

All-in-one NAS Server Features for Digital Home

QNAP Digital Home Series Turbo NAS servers are the ideal solutions for you to store and back up digital pictures, movies, music, and videos; play and share multimedia files within the home network, and set up an intelligent home media center with various networkable devices. You can install the NAS in your living room easily and experience the powerful features of the NAS with ultra high speed, maximum flexibility, and low power consumption & noise.

Multimedia Station for Media Sharing

The Multimedia Station v2 is entirely built on the Adobe Flex/Flash technology to offer the best browser compatibility and user experience. It is designed with a completely new user interface with greater ease of media contents sharing. In addition, the audio playlists can now be easily created and shared among your friends and at the same time allowing you to discover the new music from them.



FTP Server

The built-in FTP server and the Web File Manager enable you to upload or download the media files remotely.

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 offered. You can also download BitTorrent, eMule/eDonkey and NZB files.

iTunes Server for Music Sharing

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.

Printer Server

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



Surveillance Station

The Turbo NAS enables you to configure and connect to multiple IP cameras simultaneously for remote monitoring, video recording, and playback.



NMP-1000P for Cinema-grade Video & Audio Experience

QNAP NMP-1000P network multimedia player plays and streams high-definition videos and next-generation surround sound with commercial-like menu navigation for digital home entertainment. It not only features high performance Wolfson stereo DAC and automatic media management, but also supports file sharing across Windows, Mac, and Linux/Unix.



Supports PS3 and Xbox360

All the photos, music, and videos stored on the Turbo NAS can be played via the PS3 or Xbox360 on your LCD TV or stereo Hi-Fi system.



Share your media files from the QNAP NAS

UPnP Media Server (with built-in TwonkyMedia Server)

The Turbo NAS is a perfect media storage center which works well with UPnP media players. You can view the photos, play videos on TV, and listen to your favorite music on your Hi-Fi system.

Web Server with Virtual Hosting

You can host multiple websites on Turbo NAS with the built-in web server and virtual host feature. The NAS supports PHP, MySQL, HTTPS connection, and SSL authentication. It is the ideal solution for you to create your own websites, e-shops, blogs, content management system (CMS), wiki, and so on.



QMobile for iPhone and Android Devices

QMobile is an application dedicated to iPhone and Android phones users. You can browse and play the multimedia files stored on the NAS, upload photos to the NAS and publish them instantly on the Web, or download your favorite multimedia files to your iPhone/Android phone and play them offline. It also provides auto-synchronization feature upon every connection.

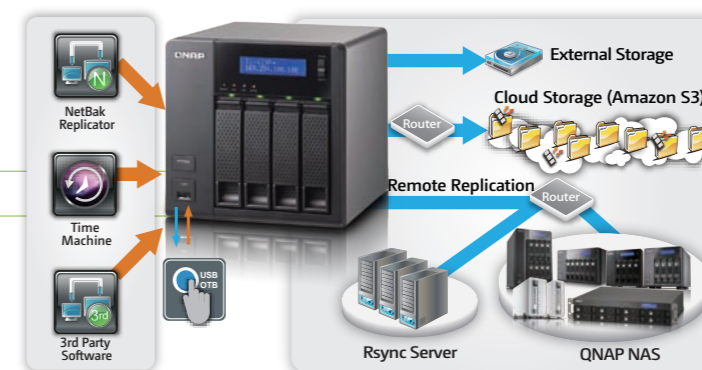


All-in-one NAS Server Features for Small Business

QNAP Small Business Series Turbo NAS servers are powerful, affordable, and easy-to-manage storage solutions with iSCSI service for backup and storage expansion. They offer versatile business-critical applications to maximize the efficiency of limited IT resources in today's small business environments.

Complete Backup Solution

The NAS offers complete backup solution for data protection, including cloud-based storage backup (Amazon S3), Apple Time Machine support, encrypted remote replication, third party software backup, one-touch-copy backup and QNAP exclusive Windows-based utility NetBak Replicator.

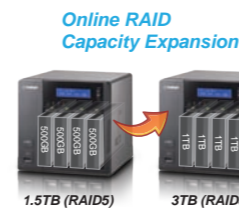


Advanced RAID Management with Hot-swap Design

The Turbo NAS offers RAID 0, 1, 5, 5+hot spare, 6, 10, single disk, 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:

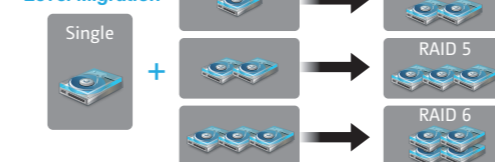
The storage capacity of a RAID configuration can be expanded by replacing the larger hard drives. All the data will be kept and seamlessly moved to the newly installed hard drives without turning off the server.



