TS-459U-RP+/SP+ Turbo NAS

Modern businesses face the challenges of dramatic growth of digital data as well as raising productivity and efficiency. To well deploy the business IT environment with a reliable, affordable, scalable, and easy-to-maintain storage center to securely store, share and back up the digital assets has become the top task for the server managers nowadays in small and mid-sized companies. The TS-459U+ series Turbo NAS is the brand-new 4-bay 1U rackmount chassis network attached storage (NAS) server to satisfy these requirements.

The TS-459U-RP/ SP+ is equipped with the next-generation Intel® Atom™ Dual-Core 1.8GHz processor delivering exceptionally high performance, yet with low power consumption for energy-saving commitment. The Turbo NAS offers the best cost performance ratio of rack mount server in the industry; and provides versatile business applications to maximize server consolidation in the business environment. The Turbo NAS is integrated as a powerful all-in-one application server, which requires no extra time and efforts for software installation. The server managers can adopt the NAS in many of the system integration projects or office applications quickly. The Turbo NAS is also an affordable solution capable of business-class server applications, secure data backup and sharing, and iSCSI service for virtualized and clustered environment.

The Most Affordable and Flexible Virtualization Solution
The TS-459U-RP/ SP+ is certified as compatible with VMware® vSphere4 (ESX 4.0 and above) virtualization platform. The NAS can be utilized as the networked shared storage of VMware virtualization environments and Windows cluster servers. Comparing with traditional SAN (Storage Area Network), the Turbo NAS is a competitive alternative with much lower setup and maintenance costs in an IP SAN.

The Feature-rich and Integrated Applications for Business
The NAS supports file sharing across Windows, Mac, Linux, and UNIX platforms. Versatile business applications such as file server, FTP server, printer server, web server, and Windows AD support are provided. The dominant features, such as WebDAV, Share Folder Aggregation (also known as DFS), IPv6 and IPv4 dual-stack, Wake on LAN, schedule power on/ off, HDD S.M.A.R.T, comprehensive log systems, and policy-based unauthorized IP blocking are all included features of a QNAP NAS server.

New iSCSI/ IP SAN for Virtualization Deployments
The Turbo NAS provides flexible and secure storage server deployment with the following enhanced iSCSI features:

- **NAS + iSCSI/ IP SAN storage solution**
  The Turbo NAS can serve as a NAS for file sharing and iSCSI storage concurrently.
- **Flexible multiple LUNs management**
  The NAS supports multiple LUNs (Logical Unit Numbers) and iSCSI targets. The LUNs can be flexibly mapped to, unmapped from, and switched among different iSCSI targets.

- **Secure IP SAN environment deployment**
  Designed with CHAP authentication and LUN masking, the advanced ACL (Access Control List) offers you the capability to block unauthorized access from the initiators.
- **Designed for virtualized and clustered environments**
  Comparing with the high cost of Fibre Channel SAN, the Turbo NAS is an affordable system that can be deployed as a storage center for virtualized and clustered server environments, such as VMware and Microsoft Windows Failover Cluster.

iSCSI Features	QNAP NAS	Other NAS
VMware Ready® certified iSCSI array	✅	❌
Citrix Ready™ certified iSCSI storage	✅	❌
Windows 2008 Hyper-V and Failover Cluster compatible	✅	❌
SPC-3 for clustered environment deployment	✅	❌
MC/S for failover, load balancing and performance gain	✅	❌
MPIO for failover and load balancing.	✅	❌
LUN masking for advanced security	✅	❌
LUN mapping for flexible management	✅	❌
Thin Provisioning for efficient disk usage	✅	❌

Virtual Disk Drive (VDD) adds flexibility to storage expansion along with ease of management
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 LUN on the network.

Superior Performance and Eco-friendly Design
The NAS delivers superior performance and high reliability for critical business applications. It is optimized to achieve low noise and low power consumption for environment protection.

