

# TS-209

## Turbo Station

**QNAP**  
www.qnap.com

# All-in-one NAS Server

## for SOHO & Home Users

*Are you looking for an ideal NAS for your digital home? QNAP TS-209 is a perfect 2-bay home media storage which fulfills all your demands!!*

### Outstanding Performance with the Most Advanced Backup Solution

- 500MHz Powerful CPU with 128 DDRII and Gigabit LAN Interface
- Ultra-high-speed Download/ Upload Performance
- Auto-sync/ Instant/ Schedule Backup (Professional Backup Software, NetBak Replicator Included!)
- Encrypted Remote Replication

### Best Choice to Set up Your Own Web Server

- PHP with MySQL and SQLite Dual Support
- Built-in DDNS Support

### RAID 1 Mirroring with Hot-swapping

- Unique Hot-swapping Design in 2-bay Storage in the Market Providing the Enterprise-class Data Protection and Non-stop Service

### Connect TS-209 to Your Digital Home

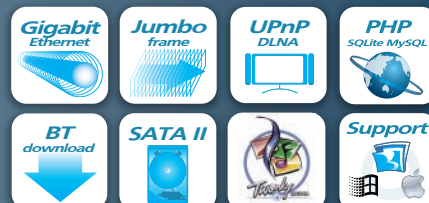
- Play the Photos, Videos and Internet Radio (with Built-in TwonkyMedia Server) via UPnP/ DLNA Compliant Media Players.
- Enjoy Your Music by iTunes Server
- Manage the Continuous Download Tasks by QGet Software, Anytime, Anywhere.
- Share Your Photos in Web-based Photo Album with Access Management



**Powerful 500MHz CPU**  
**128MB DDRII Memory**

### Abundant SOHO and Home Server Features

- |                     |                      |                    |
|---------------------|----------------------|--------------------|
| • File Server       | • Backup Server      | • Printer Server   |
| • FTP Server        | • Web Server         | • Media Server     |
| • iTunes Server     | • Mirror Station     | • Download Station |
| • Disaster Recovery | • Multimedia Station | • MySQL Server     |



# All-in-one NAS Server

## TS-209 Turbo Station

# 2-Bay • RAID 1 • Hot-swappable



## Features

QNAP TS-209 Turbo Station is the most powerful 2-bay Network Attached Storage (NAS) product designed for SOHO and Home users. TS-209 adopts the latest powerful 500MHz CPU with 128MB DDR II RAM and Gigabit Ethernet design; its ultra-high-speed performance significantly boosts the file sharing speed. Abundant valuable server features are also included, such as advanced auto-sync/ schedule/ instant backup, cross-platform sharing for Windows and Mac, Web Server of PHP with MySQL and SQLite, RAID 1 mirroring protection with hot-swapping design, encrypted FTP file sharing, encrypted Remote Replication, unique Web File Manager, built-in DDNS, SSL and SSH remote login, etc.. These differentiated designs make TS-209 a perfect choice for SOHO users who need faster performance and useful server features. With its friendly web-based interface, users can easily set up a network system for all sorts of server applications without MIS help.

TS-209 is also designed for home users. You can easily build up a perfect multimedia storage center for backing up and sharing multimedia files with your friends and family. TS-209 provides a lot of attractive server functions, such as iTunes Server, UPnP/ DLNA Media Server (TwonkyMedia) with Internet Radio, Multimedia Station with web-based photo album, BitTorrent Download Station, etc..

With the smart fan and excellent mechanical design of hard disk drive bracket to make wind tunnel effective, TS-209 provides the best heat dissipation efficiency among available NAS products in the market. TS-209 can run 24x7, 365 days for all applications and keep hard disk drive temperature under 50°C. Supporting two 3.5" SATA drives up to 2TB large storage capacity, QNAP TS-209 Turbo Station is no doubt a smart choice for SOHO and home users

## Versatile Functions for Small SOHO and Home Users

### Your Data Center for File Sharing and Storage



#### File Server

The basic purpose of File Server is to allow users to store and share files. Users often concern that their private data or confidential files would be accessed by others. TS-209 professional server allows server manager to create user ID and password, and define the authority and quota for each user. Thus personal data stored on TS-209 are well protected.