Online RAID Level Migration:

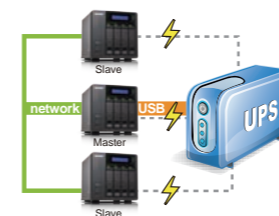
You can upgrade the disk configuration to higher RAID level with the data retained without turning off the server.

Online RAID Level Migration



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

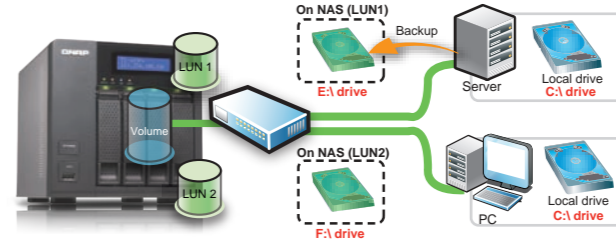
Network UPS



- 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.
- You can configure the NAS to use USB/SNMP standalone UPS mode, or as a network UPS master or slave.

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.



ISO File Archiving and Sharing

Turbo NAS supports mounting ISO images of CD and DVD discs as network shares for data archiving, storage, and sharing.

- Mount up to 256 ISO image files.
- Browse and share disc image files over LAN/WAN via multiple network protocols such as SMB, AFP, NFS, FTP, and WebDAV.



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.



Secure Measures for Data Storage and Access

Policy-based Unauthorized IP Blocking:

The server manager 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.

Remote Login:

The Turbo NAS supports remote login by SSH (secure shell) or Telnet connection.

SSL Security (HTTPS):

The Turbo NAS can be accessed and configured by the web browser securely. The administrator 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.

Secure FTP:

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

Encrypted Remote Replication by Rsync:

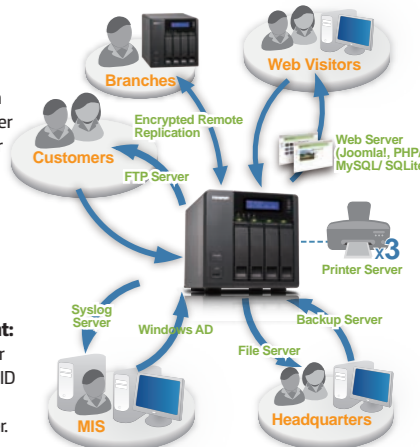
The data on the Turbo NAS can be backed up to or from another Turbo NAS or Rsync server over the network securely.

Share Folder Management:

For the security of Windows network environment, server managers can hide or show network share folders.

User Authority Management:

The Turbo NAS allows the server manager to create multiple user ID and password, and define the authority and quota for each user.



Convenient Authority Control Management

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. The users can use the same set of login name and password to access the NAS.

Share 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.



Comprehensive Event Logs

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

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 Specifications

NAS

Operating System

Embedded Linux

Protocols

CIFS/SMB, AFP (3.2), NFS(v3), FTP, FTPS, HTTP, HTTPS, Telnet, SSH, iSCSI, SNMP, SMTP, SMC

Platforms

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

File System

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

Networking

- TCP/IP IPv4 & IPv6 Dual Stack
- Dual Gigabit Ethernet with Jumbo Frame
- Port Trunking/NIC Teaming (Modes: Balance-rr, Active Backup, Balance XOR, Broadcast, IEEE 802.3ad/Link Aggregation, Balance-lb, and Balance-alt)
- Load Balancing, Failover, Multi-IP Settings
- DHCP Client, DHCP Server
- UPnP & Bonjour Discovery

Security

- IP Filter
- Network Access Protection with IP Auto-blocking
- HTTPS Connection
- FTP with SSL/TLS (Explicit)
- Encrypted Remote Replication (Rsync over SSH)
- Importable SSL Certificate
- E-mail and SMS Alerts

Disk Management

- Single Disk, JBOD, RAID 0/1/5/6/10/5+Hot Spare
- Online RAID Capacity Expansion
- Online RAID Level Migration
- HDD S.M.A.R.T.
- Bad Block Scan
- RAID Recovery
- Bitmap
- ISO Mounting: Max 256 (via Web File Manager)

iSCSI

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

Power Management

- Wake on LAN
- Scheduled Power on/off (Max 15 Settings)
- Automatic Power on after Power Recovery
- Network UPS with SNMP Management
- Internal HDD Standby Mode

Access Right Management

- User Accounts: Max 4,096
- Groups: Max 512
- Shares: Max 512
- Batch User Creation
- Import User List
- User Quota Management
- Supports Active Directory Authentication
- Domain Users Login via CIFS/SMB, AFP, FTP, and Web File Manager
- NLMv2 Authentication

