TS-563 5-Bay Turbo NAS

An Affordable, Business-Ready Quad-Core NAS with 10GbE Connectivity

AMD EMBEDDED SOLUTIONS G SERIES X

Flexible 10GbE Connectivity

SFP+

10GBASE-T

64bit x86 **Quad-core 2.0 GHz**

Virtualization Station

- Designed for file management, sharing and backup of business data with snapshot support
- Create multiple virtual machines to run various operating systems on the NAS with the Virtualization Station
- Supports high-speed 10GbE networks and extensive features for cost-conscious applications
- Expandable to either 4x 1GbE ports or 2x 10GbE + 2x 1GbE ports
- Hardware-accelerated encryption engine for efficient cryptographic performance exceeding 300MB/s
- Scale up to 21 drives with QNAP UX-800P / UX-500P expansion enclosures

CITRIX ready · Windows Server 2012 Certified · vmware READY · 2/8GB DDR3L Max 16GB RAM · SATA 6Gb/s 2.5"/3.5" · Dual GbE Ports · PCIe 10GbE Ready · AES-NI · Storage Expansion

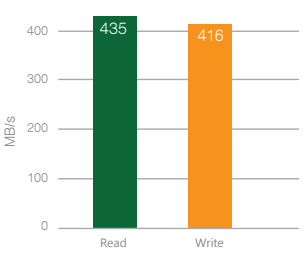
Power. Reliability. Expandability.

The power of 64-bit quad-core processor with AES-NI support

The 5-bay TS-563 is equipped with a fast 64-bit AMD® x86 quad-core 2.0 GHz processor with 2GB/8GB DDR3-1600 RAM (upgradable to 16GB), SATA 6Gb/s, and two Gigabit LAN ports (expandable to max. 4 x GbE ports or 2 x GbE + 2 x 10GbE ports) for lightning-fast multi-tasking performance with SSD cache support. The TS-563 delivers up to 448 MB/s read &write speeds with 4 x GbE port configuration. The TS-563's hardware-accelerated encryption engine provides unmatched encryption performance in its class, up to 496MB/s with AES-256 bit full NAS volume encryption, boosting system performance & security while ensuring the safety of sensitive business data.

Throughput (4 x GbE)

AES 256-bit Encrypted Transfer (4 x GbE)



Sequential throughput (64KB)

Tested in QNAP Labs. Figures may vary by environment.

Test Environment

NAS:

OS: QTS 4.1.3

Volume type: RAID 5; 5 x Plextor PX-256M5Pro SSD

Network environment: direct connection between NAS and PC, 1GbE LAN (MTU 1500)

Client PCs:

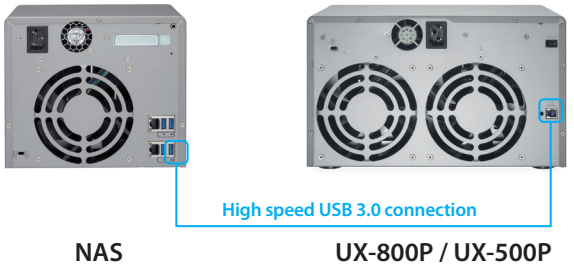
Intel® Core™ i7-4770 3.40GHz CPU; DDR3 1600Hz 16GB; WD 1TB WD10EZEX; Intel Gigabit CT (MTU 1500);

Windows® 7Professional 64bit SP1

IOMeter configuration: Transferring 8GB file continuously to/from 4/2 PCs for 3 minutes. Block size: 64KB for SMB2.0 (Throughput)

Seamless capacity expansion

The TS-563 offers a high performance yet affordable storage solution to fulfill the needs of businesses for archiving rapidly-growing data & large files. The TS-563 supports capacity expansion by connecting multiple QNAP expansion enclosures. With the QNAP scale-up solution, the raw storage capacity can be expanded on demand, making the TS-563 an ideal file center for storage-intensive business applications such as video surveillance, data archiving, TV broadcast storage, and more.



Turbo NAS Model	RAID Expansion Enclosure	No. of RAID Expansion Enclosure	Total HDD No. (NAS + Enclosure)	Max. Raw Capacity (TB)*
TS-563	UX-800P	2	21	168
		1	13	104
	UX-500P	2	15	120
		1	10	80

*The maximum capacity is calculated by using 8TB HDDs.

Flexible 10 GbE connectivity

A 10GbE (10 Gigabit Ethernet) network is essential for businesses that demand high bandwidth for virtualization and fast backup and restore for an ever-growing amount of data. The TS-563 is an affordable and reliable storage solution for deploying a 10GbE environment.

QTS - Simple and efficient

Thanks to the intuitive user interface of QTS, system operations of the TS-563 are smooth and handy. Its intelligent desktop allows you to find desired functions quickly, create desktop shortcuts or group shortcuts, monitor important system information on a real-time basis, and open multiple application windows to run multiple tasks concurrently, bringing greater operating efficiency.

Run additional operating systems

The TS-563 is empowered by AMD-V™ virtualization technology to support Virtualization Station, transforming it into a 2-in-a-box device that can function as an all-in-one NAS and a virtualization platform. Virtualization Station supports multiple operating systems, virtual machine (VM) creation, VM import/export, snapshot, and enables desktop operations on web browsers. You can also download VMs on demand from online VM marketplaces and import them to the NAS without any complex procedures.

