TS-110/ TS-210 Turbo NAS

All-in-one NAS Server with iSCSI

for SOHO and Home Users

- **Share, Access and Manage the Stored Files Securely**
- **Built-in iSCSI Target Service**
- **Virtual Disk for Storage Expansion**
- **Most Advanced Backup Solution (Auto-Sync/ Instant/ Schedule Backup)**
- **Built-in UPnP/ DLNA Media Server for Digital Home Entertainment**
- **Comprehensive Log Systems**
- **Low Power Consumption**

Brand NEW
800MHz CPU
256MB DDRII Memory

Unleash the NAS Power with GUI V3
Simply the best user experience with Ajax technology

Abundant SOHO & Home Features

- **File Server**
- **Web Server**
- **FTP Server**
- **Media Server**
- **Remote Replication (Rsync)**
- **Surveillance Station**

- **iSCSI Target**
- **Printer Server (Max. 3 Sets)**
- **Mirror Station**
- **Multimedia Station**
- **Download Station**
- **and more...**

UPS Support | iSCSI Target | SNMP | OS Support | HDD S.M.A.R.T. | Schedule on/off | BT download | UPnP DLNA

Media Server | Virtual Disk Drive | SMS Support | Printer Server | PHP SQLite & MySQL | QPKG Support | iTunes Server

All-in-one NAS Server with iSCSI
for SOHO and Home Users

Overview

More and more people are turning to network attached storage (NAS) as an alternative for PC-based servers to store their digital contents due to native NAS advantages such as low power consumption, small size, and easy installation/setup. The QNAP TS-110 and TS-210 Turbo NAS are the most economic one-drive and two-drive storage solutions for Prosumers and SOHO users who want a NAS with compelling features, solid performance, low power consumption and high reliability.

Incorporating a Marvell 800 MHz CPU and 256MB DDRII RAM, the power consumption of the TS-110 and TS-210 Turbo NAS in operation is only 7W and 14W respectively which is much less than that of a PC. The TS-110 and TS-210 offer features more often found in much higher end NAS servers,

including built-in iSCSI target service, policy-based unauthorized IP blocking, SNMP (Simple Network Management Protocol), remote replication, a Gigabit LAN port, and 3 USB ports (the front USB port includes an auto-copy feature).

The TS-110 and TS-210 Turbo NAS are not only an ideal storage server but also a multimedia station to enhance your home entertainment experience. The built-in UPnP/ DLNA media server (with TwonkyMedia enabled) of the Turbo NAS supports gaming consoles for media playing and the NAS works well with NFS-supported High-Definition (HD) digital media players. Also, the AJAX-based NAS management software utilizes a web interface that allows intuitive management of all the Turbo NAS features.

All-in-One Server Features

UPnP Media Server (with built-in TwonkyMedia Server)
The Turbo NAS is a perfect media storage center and it works well with DLNA (Digital Living Network Alliance) compliant media players. You can play the photos and videos on TV, or listen to your favorite music and Internet radio on your Hi-Fi system.

Multimedia Station for Photo Sharing
You can share your photos, video, or music online by the Multimedia Station of the Turbo NAS.

Music Sharing by iTunes Server
All your MP3 music can be collectively stored and streamed to Mac or Windows PC. Just turn on the iTunes program and enjoy all the music around your home network.

PC-less Download Station
The Turbo NAS supports BitTorrent, FTP, and HTTP download without PC. TCP/ UDP, encrypted BT download function, and DHT (Distributed Hash Tables) are also supported. It supports to download BitTorrent, emule/ eDonkey and NZB files.

File Server
The Turbo NAS allows you to create user ID and password, and define the authority and quota for each user.