SAMBA/ FTP Access

- FTP/SAMBA Testing Environment: Intel Core2 Quad CPU Q8300 2.50GHz/ 4GB DDRII RAM, WD1500HLFS, Windows 7 Enterprise 32 Bits,Intel PRO 1000 PT Dual Port Server Adapter 82571

- FTP/SAMBA Testing Method: Connect the TS-459U-RP+ /SP+ and PC to switch, upload/download 5GB File without Jumbo Frame, FTP Tool: File Zilla

Power Consumption (with 4 hard drives installed)

Efficient Power Management

Redundant Power Supply
The TS-459U-RP+ is equipped with two power supply units, each of which is capable of supplying the power for the entire NAS independently. If one of the units fails, the other one will take over to supply the power to ensure continuous operation of the NAS. You can replace the failed power supply unit without turning off the server.

Hard Disk Standby
The hard disks can be configured to enter standby mode if there is no disk access within the specified period.

Scheduled Power on/ off
The flexible scheduled power on/off feature is provided on the NAS for you to manage the NAS server's up time according to the working hours.

UPS Support
The NAS supports the majority of USB UPS devices (usbhid-ups supported) which enables the users to store the data in time and avoid critical data loss when power outage occurs during data transfer. It also supports advanced stand-by mode setting that you can set the time for the server to enter standby mode when an abnormal AC power supply is detected. When the power resumes, the server resumes to the operation status before the power outage.

Auto Power on After Power Loss
You can configure the NAS to turn on/ off when the AC power resumes after a power loss.

Abundant Business Features
The Turbo NAS provides diversified server applications in the business environment.

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

2   **Encrypted Remote Replication:**
The data on the Turbo NAS can be backed up to or from other Turbo NAS or Rsync servers over the network.

3   **File Server:**
The Turbo NAS allows file sharing across Windows, Mac, Linux, and UNIX platforms. It also supports WebDAV for you to access the share folders via HTTP/HTTPS protocol remotely.

4   **Printer Server**   *New!*
The Turbo NAS supports maximum 3 USB printers for network (LAN/WAN) printing.

5		**Backup Server:** The Turbo NAS offers you the most complete backup solution with Apple Time Machine support, remote replication to an Rsync server, Windows client backup software NetBak Replicator, and third party backup software support, and so on.
6		**Web Server:** You can easily create a website to publish information over the Internet using the built-in web server by the Turbo NAS.
7		**Surveillance Station:** The Turbo NAS enables you to configure and connect multiple IP cameras simultaneously for remote monitoring, video recording and playback.
8		**IPv6:** The Turbo NAS supports IPv6 (Internet Protocol Version 6) which makes your NAS a dual-stack IP host running IPv4 and IPv6 at the same time.

Advanced RAID Management with Hot-swap Design
The Turbo NAS offers RAID 0, 1, 5, 5+spare, 6, single, 10 and JBOD disk configurations. It also supports hot-swap design that a failed member drive of a RAID configuration (RAID 1 or above only) can be replaced by hot swapping without turning off the server.

Online RAID Capacity Expansion
The storage capacity of a RAID configuration can be expanded by replacing the larger hard drives. All the data will be kept and seamlessly moved to the newly installed hard drives without turning off the server.

Online RAID Level Migration
You can upgrade the disk configuration to higher RAID level with the data retained without turning off the server.

Complete Data Backup Solution
The NAS offers complete backup solution for data protection, including cloud-based storage backup (Amazon S3 , ElephantDrive), Apple Time Machine support, encrypted remote replication, Real-time Remote Replication (RTRR), third party software backup, one-touch-copy backup and QNAP exclusive Windows-based utility NetBak Replicator. You can choose different backup modes for redundant data backup.

- **Cloud Storage Backup**
  The Turbo NAS supports Amazon S3 and ElephantDrive online backup and storage services. You can perform scheduled and real-time backup and access your data easily on the Internet.
- **Windows Client Backup Software - NetBak Replicator**
  QNAP NetBak Replicator is a utility provided for you to back up the files and folders

from Windows PCs to Turbo NAS and restore the data. This software supports instant data backup and recovery, file filter, scheduled backup, and more.

