Superior Performance NAS with iSCSI for Business

Business Series Turbo NAS

		TS-259 Pro+/TS-239 Pro II+	TS-459 Pro+/TS-439 Pro II+	TS-459 Pro II	TS-559 Pro+	TS-559 Pro II	TS-659 Pro+	TS-659 Pro II	TS-859 Pro+	TS-809 Pro
Hardware	CPU			Dual-core Intel® Atom™ Processor (1.8 GHz)/Single-core Intel® Atom™ Processor (1.8 GHz) *						Intel® Core 2 Duo Processor (2.8 GHz)
	RAM				1GB					2GB
	Extra RAM Slot (Memory Expansion)	–	–	–	–	1	–	1	–	–
	Max. Number of Internal Hard Drives [1]	2	4	4	5	5	6	6	8	8
	Hard Drive Interface	SATA 3Gb/s, SSD	SATA 3Gb/s, SSD	SATA 6Gb/s, SATA 3Gb/s, SSD	SATA 3Gb/s, SSD	SATA 6Gb/s, SATA 3Gb/s, SSD	SATA 3Gb/s, SSD	SATA 6Gb/s SATA 3Gb/s, SSD	SATA 3Gb/s, SSD	SATA 3Gb/s, SSD
	USB 3.0	–	–	–	–	–	–	–	–	–
	Dimensions	• 177(H) x180(W) x235(D) mm • 6.97(H) x7.09(W) x9.25(D) inch	•150(H) x102(W) x216 (D) mm • 5.91(H) x4.02(W) x8.5(D) inch	•150(H) x102(W) x216 (D) mm • 5.91(H) x4.02(W) x8.5(D) inch	•185(H) x210.6(W) x235.4(D) mm • 7.28(H) x8.29(W) x9.27(D) inch	•185(H) x210.6(W) x235.4(D) mm • 7.28(H) x8.29(W) x9.27(D) inch	•175(W) x257(W) x235(D) mm • 6.9(H) x10.12(W) x9.25(D) inch	•175(W) x257(W) x235(D) mm • 6.9(H) x10.12(W) x9.25(D) inch	• 185.2(H) x298.2(W) x235.4(D) mm • 7.29(H) x11.74(W) x9.27(D) inch	• 298(H) x 200(W) x 270(D) mm • 11.73(H) x 7.87(W) x 10.63(D) inch
	Weight	• 1.74 kg / 3.84 lb (Net) • 2.92 kg / 6.44 lb (Gross)	•3.65 kg / 8.04 lb (Net) • 4.65 kg / 10.24 lb (Gross)	•3.65 kg / 8.04 lb (Net) • 4.65 kg / 10.24 lb (Gross)	• 5.1 kg / 11.24 lb (Net) • 6.5 kg / 14.33 lb (Gross)	• 5.1 kg / 11.24 lb (Net) • 6.5 kg / 14.33 lb (Gross)	• 5.2 kg / 11.46 lb (Net) • 6.5 kg / 14.33 lb (Gross)	• 5.2 kg / 11.46 lb (Net) • 6.5 kg / 14.33 lb (Gross)	• 7.3 kg / 16.08 lb (Net) • 8.6 kg / 18.94 lb (Gross)	• 8.1 kg / 17.86 lb (Net) • 9.8 kg / 21.61 lb (Gross)
	Power	• AC Input Power Voltage: 100V~240V • Power Frequency: 50Hz~60Hz • External Power Adaptor	• AC Input Power Voltage: 100V~240V • Power Frequency: 50Hz~60Hz • Internal Power Supply: 250W	• AC Input Power Voltage: 100V~240V • Power Frequency: 50Hz~60Hz • Internal Power Supply: 250W	• AC Input Power Voltage: 100V~240V • Power Frequency: 50Hz~60Hz • Internal Power Supply: 250W	• AC Input Power Voltage: 100V~240V • Power Frequency: 50Hz~60Hz • Internal Power Supply: 350W	• AC Input Power Voltage: 100V~240V • Power Frequency: 50Hz~60Hz • Internal Power Supply: 350W	• AC Input Power Voltage: 100V~240V • Power Frequency: 50Hz~60Hz • Internal Power Supply: 350W	• AC Input Power Voltage: 100V~240V • Power Frequency: 47Hz~63Hz • Internal Power Supply: 350W	• AC Input Power Voltage: 100V~240V • Power Frequency: 47Hz~63Hz • Internal Power Supply: 350W
	Power Consumption	Sleep: 16W/15W* In Operation: 25W/22W*	Sleep: 19W/19W* In Operation: 35W/33W*	Sleep: 21W In Operation: 38W	Sleep: 21W In Operation: 38W	Sleep: 21W In Operation: 38W	Sleep: 22W In Operation: 43W	Sleep: 22W In Operation: 43W	Sleep: 30W In Operation: 59W	Sleep: 42W In Operation: 81W
Software	Disk Management	Single Disk, JBOD, RAID 1	Single Disk, JBOD, RAID 0, 1, 10, 5, 6, 5+Hot Spare	Single Disk, JBOD, RAID 0, 1, 10, 5, 6, 5+Hot Spare		Single Disk, JBOD, RAID 0, 1, 10, 5, 6, 10+Hot Spare, 5+Hot Spare, 6+Hot Spare				Single Disk, JBOD, RAID 0, 1, 10, 5, 6, 10+Hot Spare, 5+Hot Spare, 6+Hot Spare
	Access Right Management	Max. No. of User Accounts: 2048 Max. No. of Groups: 256 Max. No. of Shared Folders: 256				Max. No. of User Accounts: 4096 Max. No. of Groups: 512 Max. No. of Share Folders: 512				
	IP Camera Support	2				4				
	Touch-N-Go Installation					Yes				
Performance [2]	SAMBA (Read/Write)	• 115.1/105.7 • 114.7/100.8* (MB/sec)	• 115.4/107 • 115.1/98.3* (MB/sec)	115.4/107 (MB/sec)	116.1/104.3 (MB/sec)	116.1/103.4 (MB/sec)	116.1/103.4 (MB/sec)	116.1/103.4 (MB/sec)	116.1/106.8 (MB/sec)	115.4/101.2 (MB/sec)
	FTP (Read/Write)	• 115.7/114.4 • 115.3/108.7* (MB/sec)	• 116.4/115.4 • 115.4/93.7* (MB/sec)	116.4/ 115.4 (MB/sec)	113.5/101.3 (MB/sec)	113.5/101.3 (MB/sec)	115.0/102.4 (MB/sec)	115.0/102.4 (MB/sec)	115.2/102.4 (MB/sec)	115.6/97.7 (MB/sec)