QGet Download Utility for Windows and Mac
You can use the QGet download utility provided by QNAP to manage the download tasks on multiple Turbo NAS servers.
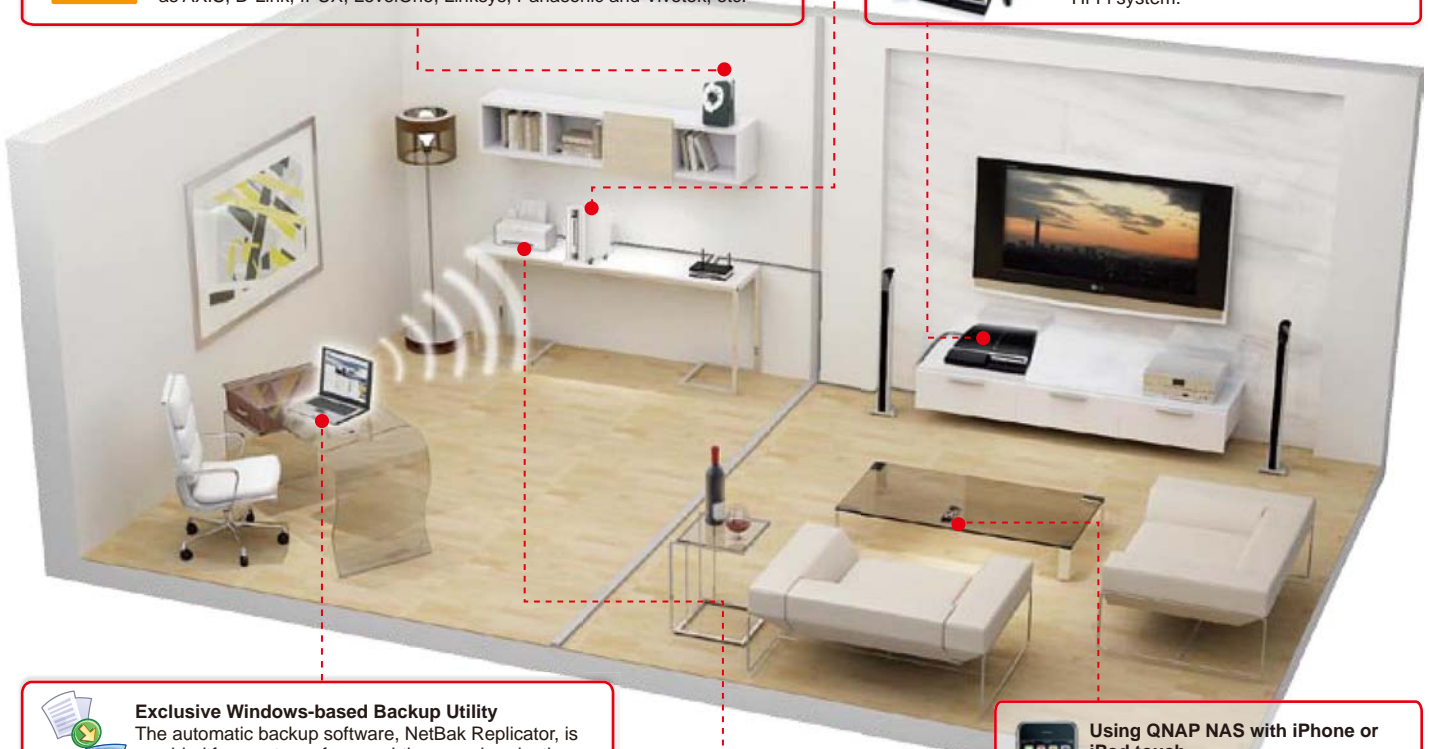
Surveillance Station
The Surveillance Station enables you to configure and connect IP cameras simultaneously and remotely manage the functions. The Surveillance Station of QNAP NAS supports all the leading network camera brands such as AXIS, D-Link, IPUX, LevelOne, Linksys, Panasonic and Vivotek, etc.

Supports PS3 and XBox360
All the photos, music, and videos stored on the Turbo NAS can be played via PS3 or XBox360 on your LCD TV or stereo Hi-Fi system.

Exclusive Windows-based Backup Utility
The automatic backup software, NetBak Replicator, is provided for you to perform real-time synchronization or schedule backup from multiple PCs to the Turbo NAS.

FTP Server
You can establish your own FTP server by using the Turbo NAS and share the files conveniently with your friends .

Printer Server
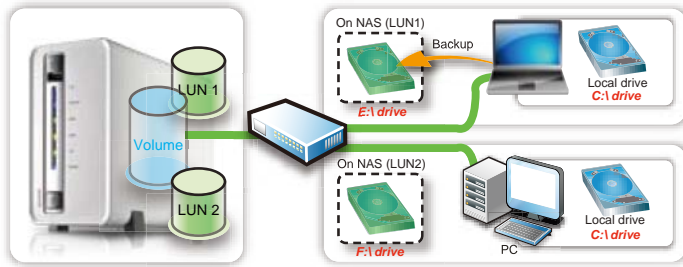The NAS supports network printer sharing function (max 3 USB printers).

Using QNAP NAS with iPhone or iPod touch
By installing DLNA/ UPnP application on the iPhone or iPod touch, you can access QNAP NAS on the local network and play the multimedia contents, e.g. videos, music, and photos on the server.

Flexible Built-in iSCSI Target Service

With the built-in iSCSI target feature, the NAS can be an ideal solution for backup or storage expansion. Users can easily create dedicated virtual drives on the NAS for their PCs or existing servers. The iSCSI drives on the NAS can be formatted as file system and used as local drives.