- **Third-party Backup Software**
  The NAS is compatible with popular third-party backup software, for example, Acronis True Image, CA BrightStor ARCserve Backup, EMC Retrospect, and Symantec Backup Exec.
- **Remote Replication by Rsync**
  The data stored on the NAS can be remotely backed up to another QNAP Turbo NAS or to Rsync servers by Rsync over the network.
- **Real-time Remote Replication (RTRR)** *New!*
  Real-time Remote Replication (RTRR) provides real-time or scheduled data replication between the local NAS and a remote NAS, an FTP server, or an external drive. **Apple Time Machine Backup and Management**
  Mac users can back up data from MacBooks to the NAS via Time Machine. This feature largely saves the storage space of your MacBooks. You can also specify the storage space dedicated to Time Machine backup on the NAS and manage the backup data easily via the web-based administration interface.
- **One-touch-copy Backup**
  You can configure the one-touch-copy button on the front of the NAS to copy the data from the NAS to an external storage device or vice versa. The NAS supports EXT3/EXT4; NTFS and HFS+ file systems for high speed data transfer and enhanced compatibility between the NAS and Windows PC or Mac OS X.

  The NAS supports EXT3, EXT4, NTFS, and HFS+ file systems for high speed data transfer and enhanced compatibility between the NAS and Windows PC or Mac OS X.

File System	QNAP NAS	Other NAS
EXT4, EXT3	✅	✅
FAT32	✅	✅
High-speed NTFS	✅	⚠️ ❌
HFS+	✅	❌

⚠️ : Lower speed

Benefits of Dual LAN Deployment
The Turbo NAS supports multiple bonding modes: Balance-rr (Round-Robin), Active Backup, Balance XOR, Broadcast, IEEE 802.3ad, Balance-tlb (Adaptive Transmit Load Balancing) and Balance-alb (Adaptive Load Balancing)

Scenario	Benefits to your company
Failover	Provides continuous services when one network port fails.

Load Balancing	▪ Aggregates bandwidth to boost the file transfer speed. ▪ Data traffic is evenly distributed to balance network loading.
Multi-IP Setting	Allows sharing among different workgroups in two different subnets.

Virtual LAN *New!*

You can integrate the NAS to an existing VLAN on a virtualization infrastructure and configure the NAS as the storage system of other VLAN devices.
By enabling VLAN on the NAS, only the devices with the same VLAN ID can access the NAS.

Wireless LAN *New!*

QNAP NAS supports USB wireless dongles for flexible and secure deployment in wireless network environment. You can securely connect the NAS to a wireless network with a compatible b/g/n USB Wi-Fi adapter.

Practical System and Authority Control Management Tools

Instant SMS and 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 and/or SMS.

SNMP (Simple Network Management Protocol)
You can collect the information, warning or error of the NAS and send to maximum 3 SNMP servers for centralized management and real-time monitoring.

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

Wake on LAN
Enable this option to power on the Turbo NAS remotely by Wake on LAN. Wake on LAN helps you manage your NAS conveniently.

S.M.A.R.T. & Advanced HDD Health Scanning (HHS)
S.M.A.R.T. (Self-Monitoring Analysis and Reporting Technology) helps you to monitor the HDD status. Moreover, the Turbo NAS is embedded with HHS (HDD Health Scan) which supports disk checking and bad blocks scanning.

Import/ Export User *New!*

The user accounts can be imported and exported in batch (BIN file) between different QNAP NAS servers.

Windows Active Directory (AD)

The Windows AD feature enables you to retrieve the user accounts from the Windows AD server to the NAS to reduce the time and effort for account setup. Users can use the same set of login name and password to access the NAS.

Shared Folder Aggregation

You can easily access the share folders of other servers on Microsoft Networking through the "portal folder" on the Turbo NAS. This saves your time and effort to login different servers one by one.

Host Access Control *New!*

The host-based permission control of QNAP NAS prevents unauthorized hosts (computers, servers) to access to the NAS folders via Microsoft Networking. You can specify the allowed access by host name, IP address or network.