#### FTP Server

Having troubles with sending large files by e-mail due to the limited capacity? You can establish your own FTP server by using TS-209. You can manage the access authority of the FTP server and share your files with your friends or customers easily in a few steps.



#### Sharing files across Windows and Mac

TS-209 is specially designed for different users to share the files across Windows and Mac environment.



#### Ultra-high-speed Performance

TS-209 adopts the latest powerful Marvell 5182 CPU and large-sized 128MB DDRII memory for extra high performance (the highest performance of its class) in uploading mass data to and downloading them from the server.



#### PHP MySQL & SQLite Supported Web Server

Owning a web server is no more a dream! With the dual support of MySQL and SQLite, SOHO & home users can easily set up their own web server. With the editable php.ini support, there is no need of going through all the hassles of setting up a web server. You can either develop programs by yourself or download a variety of open-sourced applications, such as online shops, forums, blogs, etc., over the Internet.

### Back up and Share Your Digital Contents



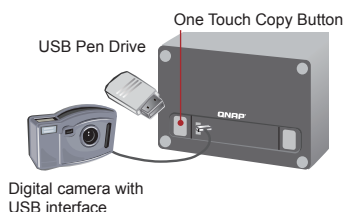
#### UPnP Media Streaming Server (with built-in TwonkyMedia Server!!!)

TS-209 is a perfect media storage center and it works well with DLNA (Digital Living Network Alliance) compliant media players. TS-209 can also stream your stored photos, music, and videos to your PS3 and Xbox360 game consoles.



#### Photo Sharing

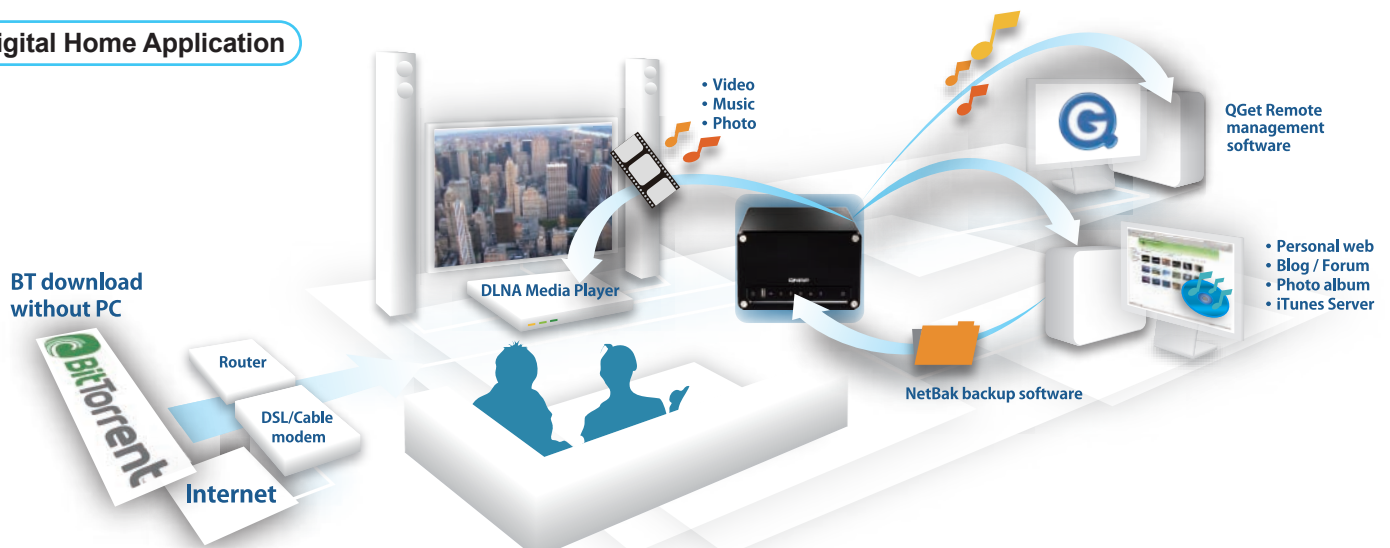
Now you can share photos with your family and friends by TS-209. The server automatically generates a web-based photo album with thumbnails and details, such as date, resolution, focal length, aperture, etc. You can browse and share the digital photos in a convenient way!



