A | N/A | N/A |
| iSCSI target | Yes | Yes | Yes | Yes |
| iSCSI Host Initiator IP Filter | N/A | Yes | Yes | Yes |
| MPIO support | Yes (iSCSI target only) | In plan | In plan | In plan |
| FC target | N/A | Yes (by option) | Yes (by option) | Yes (by option) |
| FC WWN Host Filter | N/A | Yes | Yes | Yes |
| iSCSI/FC target volume migration | N/A | Yes | Yes | Yes |
| Windows ADS support | Yes | Yes | Yes | Yes |
| Linux NIS support | Yes | Yes | Yes | Yes |
| Openldap support | N/A | Yes | Yes | Yes |
| Recycle Bin suport | N/A | Yes (SMB only) | Yes (SMB only) | Yes (SMB only) |
| Share folder audit support | N/A | Yes (SMB only) | Yes (SMB only) | Yes (SMB only) |
| Windows / MAC Client Discover Utility Tool | Yes | Yes | Yes | Yes |