Advanced Folder Permission *New!*

Advanced folder permissions allow you to configure access control to folders and subfolders of QNAP NAS. With this feature enabled, you can manage folder permissions from Microsoft Windows or the web-based management interface of the NAS without complicated procedure.

Network UPS

This feature allows multiple Turbo NAS servers on the same physical network to be protected by a single UPS via receiving UPS notification about abnormal power supply.

MyCloudNAS Service *New!*

MyCloudNAS is a service which allows you to connect to your NAS remotely from anywhere. The easy-to-use wizard helps you assign a unique name to your NAS without going through the complicated process of registering DDNS service. Various NAS services can be easily published and accessed on the Internet.

Web File Manager

Turbo NAS provides a web-based management interface Web File Manager for you to access and manage the server data anytime, anywhere by a web browser. Web File Manager supports intelligent data search, batch files upload and download, file extraction, and so on. With the support for encrypted data transfer and access control management on the NAS, you can access and share the data by Web File Manager securely.

ISO CD/DVD Archiving and Sharing

Turbo NAS supports mounting ISO images of CD and DVD discs as network shares for data archiving, storage, and sharing. This feature saves the space for storing the physical discs,

reduces the risk of data loss caused by disc wearing and tearing, and enhances the performance of data sharing on a business network.

AES 256-bit Volume-based Data Encryption
The disk volume with AES 256-bit encryption can only be accessed by an authorized encryption password or key. This prevents the NAS data from unauthorized access and data breach even if the hard drives are stolen.
*Data encryption functions may not available in accordance to the legislative restrictions of some countries.

DOM Architecture and Fail-safe Dual OS
Two operating systems are built on the DOM of the Turbo NAS for system booting alternatively upon every system startup. When one fails, the other one will be used to boot up the NAS, and the failed OS is recoverable from the other healthy OS.

Download Station & QGet   *New!*
QNAP NAS features Download Station for high-speed BitTorrent, HTTP (including RapidShare support), and FTP download without PC. RSS download (broadcatching) is also supported for automatic BitTorrent download.
QGet is a powerful utility which can be installed on any Windows or Mac computers to manage the download tasks of multiple Turbo NAS servers remotely (LAN/WAN).

Software Expansion via QPKG
The QPKG feature enables the users to maximize the usage of Turbo NAS by installing additional software packages developed by the users and community worldwide.

Hardware Spec.

CPU	Intel Atom 1.8GHz Dual-core Processor
DRAM	1GB RAM
Flash Memory	512MB DOM
HDD	2.5/ 3.5" SATA I/II HDD x4 **NOTE:** 1. The system is shipped without HDD. 2. For the HDD compatibility list, please visit http://www.qnap.com/pro_compatibility.asp
HDD Tray	4 x Hot-swappable and lockable tray
LAN Port	2 x Gigabit RJ-45 Ethernet port
LED Indicators	Status, LAN, USB, HDD 1, HDD 2, HDD 3, HDD 4
USB	5 x USB 2.0 port (Front: 1; Back: 4) Support USB printer, pen drive, USB hub, and USB UPS etc.