#### Intelligent One Touch Auto Copy

When USB device is installed, simply press the copy button and all USB data can be copied to TS-209 independent of PC.

### Digital Home Application



## Complete Backup Solution



### Backup Server

Data backup may sound time-consuming and painful for most users. QNAP's Turbo Station now brings you the enterprise-class technology and make backup extremely simple and efficient! The most intelligent automatic backup software, NetBak Replicator, is provided for users to perform real-time synchronization or schedule backup from multiple PCs to TS-209.



### Remote Replication

Remote Replication provides a superior level of data redundancy. Effectively, Qnap Remote Replication is the most affordable way in the industry for data disaster recovery. Files can be backed up from TS-209 to other QNAP NAS products in remote locations with or without encryption. Other advanced options such as data compression, block level incremental backup, and data synchronization save tremendous bandwidth and time for data backup.

## RAID-1 Mirroring with Hot-swap Design



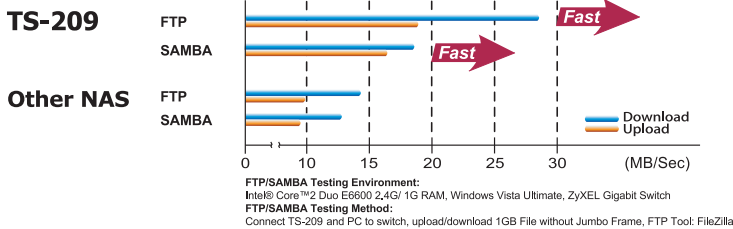
Imagine, hard drive crashes and you lose everything. What would you do to have the data back? TS-209 supports RAID 1 Mirroring for non-stop service and easy maintenance. When data crash occurs, the administrator can be alerted by e-mail alarm and LED indication.

The hard disk drive can be replaced by hot swapping without turning off the server.

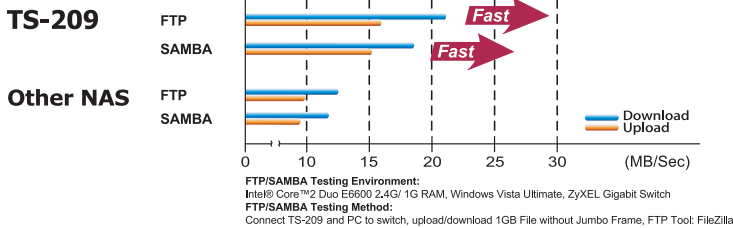
The intelligent data rebuilding capability allows users to replace a failed drive by hot-swap. This enables automatic data rebuilding to the new drive without suffering from any system downtime.

## Ultra-high-speed Performance

### RAID 0 (Disk Striping)



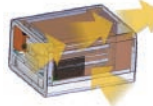
### RAID 1 (Disk Mirroring)



### Printer Server

You can share your printer device over the network without duplicating investment by simply connecting a USB printer to TS-209 USB port and enabling the printer sharing function.

## Outstanding Design with Good System Tools



Excellent mechanical design by HDD bracket to make wind tunnel effect. HDD heat dissipation through the channel efficiently.



- Low power consumption SoC system chip (System: 25.2W)
- Smart hard disk sleep function, efficient heat dissipation design
- TS-209 can run 24x7, 365 days for all applications and keep HDD temperature under 50°C



### Unique HHS (Bad Block Scanning and Disk Checking)

Do you have any idea about the health status of your hard disk drives? TS-209 is embedded with HHS (HDD Health Scanning) technology which supports disk checking and bad blocks scanning to prevent potential data loss.

