TS-219P Turbo NAS

All-in-one NAS Server with iSCSI

for SOHO and Home Users

- **Superior Performance for Cross-platform Data Sharing**
- **Share, Access and Manage the Stored Files Securely**
- **Built-in iSCSI Target Service**
- **Online RAID Capacity Expansion & Online RAID Level Migration**
- **Most Advanced Backup Solution (Auto-Sync/ Instant/ Schedule Backup)**
- **Comprehensive Log Systems**
- **Built-in UPnP/ DLNA Media Server for Digital Home Entertainment**

Brand NEW
1.2GHz CPU
512MB DDRII Memory

eSATA x2

2.5" & 3.5" HDD dual support

Brand new user interface
(CoverFlow-like AJAX technology)

Abundant SOHO & Home Server 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...**

OS Support

iSCSI Target
30%
70%

HDD S.M.A.R.T.

Schedule on/off

BT download

UPnP DLNA

SMS Support

Printer Server

PHP SQLite & MySQL

QPKG Support
QPKG

iTunes Server

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

Overview

The TS-219P Turbo NAS is the 2-bay network-attached storage server with iSCSI dedicated to the SOHO and home users who need a mass storage center to store and share huge amount of digital data. The NAS supports 2.5" and 3.5" SATA hard drives, and is featured with excellent hardware design for storage expansion, outstanding data access performance, high system reliability, and numerous powerful software applications. The TS-219P is the top-class model in the current SOHO and home NAS market.

Superior performance with abundant business features
Adopting Marvell 1.2 GHz CPU and large-sized 512MB DDRII RAM, the TS-219P Turbo NAS maintains superior performance even when there is intensive access to the network services of the server simultaneously. The NAS also supports cross-platform service across Windows, Mac, Linux, and UNIX. Enhanced industry-leading features are also provided, e.g. built-in iSCSI target service, Online RAID Capacity Expansion, Online RAID Level

Migration, policy-based IP blocking, instant email and SMS alert, schedule power on/ off, and 2 IP cameras (optional purchase) for network surveillance.

Maximize the enjoyment of your home multimedia center
The built-in UPnP/ DLNA media server (with TwonkyMedia enabled) of the Turbo NAS supports a wide range of DLNA media players such as Sony PS3 and Microsoft Xbox 360 gaming consoles and works well with NFS-supported High-Definition (HD) digital media players for HD video streaming. By installing the DLNA/ UPnP application on your iPhone or iPod touch, you can access the Turbo NAS on the local network and play the multimedia contents, e.g. videos, music, and photos on the server. In addition, the high-speed PC-less Download Station with the unique QGet utility enables you to manage the BT/ FTP/ HTTP download tasks remotely over the local network or the Internet. The TS-219P is the ideal multimedia and storage solutions to enhance your home entertainment experience.

ALL-in-One Server Features

Cross-platform File Sharing: The Turbo NAS is designed for different users to share the files across Windows, Mac, Linux, and UNIX environment.

Windows AD: The Windows AD feature enables you to import user accounts from AD domain to NAS to reduce the time and effort for account setup, and the users can use the same set of login name and password.

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

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

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.

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

Surveillance Station: The Surveillance Station enables you to configure and connect multiple IP cameras simultaneously for remote monitoring, video recording and playback.

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

UPnP Media Server (with built-in TwonkyMedia): The Turbo NAS is an ideal storage center that works well with DLNA (Digital Living Network Alliance) compliant media players. You can play the multimedia contents (photos, music, or video) stored on the NAS on TV or Hi-Fi system.

iTunes Server: You can stream the mp3 music from the NAS to the Windows PC or Mac over the network and play the files by iTunes.

Multimedia Station: You can upload your photos, music, or video files to the NAS and share them with your friends and family via the web-based album.