Administration

- AJAX-based User Interface
- HTTP/HTTPS Connections

- Smart Fan Control
- Dynamic DNS (DDNS)
- SNMP Traps (v2 & v3)
- UPS Support with SNMP & USB
- Resource Monitor
- Network Recycle Bin for File Deletion via CIFS/SMB and AFP
- Comprehensive Logs (Event & Connection)
- Real-time Online User List
- Syslog Client
- Firmware Live Update
- System Settings Backup and Restore
- Linux & UNIX
- Restore to Factory Default

Multilingual Support

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

Browser Support

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

File Server

- Protocols: CIFS/SMB (Plus DFS Support), AFP, NFS, FTP/FTPS, HTTP/HTTPS (Web File Manager), WebDAV
- Platforms: Windows, Mac OS, Linux/UNIX
- Web File Manager:
 - File Management by Web Browser
 - Smart File & Folder Search

FTP Server

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

Backup Server

- Apple Time Machine Support with Backup Management
- QNAP NetBak Replicator Backup Software (Windows Client)
- Backup to Cloud Storage (Amazon S3)
- Backup to External Storage Devices
- USB One Touch Backup (Import/Export)
- Block-level Remote Replication:
 - Work as Both Rsync Server & Client
 - Encrypted Replication to/from QNAP NAS Servers
- Third Party Backup Software Support: Acronis True Image, CA BrightStor, ARCServe Backup, EMC Retrospect, Symantec Backup Exec, LaCie SilverKeeper

Web Server

- HTTP/HTTPS Connections
- Joomla! Server
- Web-based Management via phpMyAdmin (QPKG)
- Virtual Hosts: Max 32

Media Server

- Multimedia Station
- Photo Viewing, Audio & Video Playback
- Image Slideshow and Rotation
- Automatic & Scheduled 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
- Cooliris 3D Wall Display
- Web Publishing (Facebook, MySpace, MSN Live, Twitter, Plurk, and Blogger)
- E-mail Publishing
- Supported Formats:
 - Photo: JPG/JPEG, GIF, PNG
 - Audio: MP3

* The features may be different depending on different models.

NMP-1000P

Networking

- TCP/IP, HTTP, CIFS/SMB, NFS, AFP, FTP, DDNS, DHCP client, BitTorrent P2P

Remote Share

- Up to 32 remote shares via SMB/CIFS or NFS
- Automatic share folder discovery on Microsoft network
- Automatic QNAP NAS discovery
- Discover and playback from UPnP supported storage devices

File System

- NTFS (system default)
- FAT32, EXT3

User Management

- User account management (max. 128 users)
- User group management (max. 32 groups)

File System Management

- Network share management (max. 128 shares)
- Unicode support
- Web File Manager

File Server

- Share files across Windows, Mac, Linux, UNIX and centralized management

System Tools

- Hard disk standby mode settings
- System firmware upgrade
- System logs
- Playback logs

Audio Formats**

- FLAC/CUE, APE/CUE, WAV, WMA, AAC, PCM, AC3, MP3, Ogg, MAA, DTS, Dolby Digital

Video Formats**

- Codec: MPEG1, MPEG2, MPEG4, XVID, H.264, H.263, WMV9, VC1
- Container: AVI, MPEG/MPEG, DVD (VOB, IFO, ISO, NRG), WMV, ASF, TP, TS, TRP, M1V, M2V, M4V, M2P, M2T, M2TS, BDMV/BD ISO, MTS, MOV, MP4, RMP4, MKV, MOD, 3GP

Image Formats

- BMP, JPEG/JPG, PNG, GIF

Playlist

- M3U, PLS, WPL, ASX

Subtitle Compatibility

- SRT, SUB, SMI, TXT, ASS, SSA, SUB (with idx)

Online Contents

- Flickr and Picasa photos, Apple movie trailers, Internet radio, Medi@fly™, weather forecast

FTP Server

- Access from remote location via FTP server
- Supports up to 16 concurrent connections (NAS mode)

Download Station

- PC-less BitTorrent download
- Unique download utility QGet (Windows/Mac) for remote management

Content Management

- Automatic categorization of local and remote disk data
- User rating of video and music files
- Photo sorting by date taken & keywords
- Parental control