## Store, Access and Share Your Data Securely



- **Personal data stored on TS-209 is well protected**  
Server manager can create user ID and password, and define the authority and quota of each user.
- **Easy IP filter control: Users can allow or deny specified IP connections to TS-209.**
- **SSL security (HTTPS)**  
Users can access and manage TS-209 by using web browser securely.
- **Remote login your TS-209 by SSH (secure shell) or Telnet connection.**
- **Secure FTP**  
Share and transmit your data over SSL/TLS (explicit) encryption.
- **Support passive mode FTP port range setup.**
- **Smart FTP policy control**  
Maximum number of all FTP connections or a single account can be configured.
- **Encrypted remote replication**  
Data on TS-209 can be backed up to another TS-109, TS-209 series over Internet securely.



### Delete the wrong file? Don't worry!!!

Can you imagine if you delete an important file on the NAS by mistake and lose it forever? You don't need to worry now! The files deleted from the network shares of the TS-209 will be moved to a particular recycle bin folder. You can restore your data anytime in case of unintended file deletion.

## Establish a PC-less Home Multimedia Center by Using QNAP NAS and PS3 or Xbox 360



- All the multimedia contents stored on QNAP NAS can be automatically shared to a PS3 or an Xbox360 in the home network. Users can play their stored photos and videos on a TV, or listen to the music via their Hi-Fi system. QNAP NAS can be a perfect home storage and sharing center for establishing a PC-less, HD video-playing (via PS3, video resolution up to 1080p), highly accessible, and power-saving digital home theatre.

## Easy Installation



The setting of TS-209 can be easily accomplished by QNAP Finder. Also, QNAP offers the Quick Start Guide (Multi-language) inside the CD, users can have a quick overview before installation!



## Hardware Specifications

### Processor

- SoC 500MHz

### Memory

- 128MB DDRII RAM, 8MB Flash

### HDD Capacity

- 2 x 3.5" SATA I/II HDD, up to 2 TB  
(the HDD is not included)

### LAN Port

- 1 x Gigabit RJ-45 Ethernet port

### LED Indicator

- USB, Status, HDD1, HDD2, LAN, Power

### USB

- 3 x USB 2.0, support USB printer, disk, digital camera, pen drive, card reader, USB hub

### Buttons

- Intelligent USB auto copy button
- Power button
- Reset button

### Alarm Buzzer

- System warning

### Form Factor

- Compact cubic type

### Dimension

- 214(D) x 175(W) x 115(H) mm

### Weight

- Net weight: 2.4Kg
- Gross weight: 3.5Kg

### Operation Environment

- Temperature 0~35°C
- Humidity 0~95% R.H

### Power Supply

- External power adapter, 60W, 100~240V

### Thermal Solution

- Smart fan

### Secure Design

- K-Lock security slot for theft prevention

## Powerful All-in-one Server

### File server

- Share files across Windows/ Mac and centralized management

### FTP server

- Access file from remote location via FTP server; supports up to 32 concurrent connections; FTP with SSL/TLS(Explicit) mode; passive FTP port range control

### Backup server

- Client-side backup software-NetBak Replicator supports instant, schedule and real time backup
- 3rd party backup software support: Arconics True Image, CA BrightStor ARCserve Backup, EMC Retrospect

### Mirror station

- Protect data by RAID 1 technology, support RAID auto rebuilding

### Print server

- Network printer sharing via USB (Support Windows platform only)

### Disaster Recovery

- Block level remote replication supports instant and schedule backup management; support synchronization mode

### Web Server

- Establish users' own web page and interactive websites with editable PHP.ini; SQLite and MySQL dual support

### MySQL Server

- Support MySQL database server
- Pre-installed PhpMyAdmin

### UPnP MediaServer

- Support UPnP/ DLNA multimedia technology; Watch stored photos and home videos on TV, listen to music on Hi-Fi system via DMP, PS3, or Xbox360
- Support content format:
  - \* Music: MP3, WMA, WAV, 3GP, M4A, MP4, LPCM, Ogg Vorbis, FLAC, MP2, AC3, MPA, MP1, AIF
  - \* Photo: JPEG, PNG, TIF, BMP