Download Station: The NAS supports PC-less BitTorrent, HTTP, and FTP download. You can use the QGet download utility provided by QNAP to manage the download tasks on multiple Turbo NAS servers.
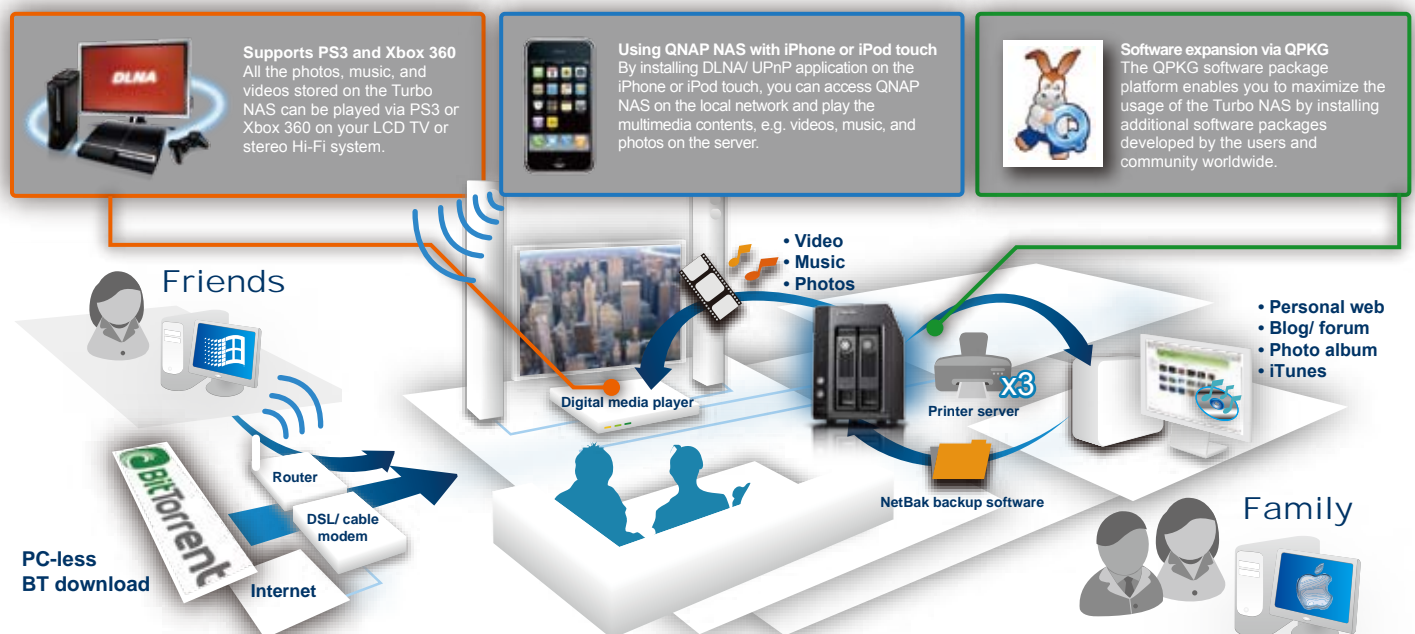
Web Server: With the built-in phpMyAdmin, Joomla!, editable php.ini, MySQL and SQLite, you can easily set up your web server and other online applications such as online shops, forums, and blogs.
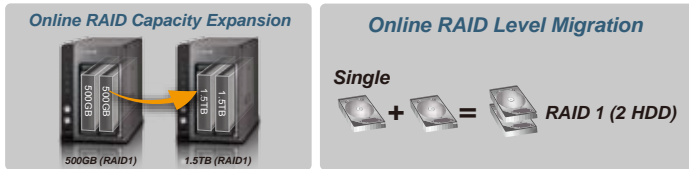
MySQL Server: The Turbo NAS is the most affordable choice as a standalone database server. It can be applied as a database server of another web server or as an additional backup database server.
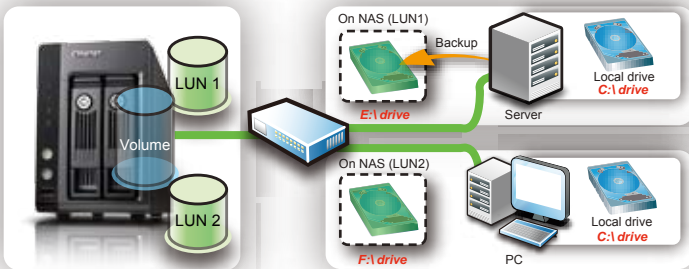
Powerful Multimedia Storage Center

Supports PS3 and Xbox 360
All the photos, music, and videos stored on the Turbo NAS can be played via PS3 or Xbox 360 on your LCD TV or stereo Hi-Fi system.

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.

Software expansion via QPKG
The QPKG software package platform enables you to maximize the usage of the Turbo NAS by installing additional software packages developed by the users and community worldwide.