eSATA	2 x eSATA port (Back)
Buttons	System: Power button, USB One-Touch-Backup Button, Reset button
Alarm Buzzer	System warning
Form Factor	1U rackmount
Dimensions	44(H) x 439(W) x 499(D) mm 1.73(H) x 16.97(W) x 19.65(D) inch
Weight	Net weight: 7.63 kg/ 16.82 lb Gross weight: 9.55 kg/ 21.05 lb
Power Consumption (W)	Sleep mode: 40W In Operation: 62W Power-off (in WOL mode): 3W (with 4 x 500GB HDD installed)
Temperature	0~40˚C
Humidity	0~95% R.H.
Power Supply	Input: 100-240 Vac~, 50-60Hz, 2A, Output: 150W
VGA	Reserved VGA interface for maintenance
Fan	3 x cooling fan (4 cm, 12V DC; internal)
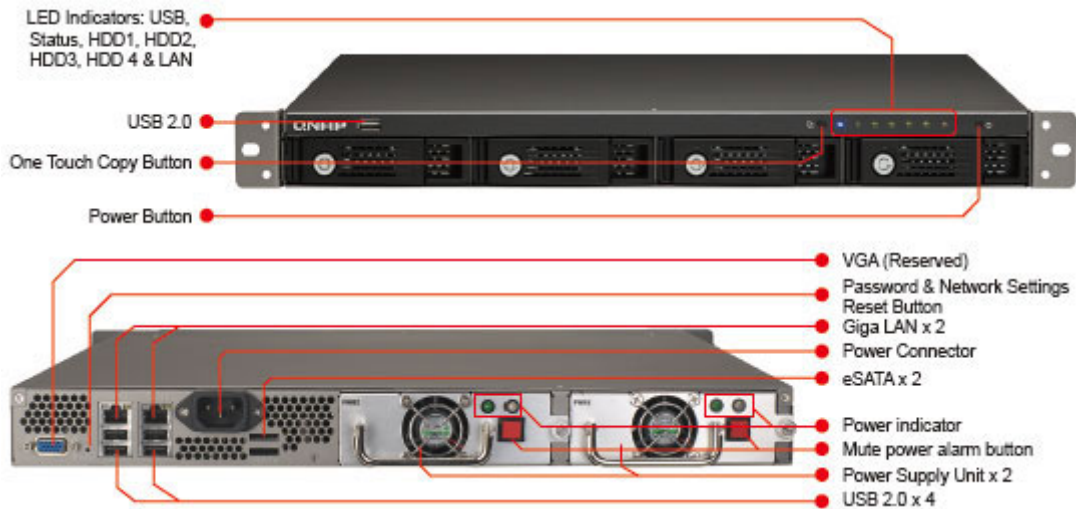
Design and specifications are subject to change without notice.

Software Spec.

Operating System	**Server Virtualization & Clustering**
	• Supports VMware vSphere

- Embedded Linux

Supported Operating System

- Microsoft Windows 2000, XP, Vista (32/ 64 bit), Windows 7 (32/ 64 bit), Server 2003/ 2008
- Apple Mac OS X
- Linux & Unix

Supported Web Browsers

- Internet Explorer 7 & 8 or later
- Firefox 3 or later
- Safari 3 & 4 or later
- Google Chrome

Multilingual Support

- Chinese (Traditional & Simplified), Czech, Danish, Dutch, English, Finnish, French, German, Italian, Japanese, Korean, Norwegian, Polish, Russian, Spanish, Swedish, Turkish.

File System

- Internal HDD: EXT3, EXT4
- External HDD: EXT3, EXT4, NTFS, FAT32, HFS+

Networking

- TCP/IP (IPv4 & IPv6: Dual Stack)
- Dual Gigabit LAN with Jumbo Frame
- Multi-IP Settings, Port Trunking/NIC Teaming (Modes: Balance-rr, Active Backup, Balance XOR, Broadcast, IEEE 802.3ad/Link Aggregation, Balance-tlb and Balance-alb)
- DHCP Client, DHCP Server
- Protocols: CIFS/SMB, AFP (3.1), NFS, FTP, HTTP, HTTPS, Telnet, SSH, iSCSI and SNMP.
- Network Service Discovery (UPnP,

(ESX/ESXi 4.x)
- Supports Citrix XenServer (5.6)
- Supports Windows Server 2008 Hyper-V & Failover Clustering

Power Management

- Wake on LAN
- Scheduled Power on/off (Max 15 settings)
- Automatic Power on after Power Recovery

Access Right Management

- Max User Accounts: 4,096
- Max Groups: 512
- Max. Share Folder: 512
- Batch Creating Users
- Import/Export Users
- User Quota Management
- Subfolder Permissions Support

Windows AD Support

- Domain Users Login via CIFS/SMB, AFP, FTP and Web File Manager
- Supports NTLMv2 Authentication