Seamless Media Playing

The Turbo NAS is a perfect home media storage center to save your photos, music and videos. You can use the NAS with network multimedia players (e.g QNAP NMP-1000) to set up your cinema-grade home theater and bring all the multimedia contents to the living room. The HD videos store in the NAS can be concurrently streamed to multiple media players for stable and high quality playback. It provides you excellent experience of viewing the HD videos.

Convenient System Tools

Batch Creation of Users and Network Shares
The NAS supports batch creation of users and share folders to save your time and effort in account and folder creation.

Instant SMS & Email Alert
You can configure the SMTP server and SMSC server settings on the NAS in order to receive instant system warning or error messages by email or SMS.

Smart Fan
The fan rotation speed is automatically adjusted according to the server's temperature. You can also define the system temperatures to trigger high speed or low speed rotation of the fan.

Smart Hard Drive Tools

HDD S.M.A.R.T. (Self-monitoring Analysis and Reporting Technology)
HDD S.M.A.R.T. offers a quick overview of the hard drive status which enables you to monitor the hard drives and check potential problems. You can also set the schedule for S.M.A.R.T. test (rapid or complete) to ensure the health of the hard disks.

Advanced Hard Drive Protection (HHS)
The embedded HHS (HDD health scanning) technology supports disk checking and bad blocks scanning which helps you discover the abnormal issue of the hard disks to prevent disaster.
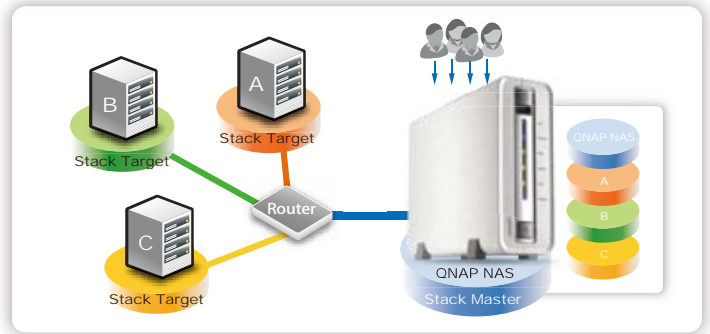
Surveillance Station

Live Audio & Video Monitoring, Recording, and Playback over the Internet

- ☑ High quality video recording in MPEG4 and Motion JPEG format
- ☑ Real-time monitoring and recording for up to 30 frames/sec per channel
- ☑ Live 2-way audio supported for monitoring and voice broadcasting
- ☑ Easy installation and management from remote locations

Virtual Disk for Storage Expansion

The unique "Virtual Disk Drive" adds flexibility to expand the capacity of NAS. By using the built-in iSCSI initiator, the NAS can connect to other iSCSI targets on the network and turn them into virtual disks, which become multiple single volumes on the NAS. Up to 8 virtual disks can be stacked. The NAS serves as the storage stack chaining master. The user only needs to connect to this single entry (QNAP NAS) and is able to reach and use all the iSCSI target storages on the network.
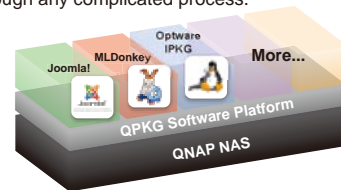

Efficient Power Management

1. Hard Disk Standby: You can configure the hard disks to enter standby mode if there is no disk access within the specified period.

2. Schedule Power on/ off: The flexible schedule power on/ off feature enables you to manage the NAS server's up time according to the working hours. You can set the time for automatic system power on, power off, or restart on any days of the week.

3. Power Resumption Settings: The Turbo NAS can be configured to be turned on or off when the AC power resumes after a power loss.

4. UPS Support & Advanced Standby Setting: The Turbo NAS supports the majority of USB UPS devices (usbhid-ups supported). You can also set the time for the server to enter stand-by mode when an abnormal AC power supply is detected. When the power resumes, the server resumes to the operation status before the power outage.

Low Power Consumption

TS-110 (In operation)	7W
TS-210 (In operation)	14W
PC server	350W

Software Expansion via QPKG

The QPKG software package platform enables you to maximize the usage of the NAS by installing additional software packages developed by the users and community worldwide. This can be done by simple "download & install" clicking without going through any complicated process.

Comprehensive Log System

The logs of connections to the NAS via samba, FTP, AFP, HTTP, HTTPS, Telnet, iSCSI, and SSH, and networking services accessed by the online users are all recorded.

Complete Backup Solution

NetBak Replicator (no license account limitation)
The backup software, NetBak Replicator, is provided for the NAS users to perform real-time synchronization or schedule backup from multiple PCs to the NAS.