Friends

• Video
• Music
• Photos

• Personal web
• Blog/ forum
• Photo album
• iTunes

Digital media player

Printer server

x3

NetBak backup software

Family

Router

DSL/ cable modem

Internet

PC-less
BT download

Advanced RAID Management with Hot-swap Design

Online RAID Capacity Expansion

500GB (RAID1) → 1.5TB (RAID1)

Online RAID Level Migration

Single

[500GB] + [   ] = RAID 1 (2 HDD)

The TS-219P supports Online RAID Capacity Expansion for expanding the storage capacity of the RAID 1 configuration and Online RAID Level Migration for upgrading the disk configuration to higher RAID level. It also supports RAID 0, 1, single, and JBOD disk configurations. The hot-swap design allows you to replace a failed member drive of the RAID 1 configuration without turning off 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. The 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.

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.
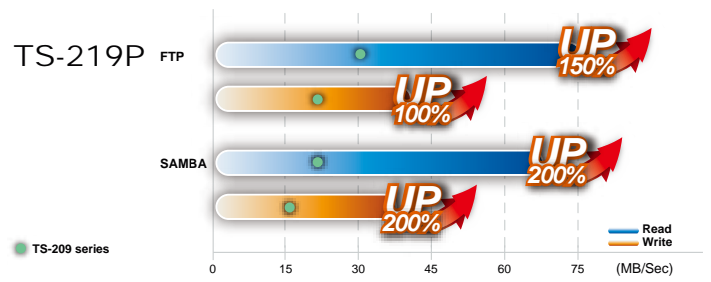
Convenient System Tools

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.

Ultra-high Speed Performance

TS-219P FTP

UP 150%
UP 100%

SAMBA

UP 200%
UP 200%

● TS-209 series

Read
Write

0   15   30   45   60   75   (MB/Sec)

• Client PC: Intel® Core™2 Quad 2.34GHz CPU, 2GB RAM, NVIDIA nForce Networking Controller, Windows Vista 32-Bit SP1
• Testing Method: Connect the TS-219P and PC to switch, upload/download 3GB file, FTP program: FileZilla 3.1.5
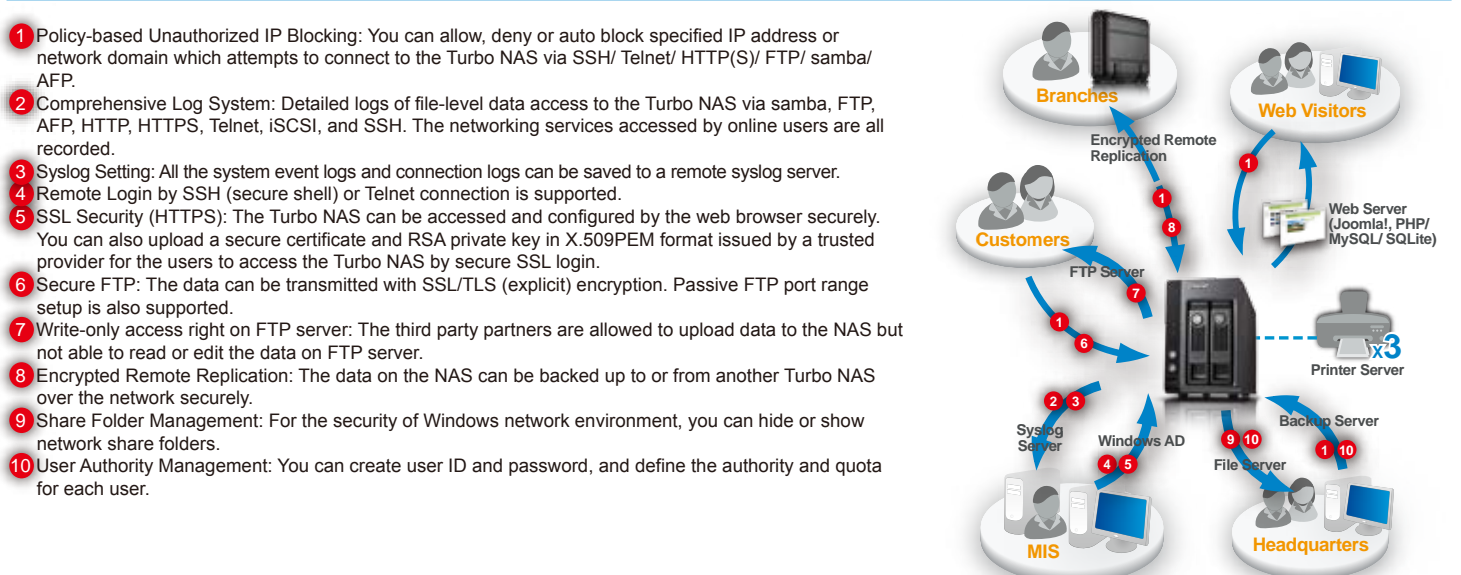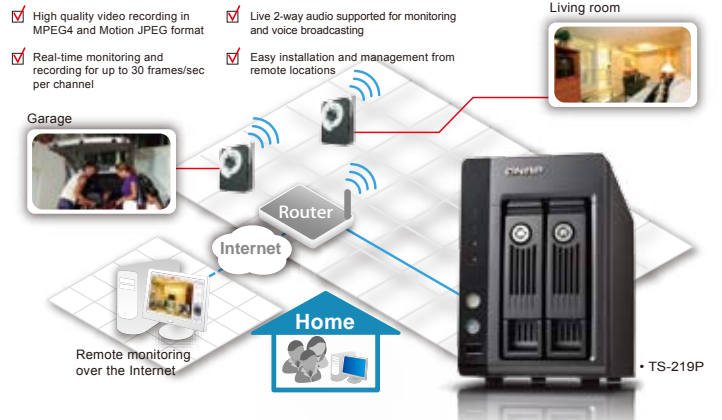
Efficient Power Management