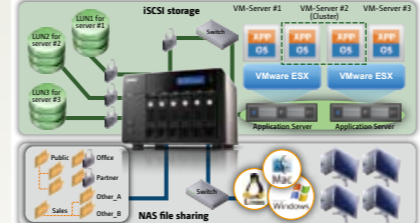|		TS-410U	TS-412U	TS-419U+	TS-459U-SP+	TS-459U-RP+	TS-859U-RP+	TS-809U-RP
Hardware	CPU	Marvell® 800 MHz	Marvell® 1.2 GHz	Marvell® 1.6 GHz		Dual-core Intel® Atom™ Processor (1.8 GHz)		Intel® Core 2 Duo Processor (2.8 GHz)
	RAM	512MB	256MB	512MB		1GB		2GB
	Max. Number of Internal Hard Drives [1]	4				4		8
	Dimensions	• 44(H) x 439(W) x 483(D) mm • 1.73(H) x 16.97(W) x 19.02(D) inch	• 44(H) x 439(W) x 483(D) mm • 1.73(H) x 16.97(W) x 19.02(D) inch	• 44(H) x 439(W) x 483(D) mm • 1.73(H) x 16.97(W) x 19.02(D) inch	• 44(H) x 439(W) x 499(D) mm • 1.73(H) x 16.97(W) x 19.65(D) inch	• 44(H) x 439(W) x 499(D) mm • 1.73(H) x 16.97(W) x 19.65(D) inch	• 88.9(H) x 482.6(W) x 531.5(D) mm • 3.5(H) x 19(W) x 20.93(D) inch	• 88.9(H) x 482.6(W) x 531.5(D) mm • 3.5(H) x 19(W) x 20.93(D) inch
	Weight		• 6.7 kg / 14.77 lb (Net) • 9.5 kg / 20.94 lb (Gross)		• 7.63 kg / 16.82 lb (Net) • 9.55 kg / 21.05 lb (Gross)	• 8.38 kg / 18.44 lb (Net) • 10.3 kg / 22.71 lb (Gross)	• 12.15 kg / 26.79 lb (Net) • 14.87 kg / 32.78 lb (Gross)	• 12.15 kg / 26.79 lb (Net) • 14.87 kg / 32.78 lb (Gross)
	Power		• AC Input Power Voltage: 100V~240V • Power Frequency: 50Hz~60Hz • Internal Power Supply: 250W		• Single PSU • AC Input Power Voltage: 100V~240V • Power Frequency: 50Hz~60Hz • Internal Power Supply: 150W	• Redundant PSU • AC Input Power Voltage: 100V~240V • Power Frequency: 50Hz~60Hz • Internal Power Supply: 150W	• Redundant PSU • AC Input Power Voltage: 100V~240V • Power Frequency: 47Hz~63Hz • Internal Power Supply: 300W	• Sleep: 53W In Operation: 101W
	Power Consumption	Sleep: 14W In Operation: 28W	Sleep: 14W In Operation: 28W	Sleep: 15W In Operation: 29W	Sleep: 40W In Operation: 62W		Sleep: 46W In Operation: 73W	
Software	Disk Management			Single Disk, JBOD, RAID 0, 1, 10, 5, 6, 5+Hot Spare			Single Disk, JBOD, RAID 0, 1, 10, 5, 6, 10+Hot Spare, 5+Hot Spare, 6+Hot Spare	
	Access Right Management			Max. No. of User Accounts: 4096 Max. No. of Groups: 512 Max. No. of Shared Folders: 512				
	IP Camera Support			4				
	Touch-N-Go Installation			–			Yes	
Performance [2]	SAMBA (Read/Write)	• 63.0/21.9 (MB/sec)	• 63.0/21.9 (MB/sec)	101.7/43.5 (MB/sec)	115.4/107 (MB/sec)	115.4/107 (MB/sec)	116.1/106.8 (MB/sec)	114.9/103.1 (MB/sec)
	FTP (Read/Write)	• 83.6/24.1 (MB/sec)	• 83.6/24.1 (MB/sec)	114.1/42 (MB/sec)	116.4/112.3 (MB/sec)	116.4/112.3 (MB/sec)	115.6/97.7 (MB/sec)	113.7/100.2 (MB/sec)