- \* Video: MPEG1, MPEG2, MPEG2-TS, MPEG4, AVI, WMV, VOB, DivX, 3GP, VDR, ASF, MPE, DVR-MS, Xvid, M1V, M4V
- \* Internet Radio: vTuner, Shoutcast
- \* Playlists: WPL, PLS, M3U
- Enjoy more than hundreds of worldwide Internet radio (TwonkyMedia)

### iTunes Server

- Act as an iTunes server on your network, and you can play all your music files by iTunes software on your PC/NB.

### Multimedia Station

- Image Slide show, Rotate (+90°, -90°)
- Showing photo's details: dates, exposure time, aperture, etc
- Auto generating thumbnails for easy browsing
- Photo album access authority management
- Multimedia (video, audio) file local play
- Automatic file categorization

### Download Station

- Support BitTorrent/ FTP/ HTTP Download (without PC)
- Unique remote control software: QGet (Windows-based application), allows you to control multiple Turbo Stations on one PC.
- BitTorrent download supports DHT
- Download task management (Automatic relaying if interrupted)
- Download configuration (Current seed number, configurable port range, bandwidth control, download percentage, UPnP NAT port forwarding for BitTorrent download)
- Support access from Mac by Mozilla Firefox

## Software Specifications

### Operation System

- Linux embedded system

### Networking

- TCP/IP, DHCP Client, DHCP Server, CIFS/SMB, AFP, HTTP, HTTPS, FTP, DDNS, NTP, Gigabit Jumbo Frame

### File System

- EXT3 (Internal/external HDD)
- FAT (External HDD)
- NTFS (External HDD, read only)

### Supported Clients

- Microsoft® Windows® 98/ ME/ NT/ 2000/ XP/ 2003/ Vista
- Mac OSX

### Disk Management

- User quota management (Per user)
- Single disk, RAID 0 (Disk Stripping), RAID 1(Disk Mirroring), JBOD (Disk Volume)
- Disk usage status
- Check disk (Check Linux file system)
- Bad blocks scan

### User Management

- User account management (max 256 users)
- User group management (max 128 groups)

### File System Management

- Network share management (max 256 shares)
- Share folder level ACL support

- Unicode support
- Journaling file system
- Unique Web File Manager

### System Tools

- E-mail alert (support SMTP authentication)
- HDD standby mode setting
- Disk usage alert
- Auto power on after power loss
- System firmware upgrade
- Change homepage Logo
- Backup, Restore, Reset system setting
- Network recycle bin
- Configurable management port
- Easy IP filter management
- Secure remote login by SSH connection; remote login by Telnet connection
- UPS Support

### Event Log

- Display system log/alert/error

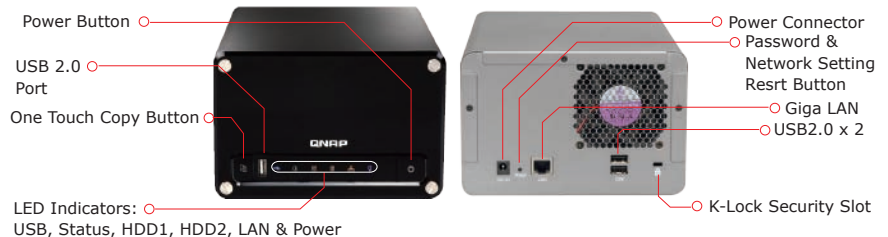
### Multi Language

- English, Traditional Chinese, Simplified Chinese, Japanese, Korean, French, German, Italian, Spanish, Russian

### Backup Management

- PC client backup software-NetBak Replicator: Instant/ Schedule/ Auto-sync backup
- Encrypted Remote Replication
- RAID 1 Mirroring

## Package Contents



## QNAP Systems, Inc.

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