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-219P (Sleep mode)   5W
TS-219P (In operation)   21W
PC server   350W

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

Living room

Garage

Router

Internet

Home

Remote monitoring over the Internet

• TS-219P

Secure Measures for Data Storage and Access

1. Policy-based Unauthorized IP Blocking: You can allow, deny or auto block specified IP address or network domain which attempts to connect to the Turbo NAS via SSH/ Telnet/ HTTP(S)/ FTP/ samba/ AFP.

2. Comprehensive Log System: Detailed logs of file-level data access to the Turbo NAS via samba, FTP, AFP, HTTP, HTTPS, Telnet, iSCSI, and SSH. The networking services accessed by online users are all recorded.

3. Syslog Setting: All the system event logs and connection logs can be saved to a remote syslog server.

4. Remote Login by SSH (secure shell) or Telnet connection is supported.

5. SSL Security (HTTPS): The Turbo NAS can be accessed and configured by the web browser securely. You can also upload a secure certificate and RSA private key in X.509PEM format issued by a trusted provider for the users to access the Turbo NAS by secure SSL login.

6. Secure FTP: The data can be transmitted with SSL/TLS (explicit) encryption. Passive FTP port range setup is also supported.

7. Write-only access right on FTP server: The third party partners are allowed to upload data to the NAS but not able to read or edit the data on FTP server.

8. Encrypted Remote Replication: The data on the NAS can be backed up to or from another Turbo NAS over the network securely.

9. Share Folder Management: For the security of Windows network environment, you can hide or show network share folders.

10. User Authority Management: You can create user ID and password, and define the authority and quota for each user.

Branches
Web Visitors
Encrypted Remote Replication
Customers
Web Server (Joomla!, PHP/ MySQL/ SQLite)
FTP Server
x3
Printer Server
Backup Server
Syslog Server
Windows AD
File Server
MIS
Headquarters

Hardware Specifications

Processor
- Marvell 6281 1.2GHz

Memory
- 512MB DDRII RAM, 16MB Flash

HDD Capacity
- 2 x 2.5" or 2 x 3.5" SATA I/II HDD (the standard package is shipped without HDD)

HDD Tray
- 2 x hot-swappable and lockable tray

LAN Port
- Gigabit RJ-45 Ethernet port

LED Indicators
- HDD 1, HDD 2, LAN, eSATA, power, USB

USB
- 3 x USB 2.0 (Front: 1; Back: 2)
- Supports USB printer, USB disk, pen drive, USB hub, and USB UPS, etc.

eSATA
- 2 x eSATA port (Back)

Buttons
- Power button, one touch copy button, reset button

Alarm Buzzer
- System warning

Form Factor
- Tower

Dimensions
- 150(H) x 102(W) x 216(D) mm 5.91(H) x 4.02(W) x 8.5(D) inch

Weight
- Net weight: 1.74kg/ 3.84 lb
- Gross weight: 2.92kg/ 6.44 lb

Operation Environment
- Temperature: 0~40°C/ 32~104°F Humidity: 0~95% R.H.