User Customization

- Home menu style selection
- Subtitle size, location, and time offset settings

** Support unprotected files only.

Comparison List



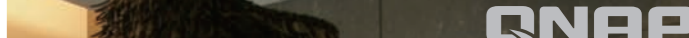
Model Name	TS-112	TS-119P+	TS-212	TS-219P+	TS-412	TS-419P+	NMP-1000P		
System	CPU: Marvell® 1.2 GHz Memory: 256 MB Flash: --	Marvell® 1.6 GHz 512MB	Marvell® 1.2 GHz 256 MB	Marvell® 1.6 GHz 512MB	Marvell® 1.2 GHz 256 MB	Marvell® 1.6 GHz 512MB	Sigma Designs SMP8643 512MB		
Internal HDD	2.5"-inch (SATA/SSD)*	--	--	--	Yes	Yes	--		
	3.5"-inch (SATA/SATAII)*	Yes	Yes	Yes	Yes	Yes	Yes		
	Max. Capacity***	3TB	3TB	6TB	6TB	12TB	12TB	2TB	
I/O Interface	Hot-swappable	--	Swappable	--	Yes	Yes	--		
	USB	3 (Front:1, Back:2)	3 (Front:1, Back:2)	3 (Front:1, Back:2)	3 (Front:1, Back:2)	4 (Front:1, Back:3)	4 (Front:1, Back:3)	3 (Host:2, Slave:1)	
Network	eSATA*	1	1	--	2	2	2 (Host:1, Slave:1)		
	A/V Output	--	--	--	--	--	HDMI, Analog audio, Component/ Composite video, S/PDIF optical		
Physical Specification	Gigabit LAN Port	1	1	1	1	2	2		
	USB Wireless N adapter*	--	Yes	--	Yes	--	Yes		
	Wake On LAN	--	Yes	--	Yes	--	Yes		
RAID Management	Dimensions (H x W x D)	165.5 x 60 x 218.4 mm 6.52 x 2.36 x 8.60 inch	150.2 x 67 x 216 mm 5.91 x 2.64 x 8.54 inch	165.5 x 85 x 218.4 mm 6.52 x 3.35 x 8.60 inch	150 x 102 x 216 mm 5.91 x 4.02 x 8.5 inch	177 x 180 x 235 mm 6.97 x 7.09 x 9.25 inch	177 x 180 x 235 mm 6.97 x 7.09 x 9.25 inch	204 x 176.4 x 62mm 8 x 6.9 x 2.4 inch	
	Weights (Net/Gross)	0.79kg/ 1.74 lb (Net) 1.7kg/ 3.75 lb (Gross)	1.06kg/ 2.34 lb (Net) 1.86kg/ 4.10 lb (Gross)	0.91kg/ 2.01 lb (Net) 1.9kg/ 4.19 lb (Gross)	1.74kg/ 3.84 lb (Net) 2.92kg/ 6.44 lb (Gross)	3kg/ 6.61 lb (Net) 4.6kg/ 10.14 lb (Gross)	3kg/ 6.61 lb (Net) 4.6kg/ 10.14 lb (Gross)	0.7kg/ 1.54 lb (Net) 2kg/ 4.4 lb (Gross)	
Power	RAID Support	Single Disk, Q-RAID1	Single Disk, Q-RAID1	Single Disk, JBOD, RAID 0, 1	Single Disk, JBOD, RAID 0, 1	Single Disk, JBOD, RAID 0, 1, 5, 6, 10, 5+ hot spare	Single Disk, JBOD, RAID 0, 1, 5, 6, 10, 5+ hot spare	Single Disk	
	Power Supply	36W	36W	60W	60W	120W	120W	60W	
Fan	External Power Adapter	--	Yes	--	Yes	--	Yes		
	Smart Fan	1 (5cm, 12V DC)	1 (5cm, 12V DC)	1 (6cm, 12V DC)	1 (7cm, 12V DC)	1 (9cm, 12V DC)	1 (9cm, 12V DC)	1 (4cm, 12V DC)	
Access Right Management	Sleep/Operation consumption	5W / 7W	5W / 12W	6W / 13W	7W / 19W	11W / 26W	13W / 31W	9W / 16W	
	Max. User Accounts					2048		4096	128
	Max. User Groups					256		512	32
Surveillance	Max. Share Folders					256		512	128
	Max. Concurrent Connections					256			16
Performance**	Max. IP Cameras*	2	2	2	2	4	4	--	
	SMB (MB/sec)	73.2 / 46.7	103.3 / 65.1	70.2 / 40.7	102.9 / 57.4	69.3 / 32.7	100.2 / 45.4	--	
Surveillance	FTP (MB/sec)	106.3 / 44.5	114.1 / 60.2	107.5 / 38.8	113.1 / 54.1	110.3 / 32.8	113.7 / 42.7	--	

* Please check QNAP website for the compatibility list. ** Actual testing results may be different depending on your operation environment. *** Using 3TB Hard disks.

Front & Rear (TS-419P+)



Front & Rear (NMP-1000P)



QNAP Home and SOHO Series

- Store & share your digital collections
- Ultra low power consumption & quiet operation