(1) The standard system is shipped without hard drives.
(2) Testing results may vary in different system condition.

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iSCSI (IP SAN) and Virtualization Deployment

QNAP Business Series Turbo NAS servers are fully VMware and Citrix ready and Windows Server 2008 Hyper-V clusters compliant.

NAS + iSCSI Combo Solution:
The Turbo NAS can serve as a NAS for file sharing and iSCSI storage concurrently.

Flexible 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 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:
Compared with the high cost 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.
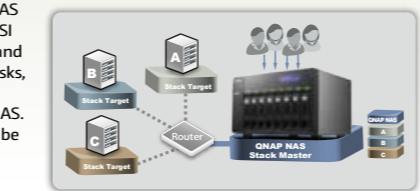
SPC-3 Persistent Reservation Supported:
The built-in iSCSI service supports enterprise-level features such as SPC-3 persistent reservation for clustering in VMware and Windows 2008. You can set up Microsoft Failover Cluster environment and use Cluster Shared Volume for Hyper-V. This allows you to execute virtual machine live migration between Hyper-V hosts.

Advanced MPIO and MC/S Supported:
With the support of MPIO (Multipath Input Output) and MC/S (Multiple Connections per Session) on the Turbo NAS, you can connect to the QNAP iSCSI targets using two or more network interfaces from your server with failover and load balancing. Furthermore, you can achieve better data transmission performance with MC/S setting.
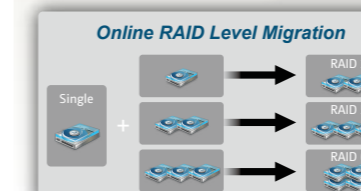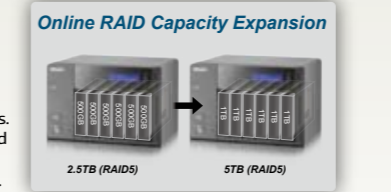
Virtual Disk Expansion

The unique "Virtual Disk Drive (VDD)" adds flexibility to expand the capacity of the NAS. The Turbo 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.