Remote Replication by Rsync
The data on the Turbo NAS can be backed up to or from another Turbo NAS or Rsync server over the network.

3rd Party Backup Software Ready
Acronis True Image, CA BrightStor ARCserve Backup, EMC Retrospect, Symantec Backup Exec, and LaCie Silverkeeper.

USB One Touch Auto Copy
The one touch copy button can be configured to trigger data backup from the external USB device to the NAS or the other way round (applies to the USB device connected to the front USB port of the NAS only).

Hardware Specifications

Processor
- Marvell 6281 800MHz

Memory
- 256MB DDRII RAM, 16MB flash

HDD Capacity
- TS-110: 1 x 3.5" SATA I/II HDD, up to 2 TB (the standard system is shipped without HDD)
- TS-210: 2 x 3.5" SATA I/II HDD, up to 4 TB (the standard system is shipped without HDD)

LAN Port
- 1 x Gigabit RJ-45 Ethernet port

LED Indicators
- USB, status, eSATA (TS-110 only), HDD, LAN, power

USB
- 3 x USB 2.0 (front:1; back:2), supports USB printer, USB disk, digital camera, pen drive, USB hub, and USB UPS etc.

eSATA
- eSATA port (back; TS-110 only)

Buttons
- One touch copy button
- Power button
- Reset button

Alarm Buzzer
- System warning

Form Factor
- TS-110: Portable desktop
- TS-210: Portable desktop

Dimensions
- TS-110: 165.5(H) x 60(W) x 218.4(D) mm
  6.52(H) x 2.36(W) x 8.6(D) inch
- TS-210: 165.5(H) x 85(W) x 218.4(D) mm
  6.52(H) x 3.35(W) x 8.6(D) inch

Weight
- TS-110
  Net weight: 0.79 kg/ 1.74 lb
  Gross weight: 1.7 kg/ 3.75 lb
- TS-210
  Net weight: 0.91 kg/ Gross weight: 2.01 lb
  Net weight: 1.9 kg/ Gross weight: 4.19 lb

Operation Environment
- Temperature 0~40°C
- Humidity 0~95% R.H.

Power Supply
- External adaptor
  TS-110: 36W, 100~240V
  TS-210: 60W, 100~240V

Thermal Solution
- Smart fan

Secure Design
- K-Lock security slot

Software Specifications

Operation System
- Linux-embedded system

Networking
- TCP/ IP, DHCP client, DHCP server, CIFS/ SMB, AFP, NFS, HTTP, HTTPS, FTP, DDNS, NTP
- Gigabit Jumbo Frame
- Network Service Discovery (UPnP & Bonjour)

File System
- EXT3 (Internal/ external HDD)
- EXT4 (Internal/ external HDD)
- FAT (External HDD)
- NTFS (External HDD)

Supported Operating Systems
- Microsoft® Windows® 2000/ XP/ 2003/ Vista
- Mac OS X
- Linux and Unix

Disk Management
- Single disk, RAID 0/ 1 and JBOD (TS-210 only)
- Q-RAID 1 (TS-110 only)
- Disk usage status management
- Check disk (Check Linux file system)
- HDD S.M.A.R.T.
- Bad blocks scan
- Built-in iSCSI target service
- Virtual Disk Drive(VDD) for storage expansion(max. 8 volumes)

User Management
- User quota management (per user)
- Windows AD
- User account management (max. 1024 users)
- User group management (max. 128 groups)
- Batch creating users

File System Management
- Network share management (max. 256 shares)
- Share folder level ACL support
- Hide share folder on Windows network
- Unicode support
- Journaling file system
- Web File Manager

System Tools
- E-mail alert (SMTP authentication)
- SMS alert
- SNMP
- HDD standby mode
- Disk usage alert
- Automatic power on after power loss
- System firmware upgrade
- Back up, restore, reset system settings
- Smart fan setting
- Configurable management port
- Policy-based unauthorized IP blocking
- Secure remote login by SSH connection; remote login by Telnet connection
- USB, SNMP UPS support
- Schedule on/ off (max. 15 settings)
- Network recycle bin
- Import SSL certificate
- Real-time system resource monitor

Event Logs
- Complete system logs (system events management, connection logs, current connection of on-line users)

Multilingual Support
- English, Traditional Chinese, Simplified Chinese, Japanese, Korean, French, German, Italian, Spanish, Russian, Swedish, Danish, Finnish, Norwegian, and Polish

