

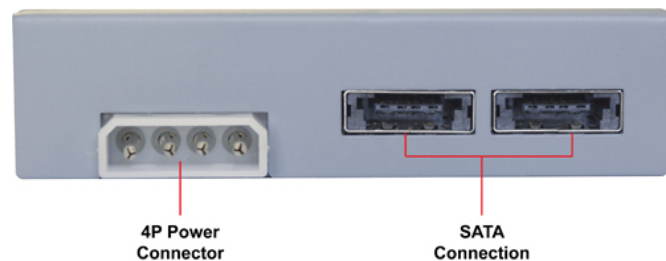
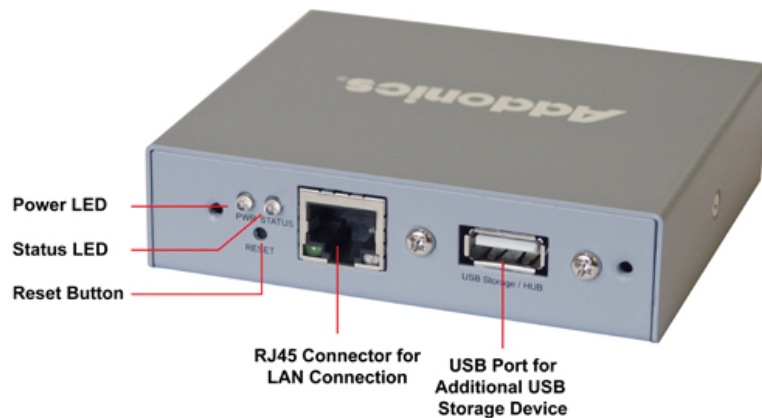
### INTRODUCTION

**Share as many as 16 hard drives over the LAN 85MB/sec transfer speed over 1G network  
As large as one exbibyte per drive volume Enterprise NAS at a fraction of the cost**

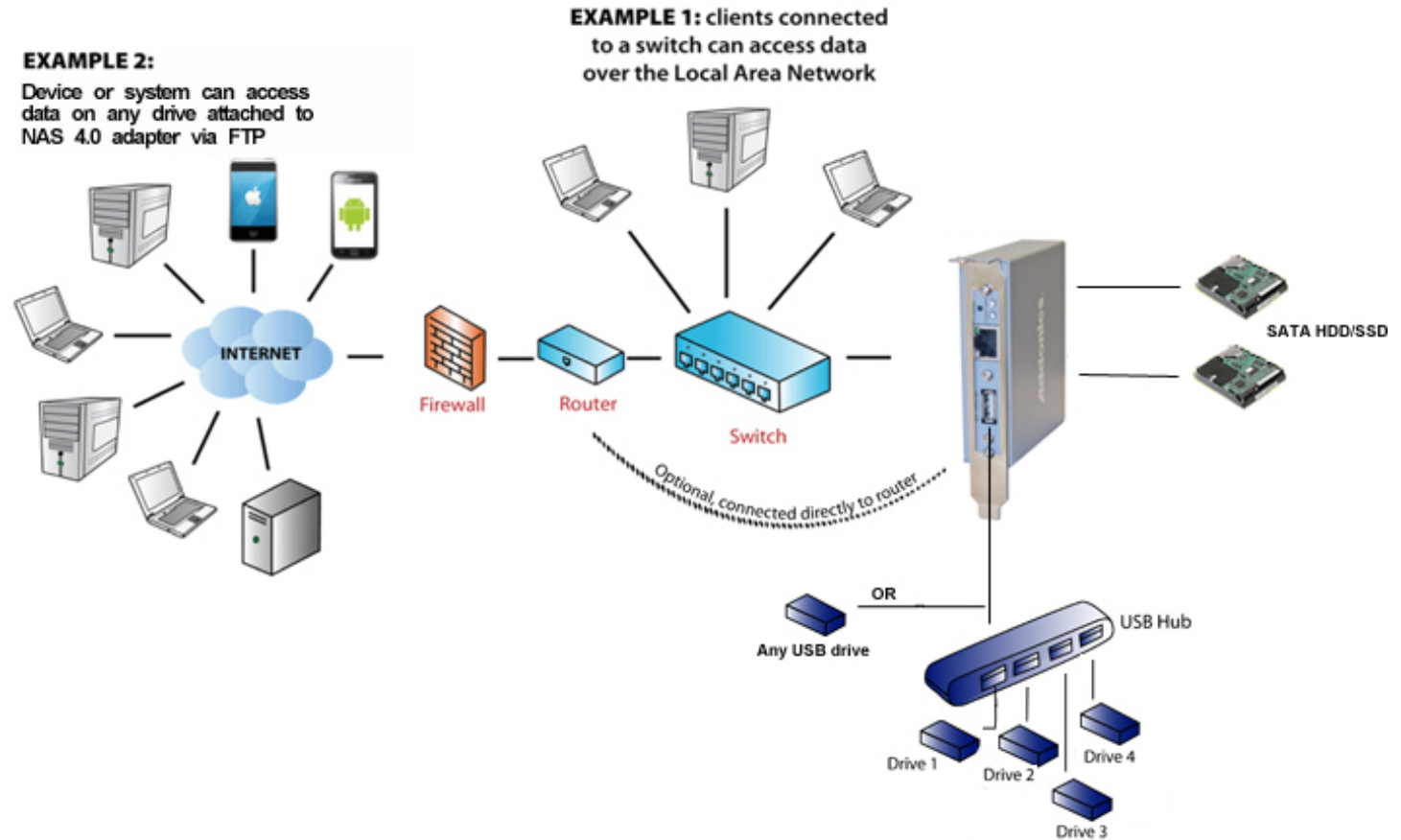
This internal GigaNAS adapter is a simple solution for custom build your own high capacity Gigabit Network Attached Storage appliance. Come with all the necessary mounting brackets, this internal GigaNAS adapter can be mounted into any computer chassis with a standard PCI slot or Storage chassis such as the Addonics family of Storage Tower that has a centronic 50-in (SCSI-I) cut out.

