

# DNAS

## DNAS

DNAS is a new type storage technology designed for dynamic networking environments. DNAS delivers significant benefits over traditional server attached storage.

## Plug and Play Storage

All DNAS systems come equipped with a direct connection module, which allows them to connect to your existing network, by just plugging them into your network hub. All DNAS units come pre-formatted and RAID 5 configured, thus installation is very simple in fact a typical DNAS unit can be set up and running in less than 15 minutes. There is no need for client licenses or servers.

## Universal Accessibility

Virtually any type of client can connect to a DNAS unit, including PC, MAC, SUN, HP IBM,AS400, in fact, any computer you can connect to your network can access a DNAS storage partition. A DNAS storage partition is the area on the the DNAS unit which is reserved for user data.

## Enterprise Storage Management via a Web Browser console

The storage partition, is created and managed via a web browser based management console. The management console is a powerful program which allows you to administer the DNAS system, and incorporates such functions, as allocating storage resources amongst users and setting up a security regime to restrict access based on group or user id. The management console manages all the DNAS units connected to your network. This is a very powerful way to manage the whole of your companies storage resources from one management console.

## Direct Tape Backup

DNAS comes equipped with an integral tape backup option. The system features an external SCSI port, which can be used to connect an external tape device. The tape devices are controlled by an inbuilt tape backup program which is administered via a web browser.

## RAID 5 Data Protection

All DNAS units feature RAID 5 data protection. In addition a hot online spare drive is provided. The system constantly monitors the status of all drives, if it detects a drive failure, the hot online spare is automatically activated and takes the place of the failed drive. When the faulty drive is replaced the new drive then becomes the online spare.

## Redundant elements to enhance fault tolerance

DNAS units feature a number of redundant elements to enhance the operational fault tolerance of the units. These elements include redundant hot swap power supplies, and online spare hard drives.

## Infinite Scalability

Unlike traditional RAID systems with their limitations as to cabling and the number of PCI slots e.t.c. DNAS, units can be scaled infinitely, you can start out with 144GB unit and scale to 8000GB. DNAS features an advanced file system and volume manager which allows the addition of extra storage without the need for rebuilding raid. Storage can be added and become instantly available.

## Performance

The systems are designed from the ground up, to optimize I/O processing. Unlike traditional servers which are designed as general purpose computers, and are typically running a large operating system which has to share the workload among competing tasks, DNAS units only do one thing: move data off the disks as fast as possible. DNAS units come equipped with multiple channels for I/O processing.

The installation of a DNAS system on a network usually leads to an improvement in general network performance as they offload a lot of typical server processing. DNAS units allow servers to concentrate on running applications such as database, messaging etc rather than managing file I/O. The network performance of DNAS units can be further enhanced via the addition of extra network ports on the DNAS units. The standard ethernet based DNAS unit can have the number of network ports (NICs) increased from 1 to 6, a GIGABIT , ATM, Fibre Channel or Firewire option is also available.

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## Technical specification Direct Network Attached Storage

### RAID Array - Features

144 - 8000GB Total Capacity  
Support for RAID 0,1, or 5  
Background rebuild of spare drive

### Hard Drives and Carriers

Mounted in hot swap cannisters  
Carriers incorporate integrated key locks for maximum security

### Physical dimensions

#### Tower version:

Width : 355mm  
depth : 570mm  
height : 720mm  
weight : 50kgs  
max drives : 12

#### Rackmount version:

Width : 220mm  
Depth : 570mm  
Height : 437mm  
Weight : 32kgs  
max drives : 7

### Environmental Specifications Temperature

Fahrenheit : 32-104  
Centigrade: 0-40

### Humidity:

10% - 80%

### Electromagnetic emissions

Class B FCC

### Regulatory Approvals

CE, CUL

### Power Supply

2 x 300W redundant

### System Protocols

Netware:NCP over IPX and IP  
Windows: SMB over Netbios  
DHCP and TCP/IP  
UNIX: NFS over UDP/IP, TCP  
BOOTP and FTP  
WWW: HTTP over TCP/IP  
Macintosh: IP and Appletalk

### File Systems

Netware: shows up as a Netware file server. Mount with Netware tools. Total storage mounted under one drive letter.

Windows: shows up as an NT server. Mount using Explorer or File manager. Total storage seen as 1 drive letter.

UNIX: set IP address via browser use standard mount

WWW: set IP address browser.

Access by specifying DNAS IP.

Macintosh: appears in chooser.

Apple share can see DNAS as if it were another MAC.

### Security

Windows: password authorization via NT domain controller.

Netware: passwords authorization via the file server including NDS.

Independent: password and user level security support provided as well as above.

### Tape Backup

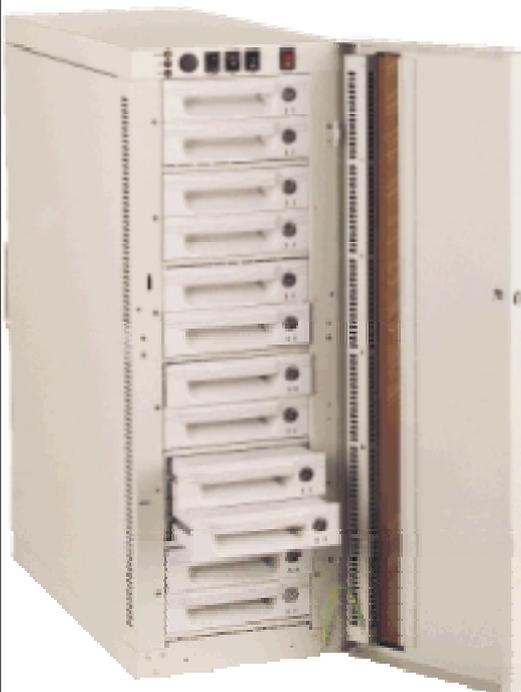
DNAS unit can be backed up via inbuilt SCSI port to an external tape device. Backup process controlled via browser.

### Network Attachment

10/100 Ethernet  
Gigabit Ethernet  
ATM  
Fibre Channel  
Firewire (1394)

### Warranty

1 year RTB standard  
Options:1 year onsite  
3 year onsite



FireWire



GIGABIT ETHERNET

FIBRE CHANNEL