Advanced RAID Management with Hot-swap Design

The Turbo NAS offers advanced RAID 0, 1, 10, 5, 6, 10+hot spare*, 5+hot spare, 6+hot spare*, single, and JBOD disk configurations. It also supports hot-swap design that a failed drive 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 hard drives with larger ones. All the data will be kept and seamlessly moved to the newly installed hard drives.

Online RAID Level Migration:
You can upgrade the disk configuration to higher RAID level with the data retained. There is no need to turn off the Turbo NAS during the process.

* The RAID configurations available vary depending on the product models and the number of hard disk drives installed.

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).

Failover:
Failover allows the Turbo NAS server to sustain the failure of one network port to provide continuous services.

Load Balancing:
Load balancing allows bandwidth aggregation to boost the file transfer speed. It works with managed Ethernet switch with 802.3ad configured.

Multi-IP Settings:
The Turbo NAS can be deployed with two different IP settings for sharing among different workgroups in two different subnets.

Secure Measures for Data Storage and Access

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

Remote Login:
The NAS supports remote login by SSH (secure shell) or Telnet connection.

SSL Security (HTTPS):
The Turbo NAS supports HTTPS connection. You can 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.

Secure FTP:
The NAS offers secure data transfer with SSL/TLS (explicit) encryption. Passive FTP port range setup is also supported.

Share Folder Management:
You can select to hide or show the network shared folders of the NAS on Windows network.

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

Abundant Business Features

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

Printer Server:
The NAS offers cross-platform printer sharing over the network and remote printing over Internet (max. 3 USB printers). It supports IPP (Internet Printing Protocol), print job management and Bonjour printing for Mac OS X.
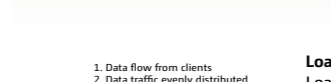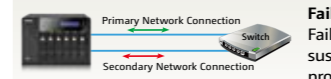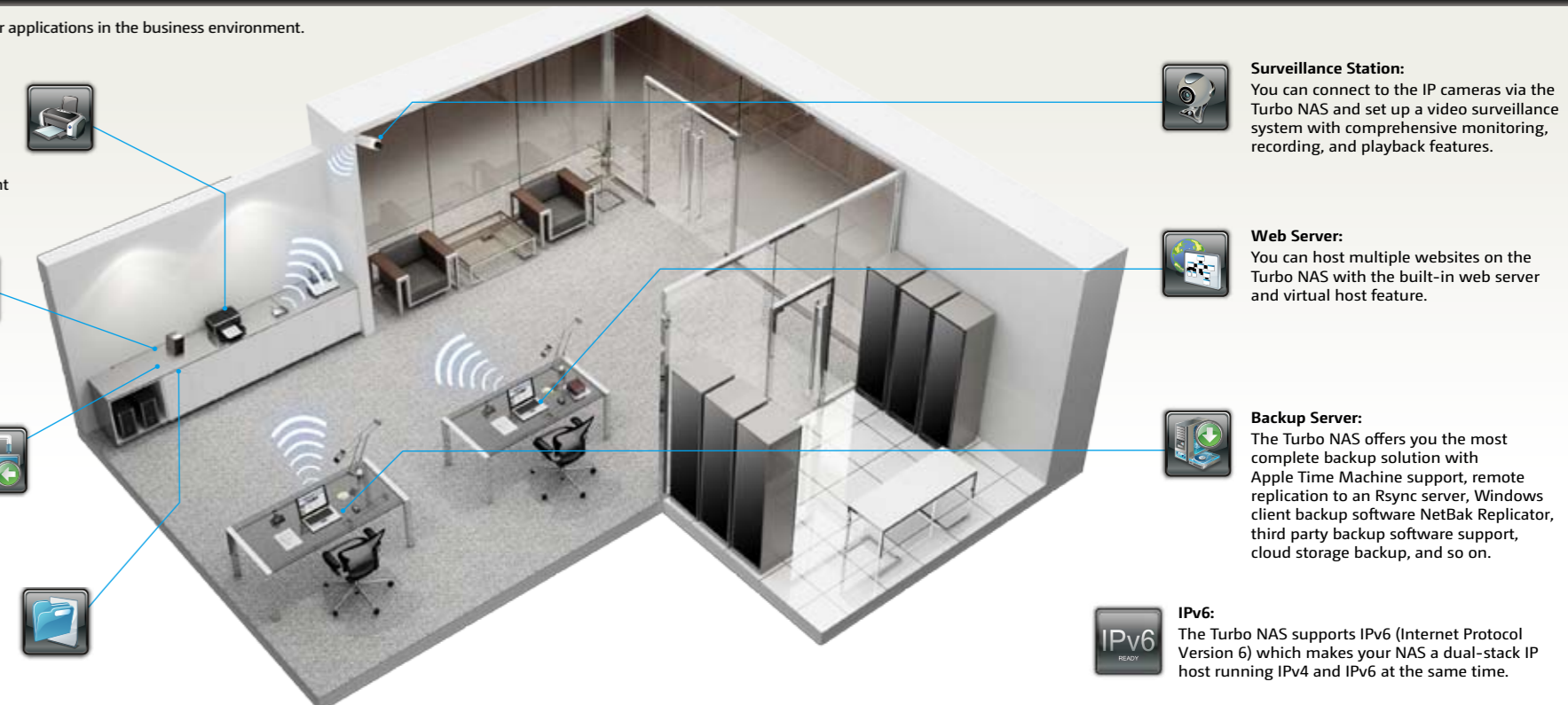
FTP Server:
You can establish your own FTP server by the Turbo NAS and share the files conveniently with your colleagues or customers.