The internal GigaNAS adapter is built basing on the same electronic and firmware of the NAS 4.0 adapter. There are two SATA ports and two USB ports that support connecting up to a total of 16 drives or RAID volume. By connecting drives to the SATA port of this GigaNAS adapter and onto the Gigabit network, data transfer rate can exceed 85 MB/sec., out performing many expensive NAS solution in the market.

The internal GigaNAS adapter supports storage devices with multiple partitions, with each partition appearing as a share folder on the network. The supported file system includes XFS, EXT2, EXT3, EXT4, NTFS and FAT32. A very large storage in excess of hundreds or thousands of Terabytes storage capacity can be easily built by attaching multiple drives or RAID volume via Port Multipliers or USB hubs. A storage farm with enough storage capacity for commercial data center can be easily put together at just a fraction of the cost of an enterprise storage system. More storage can be added to the Internal GigaNAS adapter in many many years to come without ever reaching the capacity limitation.



## Network Connection illustration



## FEATURES

- A powerful tool for creating a custom Network Attached Storage appliance
- Install into any computer chassis via PCI slot
- Can be mounted inside storage chassis or Addonics family storage tower via the Centronic 50-pin (SCSI - I) cut out
- Two SATA ports for connecting up to two SATA hard drives or RAID Volume created by a Port Multiplier
- One external USB 2.0 ports for attaching additional USB storage
- Up to 16 storage devices can be connected to the LAN with the following additional accessories:
  - USB Hub
  - Port Multiplier (PM) via USB connection such as the Addonics PM model AD5HPMREU. Please review using the PM in the Q&A section for more detail
- Support Up to 15 partitions per storage device - giving a maximum 240 drive volumes on the network
- Built-In SMB / Samba server for file sharing over LAN
- Built-in FTP server for file access over the internet
- Same folder can be shared using SMB on LAN or FTP over WAN, great for setting up your private Cloud storage
- Support any eSATA or USB storage with XFS, EXT2, EXT3, EXT4, NTFS or FAT32 file system
- Maximum partition size or drive volume capacity:
  - XFS - 16 tebibyte (TiB)
  - EXT3 - 16 tebibyte (TiB)

## FEATURES (Cont.)

- EXT4 - 16 tebibyte (TiB)
- NTFS - 16 TB
- FAT32 - 2TB
- Storage device with existing data can be attached to the NAS adapter (the folder name must be in large CAP to be sharable). See Q&A section on folder and file security setting.
- Built-in file formatting utility for XFS and EXT3
- Support 10/100/1000 Mbps network
- Maximum data transfer over Gigabit LAN:

	SATA storage		USB storage	
	read	write	read	write
<b>XFS</b>	up to 85 MB/sec	up to 45 MB/sec	up to 30 MB/sec	up to 30 MB/sec
<b>EXT3 or EXT4</b>	up to 50 MB/sec	up to 35 MB/sec	up to 30 MB/sec	Up to 30 MB/sec
<b>NTFS</b>	up to 16 MB/sec	up to 5 MB/sec	up to 16 MB/sec	up to 5 MB/sec
<b>FAT32</b>	up to 18 MB/sec	up to 8 MB/sec	up to 18 MB/sec	up to 8 MB/sec

- Built-in MLDonkey client for direct download to the attached storage device
- Web GUI administration
- User management to allow read only or read/write access to folders
- USB port can be used to power most 2.5" USB hard drives or any low power USB storage device
- Simple to install
- Small and light weight. Size of a cigarette pack. Can be installed practically anywhere
- Rugged metal enclosure for use in wide range of application environments
- Compatible with all Windows OS, Mac OS X, Linux 2.6.x and above

\*USB hard drives over 2TB from Western Digital and Seagate such as the GoFlex series are not compatible, please see detail explanation in Q&A section

### SPECIFICATIONS

- Two SATA connectors
- One external USB 2.0 type B female connector
- USB port can supply power up to 1.5A at 5V
- One RJ45 socket for 10/100/1000Mbps Ethernet connection
- File systems support: XFS, EXT3, EXT4, NTFS, FAT16, FAT32
- Support connecting up to sixteen (16) storage devices to the LAN by expanding via the USB connection (requires combination of USB hubs or Addonics 5-port HPM-XU Port Multiplier)
- Maximum # of partition per storage device - 15
- Maximum user accounts:
  - Samba server - 64,000\*
- Maximum # of concurrent connections:
  - Samba and FTP server combined - 32,000\*
- LED for power, status and LAN activity
- Power consumption: 2 watts @ idle, 2.5 watts average during operation
- Dimensions (L x W x H): ~ (105 x 90 x 23) mm or (4.13 x 3.54 x 0.91) in.
- Weight: ~169g (6 Oz) including the PCI bracket
- Operation Temperature: 0 °C ~ 70 °C
- Operation Humidity: 10 ~ 90 %RH
- Storage Temperature: -20 °C ~ 70 °C
- Storage Humidity: 5~ 95 %RH

\* These are the theoretical limits in the kernel. As # of concurrent connections increase, performance starts to decline depending on the drive access activity from the concurrent connections.