Web Administration

- AJAX-based User Interface
- HTTP/HTTPS Connections
- Alert Notification (Email & SMS)
- Smart Fan Control
- DDNS & MyCloudNAS Remote Access
- SNMP (v2 & v3)
- UPS Support with SNMP Management (USB)
- Supports Network UPS
- Resource Monitor
- Network Recycle Bin for CIFS/SMB and AFP
- Comprehensive Logs (Events & Connection)
- Real-time Online User List
- Syslog Client

Bonjour)
- USB Wi-Fi 802.11n Adapter Support (Optional Purchase)

Network File Sharing

- CIFS/SMB (Plus DFS Support)
- AFP
- NFS
- FTP
- WebDAV

Backup Solution

- Real-time Remote Replication (RTRR)
    - Work as Both RTRR Server & Client
    - Supports Real-time & Scheduled Backup
    - Supports Encryption, Compression, and File Filter
- USB One Touch Backup (Import/Export)
- Apple Time Machine Support with Backup Management
- Block-level Remote Replication
    - Work as Both Rsync Server & Client
    - Supports Encrypted Replication between QNAP NAS Servers
- Back up to External Storage Device
- Back up to Cloud Storage (Amazon S3 & ElephantDrive)

Security

- IP Filter & Policy-based Automatic IP Blocking
- Network Access Protection with Auto-blocking
- Encrypted Access: HTTPS, FTP with SSL/TLS (Explicit), SSH/SFTP (admin only), Encrypted Remote Replication (Rsync over SSH)
- CIFS Host Access Control for Shared Folders

- Firmware Update with Live Update Notification
- Backup and Restore System Settings
- Restore to Factory Default

Applications

- Web File Manager
- Multimedia Station
- Download Station
- Surveillance Station
- iTunes Server
- UPnP Media Server
- Apache Web Server
- MySQL Server

QMobile App

- QMobile for iPhone, iPad, iPod touch, Android devices
- Third Party UPnP Media Player

QPKG

- Web Applications
    - Joomla!
    - phpMyAdmin
    - WordPress
    - AjaXplorer
    - vtigerCRM
    - GLPI
    - Magento
- P2P Applications
    - MLDonkey (eMule)
    - SABnzbd+
    - NZBGet
    - Transmission
- Server Applications
    - Squeezebox Server
    - Tomcat
    - Asterisk
    - XDove (Mail Server)
    - OpenLDAP
    - eyeOS
- Media Server
    - PS3 Media Server
    - IceStation
- Misc.

- AES 256-bit Volume-based Encryption
- Importable SSL Certificate
- Instant Alert via Email, SMS

  o Optware IPKG
  o Python
  o Java Runtime Environment
  o Mono
  o iStat

…and more

Disk Management

- Single Disk, JBOD, RAID 0 / 1 / 5 / 5+Hot Spare / 6 / 10
- Online RAID Capacity Expansion & Online RAID Level Migration
- Bad Block Scan & HDD S.M.A.R.T
- Global Spare Drive
- AES 256-bit Volume-based Encryption
- RAID Recovery
- Bitmap Support
- Supports ISO Mounting (via Web File Manager)

iSCSI (IP SAN)

- iSCSI Target
  o Multi-LUNs per Target
  o Up to 256 LUNs
  o Supports LUN Mapping & Masking
  o Supports SPC-3 Persistent Reservation
  o Supports MPIO & MC/S
- Virtual Disk Drive (via iSCSI Initiator)
  o Stack Chaining Master
  o Max. Virtual Disk Drives: 8

Powerful All-in-one server

File Server

- File Sharing across Windows, Mac, and Linux/UNIX
- Protocols: CIFS/SMB, AFP(3.2), NFS, FTP, HTTP, HTTPS
- QNAP Web File Manager
  o Supports ISO Mounting
  o Direct File Viewing

Printer Server

- Network Printer Sharing (USB)
- Max Printers: 3
- Supports Internet Printing Protocol
- Supports Apple Bonjour Printing
- Advanced Printer Management
  o Print Jobs Display and Management
  o Access Right Control (IP & Domain Names)

via Google Doc

FTP Server

- FTP over SSL/TLS (Explicit)
- Max Concurrent Connections: 256
- FXP Supported
- Passive FTP Port Range Control
- FTP Bandwidth & Connection Control
- Unicode Support