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.

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

Surveillance Station:
You can connect to the IP cameras via the Turbo NAS and set up a video surveillance system with comprehensive monitoring, recording, and playback features.

Web Server:
You can host multiple websites on the Turbo NAS with the built-in web server and virtual host feature.

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, third party backup software support, cloud storage backup, and so on.

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.

About QNAP

QNAP Systems, Inc. is a privately held company founded in 2004 and is dedicated to bringing world class NAS storage, professional NVR video surveillance, and network video players to consumer, small/medium business, and entry level enterprise market segments. QNAP leverages not only hardware design but also a growing core competency in software engineering that is precisely focused on bringing to market products that offer the highest available performance coupled with outstanding reliability, scalability, and ease of installation and use. QNAP is a multi-national company with headquarters in Taipei, Taiwan, and subsidiary offices in China and the United States.

Customer Service
Online Support: http://www.qnap.com
MSN: q.support@hotmail.com
Skype: qnapskype
Forum: http://forum.qnap.com
Facebook: http://www.facebook.com/QNAPSys
Twitter: http://twitter.com/QNAP_nas

Updates & Download
http://www.qnap.com/download.asp

Product Information
http://www.qnap.com

Dealer Seal

Software Specification

Operating System
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 NICs 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, Bonjour)
• Virtual LAN Support [1]
• Supports 802.11n USB Wi-Fi adapter

Network File Sharing
• CIFS/SMB (Plus DFS Support)
• AFP
• NFS
• FTP
• WebDAV

Backup Solution
• Real-time Remote Replication (RTRR) [2]
  ■ Work as Both RTRR Server & Client
  ■ Supports Real-time & Scheduled Backup
  ■ Supports Encryption, Compression, and File Filter]
• USB One Touch Backup (Import/Export) [3]
• 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
• AES 256-bit Volume-based Encryption [4]
• Importable SSL Certificate
• Instant Alert via E-mail, SMS, and LCD

Disk Management
• Single Disk, JBOD, RAID 0, 1, 10, 5, 6, 10+Hot Spare, 5+Hot Spare, 6+ Hot Spare [5]
• Online RAID Capacity Expansion & Online RAID Level Migration
• Bad Block Scan & HDD S.M.A.R.T.
• RAID Recovery
• Bitmap Support
• Supports ISO Mounting (via Web File Manager)

iSCSI (IP SAN)
• iSCSI Target
  ■ Multi-LUNs per Target
  ■ Up to 256 LUNs
  ■ Supports LUN Mapping & Masking
  ■ Supports SPC-3 Persistent Reservation
  ■ Supports MPIO & MC/S
• Virtual Disk Drive (via iSCSI Initiator)
  ■ Stack Chaining Master
  ■ Max. No. of Virtual Disk Drives: 8

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

Power Management
• Wake on LAN [5]
• Scheduled Power on/off (Max. 15 Settings)
• Automatic Power on after Power Recovery

Access Right Management
• User Accounts Management
• Groups Management
• Network Shares Management
• 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
• 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