Power Supply
- External power adaptor, 60W, Input: 100-240V

Secure Design
- K-Lock security slot

Fan
- 1 x quiet cooling fan (7 cm, 12V DC)

Software Specifications

Operating System
- Linux-embedded system

Networking
- TCP/IP, DHCP client, DHCP server, CIFS/SMB, AFP, NFS, HTTP, HTTPS, FTP, DDNS, NTP
- Gigabit Jumbo frame

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

Supported Operating Systems
- Microsoft® Windows® 98/ ME/ NT/ 2000/ XP/ 2003/ Vista
- Mac OS X
- Linux & UNIX

Disk Management
- Single disk, RAID 0/ 1 and JBOD
- Online RAID Capacity Expansion
- Online RAID Level Migration
- Disk usage status management
- Check disk (Check Linux file system)
- HDD S.M.A.R.T.
- Bad blocks scan
- Built-in iSCSI target service

User Management
- User quota management (per user)
- Windows AD
- User account management (max. 2,048 users)
- User group management (max. 256 groups)
- Batch creating users

File System Management
- Network share management (max. 256 shares)
- Network volume status management
- 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
- HDD standby mode
- Disk usage alert
- Automatic power on after power loss
- QPKG add-on firmware supported
- System firmware upgrade
- Change home page logo
- 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 service (max. 15 settings)
- Network recycle bin
- Import SSL certificate

Event Logs
- Complete system logs (file level): system events management, logs, current connection of on-line users
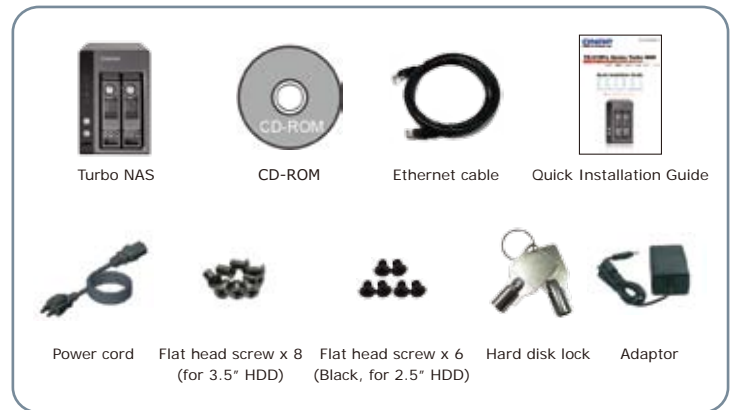
Multilingual Support
- English, Traditional Chinese, Simplified Chinese, Japanese, Korean, French, German, Italian, Spanish, Russian, Swedish, Norwegian, Finnish, Danish, and Polish

Backup Management
- PC-client backup software-NetBak Replicator: Instant/ Schedule/ Auto-sync backup
- Remote replication supports Rsync
- Encrypted remote replication
- One touch USB copy for different destination folders
- Data backup to external storage device

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. 256 concurrent connections)
- FTP with SSL/ TLS (explicit) mode
- FXP supported
- FTP bandwidth control and connection control
- Passive FTP port range control

Backup Server
- QNAP 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
- Supports MySQL database server

UPnP Media Server (built-in TwonkyMedia)
- Supports UPnP or DLNA technology; the video, music, and photos on the NAS can be played by digital media players over the local network
- Internet radio (built-in TwonkyMedia)
- Media playing with PS3, Xbox360, PSP game consoles

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 (video and audio) local playing
- Automatic file categorization

Download Station
- PC-less BitTorrent/ FTP/ HTTP download
- QNAP remote download software: QGet (Windows & Mac), allows you to manage the download tasks of multiple Turbo NAS on one PC via LAN/ WAN
- BitTorrent download supports TCP/ UDP, DHT
- BT schedule download
- BT download (up to 500 tasks)
- 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

Package Contents

Turbo NAS | CD-ROM | Ethernet cable | Quick Installation Guide

Power cord | Flat head screw x 8 (for 3.5" HDD) | Flat head screw x 6 (Black, for 2.5" HDD) | Hard disk lock | Adaptor

LED Indicators: HDD1, HDD2, LAN, eSATA
Power Button
One Touch Copy Button
USB 2.0

Fan
LAN
eSATA x 2
USB 2.0 x 2
Reset Button
DC 12V
K-Lock Security Slot

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