Backup Management
- PC client backup software-NetBak Replicator: Instant/ Schedule/ Auto-sync backup
- Encrypted remote replication
- TS-110: Q-RAID 1
  TS-210: RAID 1
- Data back up to external storage devices
- USB one touch copy backup

Multi-browser Support
- Internet Explorer 7 & 8
- Safari 3 & 4
- Firefox 3
- Google Chrome

Powerful All-in-one Server

File server
- File sharing across Windows/ Mac/ Linux/ Unix and centralized management

FTP server
- Supports data access from remote location via FTP (max. 128 concurrent connections)
- FTP with SSL/ TLS (explicit) mode
- FTP bandwidth control and connection control
- Passive FTP port range control

Backup server
- Client-side backup software-NetBak Replicator supports instant, schedule, and auto-sync backup
- 3rd party backup software support: Acronis True Image, CA Brightstor ARCserve Backup, EMC Retrospect, Symantec Backup Exec, LaCie Silverkeeper

Printer server
- Network printer sharing via USB (Windows & Mac)
- Supports all-in-one printer (max. 3 sets)

Remote Replication
- Block-level remote replication supports instant, schedule backup management; supports synchronization mode

Web Server
- Built-in phpMyAdmin, Joomla!, editable php.ini, SQLite and MySQL

MySQL Server
- MySQL database server

UPnP Media Server
- Supports UPnP or DLNA technology; the video, music, and photos on the NAS can be played by digital media players over the local network
- Enjoy more than hundreds of worldwide Internet radio (built-in TwonkyMedia)
- Supports DLNA media playing with PS3, Xbox360, PSP
- Supports Nokia N95 (DLNA control point)
- Supports iPhone/ iPod DLNA/ UPnP application

iTunes Server
- iTunes server for music sharing
- Smart playlist for iTunes software

Multimedia Station
- Image slide show and rotation (+90°, -90°)
- Display photo details: date, exposure time, aperture, etc.
- Automatic thumbnail generation for easy browsing
- Photo album access authority management
- Multimedia files local playing
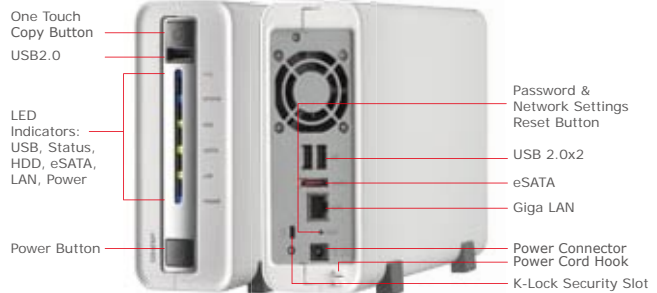- Automatic file categorization

Download Station
- PC-less BitTorrent/ FTP/ HTTP download
- QNAP remote download control software: QGet (Windows & Mac), allows you to control the download tasks of multiple Turbo NAS on one PC via LAN/ WAN.
- BitTorrent download supports TCP/ UDP tracker protocol, DHT
- BT schedule download
- BT tasks download (up to 500)
- Download configuration (current seed number, configurable port range, bandwidth control, download percentage, UPnP NAT port forwarding for BitTorrent download)
- Download status list management (download percentage)
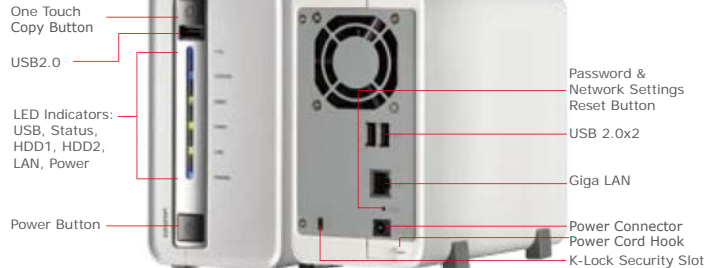- Supports access from Mac by Mozilla Firefox

Surveillance Station
- Supports 2 IP cameras (optional purchase) for network surveillance

TS-110

One Touch Copy Button
USB2.0
LED Indicators: USB, Status, HDD, eSATA, LAN, Power
Power Button

Password & Network Settings Reset Button
USB 2.0x2
eSATA
Giga LAN
Power Connector
Power Cord Hook
K-Lock Security Slot

TS-210

One Touch Copy Button
USB2.0
LED Indicators: USB, Status, HDD1, HDD2, LAN, Power
Power Button

Password & Network Settings Reset Button
USB 2.0x2
Giga LAN
Power Connector
Power Cord Hook
K-Lock Security Slot

*Designs and specifications are subject to change without notice. Please contact QNAP for updated information.

BitTorrent™

QNAP
www.qnap.com