Mobile App
• QMobile for iPhone, iPad, iPod touch, Android devices
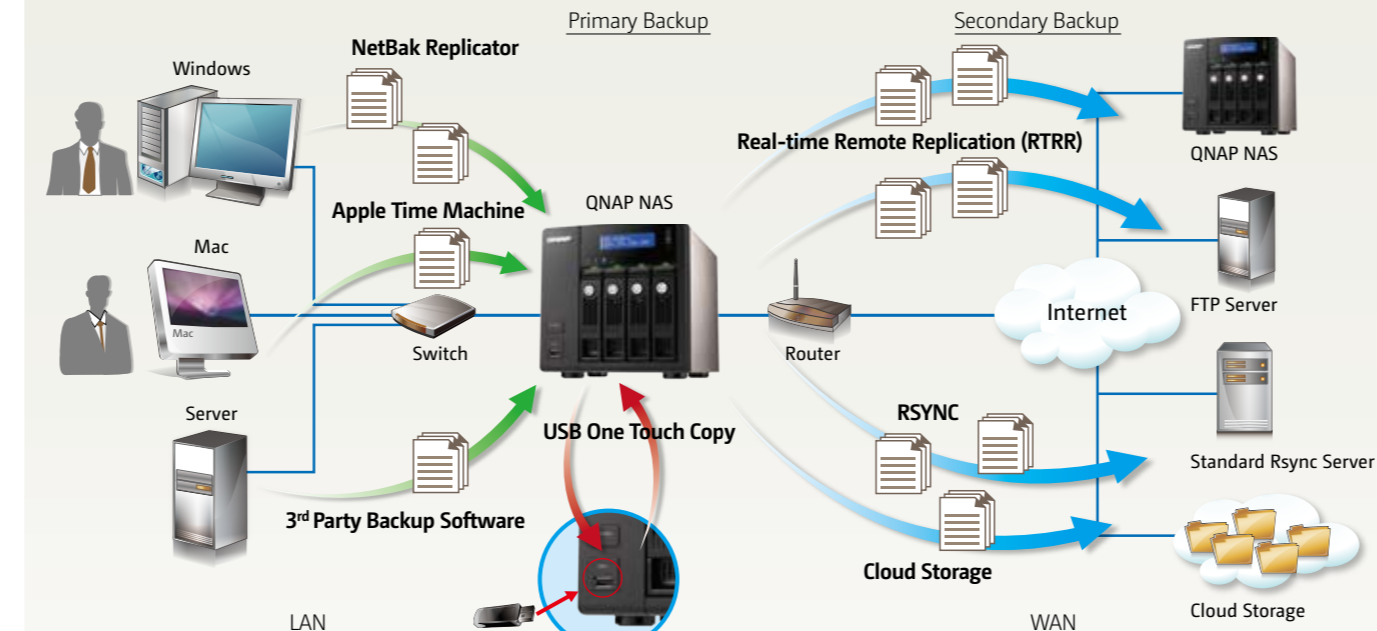• Third Party UPnP Media Player

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.
  ■ Optware IPKG
  ■ Python
  ■ Java Runtime Environment
  ■ Mono
  ■ iStat
• ...and more

Introducing Turbo NAS Firmware V3.4
NEW

Complete Backup Solution
The QNAP Turbo NAS offers complete backup solution to safeguard your data and simplify disaster recovery. The powerful Real-time Remote Replication (RTRR) and offsite backup to ElephantDrive cloud storage are introduced with the new Turbo NAS firmware V3.4.

Primary Backup — NetBak Replicator — Apple Time Machine — Windows — Mac — Server — LAN — Switch — USB One Touch Copy — 3rd Party Backup Software — QNAP NAS — Router — Internet — Secondary Backup — Real-time Remote Replication (RTRR) — QNAP NAS — FTP Server — RSYNC — Cloud Storage — WAN — Standard Rsync Server — Cloud Storage

Real-time Remote Replication (RTRR)

■ **Data backup to remote NAS**
The Turbo NAS offers Real-time Remote Replication (RTRR) for instant and scheduled data backup to one or multiple QNAP NAS servers in remote locations. With real-time synchronization, any file changes on the NAS will be instantly copied to the destination. Advanced options such as backup logs, filters, policies, and email alert are available.