Web Server

- HTTP/ HTTPS Connections
- Supports WebDAV Connection
- Support Virtual Host
- Importable SSL Certificate

Database Server

- Built-in MySQL Server
- Web-based Management via phpMyAdmin (QPKG)

Backup Server

- Remote Replication Server (over Rsync)
- Real-time Remote Replication Server
- Apple Time Machine Support
- QNAP Client Backup Application-NetBak Replicator
- 3rd Party Backup Software Support: Acronis True Image, CA BrightStor, ARCserve Backup, EMC Retrospect, Symantec Backup Exec, LaCie SilverKeeper

iTunes Server

- Audio and Video Sharing

Multimedia Station

- Supports Photo, Audio and Video
- Image Slide Show and Rotation
- Automatic & Schedule Thumbnail Generation for Easy Browsing
- Display Photo Details from EXIF: Date, Exposure Time, Aperture, etc.
- Display Audio Details from ID3 Tag: Album Cover, Title, Artist, Album, etc.
- Access Authority Management
- Multimedia (Video & Audio) Streaming
- Supports Cooliris
- Supports Web Publishing (Facebook, MySpace, MSN Live, Twitter, Plurk, Blogger)
- Share Photos by Email
- Supported Formats:
  - Photo - JPG/JPEG, GIF, PNG
  - Audio - MP3
  - Video
    - Playback: FLV, MPEG-4 Video (H.264 + AAC)
    - Transcode: AVI, M4V, MPG/MPEG, RM/RMVB, WMV
- QNAP Exclusive iPhone & Android App - QMobile

Download Station

- PC-less BitTorrent, FTP, HTTP Download (up to 500 Tasks)
- BitTorrent Download
  - Supports TCP/ UDP Tracker Protocol
  - Schedule Download
  - Configurable Port Range
  - Bandwidth Control
  - UPnP NAT Port Forwarding
  - Subscribe to RSS Feeds
  - RSS Download (Broadcatching)
  - Selectable Download Files
- HTTP/ FTP Download
  - Configurable Saving Directory
  - Bulk Download with Wildcard Setting
  - RapidShare Download Support
- QNAP Download Management Software:

- Smart Playlist for iTunes Client (Windows & Mac OS)

UPnP Media Server

- Real-time & Background Photo Transcoding
- Supports UPnP Media Player
  - o Game Console: PlayStation 3, PSP and Xbox 360
  - o Digital Media Adapter/Player
  - o Mobile Device (e.g. iPhone, iPod touch with UPnP Applications)
- Supported Formats:
  - o ASF - Windows Media Video (Codecs: WMV video and WMA audio)
  - o BMP - Bitmap Image
  - o FLV, F1V, F4V - Standard Quality YouTube Video (Codec: Flash, Video: Sorenson Spark H.263 Video Codec & MP3 Audio Codec)
  - o GIF - Graphics Interchange Format
  - o JPG, JPEG, JPE - Joint Photographic Experts Group Image
  - o MP3 - MPEG Audio Layer 3 (Codec: MPEG Audio)
  - o MP4 - High Quality YouTube Video (Codecs: MP4: H.264 Video & HE-AAC audio)
  - o MP4 - MPEG-4 Video (Codecs: Microsoft MPEG-4 v1, Microsoft MPEG-4 v2, Microsoft MPEG-4 v3 & ISO MPEG-4

QGet
  - o For Both Windows & Mac OS
  - o Manage the Download Tasks of Multiple QNAP NAS Remotely over LAN or WAN

Surveillance Station

- Supports 4 IP Cameras (Optional Purchase) for Network Surveillance

v1)
- o MPEG, .MPG, .MLV - MPEG-1 (Codecs: MPEG-1 Video & MP2 Audio)
- o PNG - Portable Network Graphics
- o WAV - Linear Audio (Codecs: Uncompressed PCM-encoded & ADPCM-encoded)

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