■ **Data backup to FTP servers**
The RTRR feature also allows data backup from the NAS server to one or multiple FTP servers instantly or scheduled, with encrypted SSL/TLS supported.

Data Backup to Cloud Storage: ElephantDrive

The Turbo NAS provides offsite data backup, real-time or scheduled, to ElephantDrive cloud storage to protect your data from any event and allow disaster recovery at anytime. With ElephantDrive you can monitor your cloud storage through a web browser, also versioning control so that you can choose a point of time you wish to restore your NAS. An extra set of all of your data will always be available, so you can remotely recover your data from anywhere with ease.

More Features Available in Firmware 3.4

Host-based Permission Control
The host-based permission control of the Turbo 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.

Virtual LAN Support*
Virtual LAN (VLAN) is an advanced network feature of the the Turbo NAS. You can integrate the NAS into an existing VLAN on a virtualization infrastructure and configure the NAS as the storage system for other VLAN devices. By enabling VLAN on the NAS, only the devices with the same VLAN ID can access the NAS.
*Except: TS-419U+, TS-412U and TS-410U

Wi-Fi Connection
Connect the Turbo NAS to the wireless network through a USB Wi-Fi dongle for convenient access. The NAS is compatible with fast 802.11n and 802.11g dongles for Wi-Fi connection (max. one).

Enhanced Virtual Disk
The Turbo NAS can connect to multiple iSCSI targets on the network and turn them into virtual disks to expand its storage capacity. The NAS now supports more file system formats including EXT3, EXT4, FAT32, NTFS, and HFS+ for mounting and formatting virtual disks.

Advanced Folder Permissions
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.

MyCloudNAS Service

MyCloudNAS service provides host name registration, auto port mapping of UPnP router on your local network, and NAS services publishing on the Internet. You can use MyCloudNAS wizard to finish the settings:

■ **Host name registration**
Register a unique name for your NAS in just a few clicks without complicated DDNS registration.

■ **Auto router configuration**
Specify the ports to be opened on your UPnP router automatically by the NAS for remote access to the NAS services.

■ **Publish and share NAS services conveniently**
Select the web-based NAS services (Multimedia Station, Web File Manager, and so on) to be published on MyCloudNAS.com.

MyCloudNAS Service — UPnP Router — Internet — MyCloudNAS host name registration — Remotely access the NAS services in 2 ways: A: Direct NAS URL: http://hostname.mycloudnas.com B: MyCloudNAS portal website: http://www.mycloudnas.com

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System Management Tools

The Turbo NAS offers lots of features which help you manage the system efficiently.

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.

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.
*Except: TS-412U and TS-410U

Scheduled Power on/off
You can create schedules to automatically turn on, turn off, or restart the NAS. Up to 15 schedules can bet set.

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

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.
Except: TS-419U+, TS-412U, andTS-410U

QMobile for iPhone and Android Devices

QNAP offers a free multimedia application QMobile to allows users of iPhone, iPad, iPod touch and Android devices to carry all the multimedia files on the NAS in their pocket. You can stream videos, view and upload digital pictures, play music that are stored on the NAS over the network and share your music playlists with other iPhone or Android phones users.

Android devices   iPad, iPod touch

Comprehensive Event Logs

Detailed logs of file-level access to the NAS via Samba, iSCSI, FTP, AFP, HTTP, HTTPS, Telnet, and SSH, and networking services accessed by online users can all be recorded.
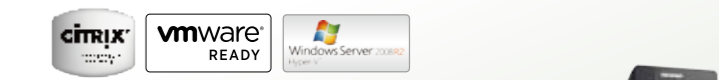

Available QPKG Software Plugins

You can maximize the usage of the Turbo NAS by installing additional QPKG software plugins developed by the users and community worldwide.

MLDonkey — Optware IPKG — Joomla! — More... — QPKG Software Platform — QNAP NAS

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Superior Performance NAS with iSCSI for Business

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Dual-Core CPU
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• TS-x59 Pro II: Dual-core Intel® Atom™ processor D525 1.8 GHz, 1GB RAM, SATA 6Gb/s, USB3.0
• TS-x59 Pro+: Dual-core Intel® Atom™ processor D525 1.8 GHz, 1GB RAM
• TS-x39 Pro II+: Single-core Intel® Atom™ processor D425 1.8 GHz, 1GB RAM

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