Cross-platform file sharing & centralized data storage

The TS-563 supports SMB/CIFS, AFP, and NFS protocols for file sharing across Windows®, Mac, Linux/UNIX networks. Data, logs and ISO images of CDs and DVDs can be centrally stored on the TS-563 and protected by an integrated antivirus solution. The Windows AD and LDAP services enable system administrators to configure user permissions by using an existing Windows AD server, LDAP server or built-in LDAP service. The TS-563 supports SAMBA v4 and can act as a Windows domain controller to manage privilege settings.

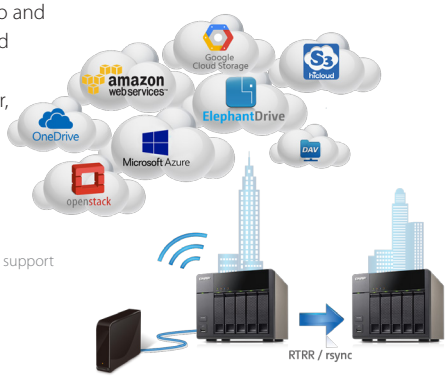
Well-rounded backup solutions to secure data

QNAP NetBak Replicator supports real-time and scheduled data backup on Windows® including Outlook email archiving. Apple Time Machine is also supported to provide Mac OS X users with a solution to effortlessly back up data to the TS-563. The front-panel USB 3.0 port features a one-touch-copy function for you to instantly back up data from external drives to the TS-563 with just one click, or alternatively to back up data from the TS-563 to external drives. A wide range of third-party backup software such as Acronis® True Image and Symantec® Backup Exec are also supported.

Disaster recovery solutions brings peace of mind

The TS-563 offers various data recovery options. RTRR (Real-Time Remote Replication) supports real time or scheduled data backup to a remote Turbo NAS or FTP server and synchronizes files to a remote folder from a local folder with better backup efficiency and reduced backup time. The TS-563 also supports the rsync protocol to back up data to another remote server on a scheduled basis. Data can also be backed up to and restored from a range of cloud storage services, including Amazon® S3/Glacier, OneDrive, Microsoft® Azure, ElephantDrive®, Dropbox® and Google Cloud Storage*

*Note: The Google Drive and OneDrive support will be provided in the QTS 4.2.0 OS.

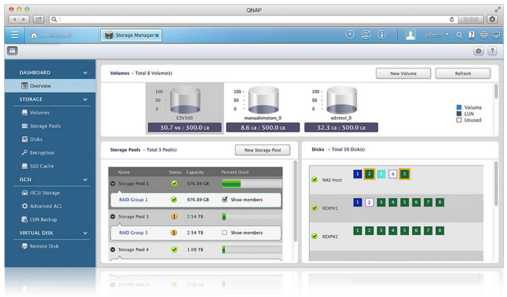


Comprehensive security options

In open network environments, business data may be exposed in a potential hack. The TS-563 provides numerous security options, such as encrypted access, IP blocking, and more. IT administrators can also control the access rights of each user to different folders, preventing unauthorized access to important files. The TS-563 is validated with military-level FIPS 140-2 AES 256-bit encryption, preventing sensitive business data from unauthorized access and breach even if the hard drives or the entire system were stolen.

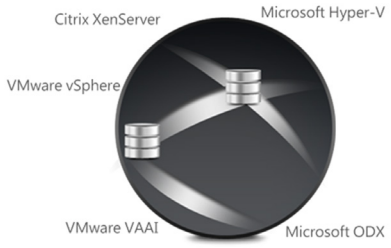
Powerful QNAP flexible volume

QNAP's flexible volume provides a more secure and flexible way to store NAS data. This next-generation volume offers powerful features such as storage pooling with multiple RAID group protection, thin provisioned volumes with space reclaim, block-level iSCSI LUN, and online capacity expansion. The QTS Storage Manager neatly presents tools and options for managing system storage which greatly simplifies the process of NAS capacity expansion and QNAP RAID expansion enclosure management.



Storage for comprehensive virtualization applications

The TS-563 supports VMware® and Citrix®, and is compatible with Microsoft® Hyper-V™ and Windows Server 2012, benefiting flexible deployment and management in the virtualization environments. The TS-563 supports VMware VAAI and Microsoft ODX to increase performance by offloading server loading for ESXi server and Hyper-V respectively, and supports QNAP vSphere Client plug-in and QNAP SMI-S provider for enhanced operational efficiency and management in virtualization applications.

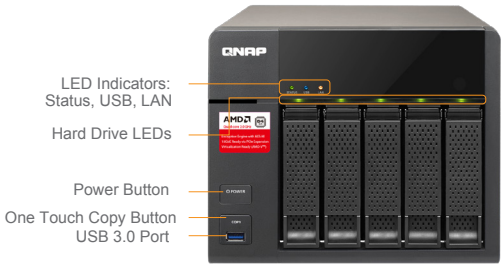


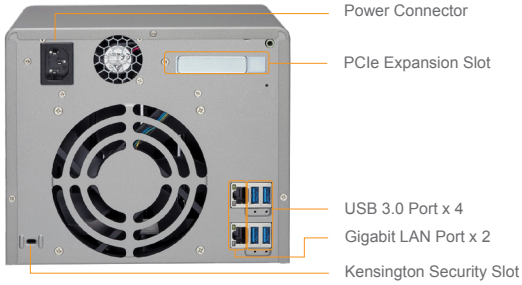
Comprehensive surveillance solution providing 24/7 security

Surveillance Station is a professional network surveillance Video Management System (VMS) that offers a user-friendly management interface, compatibility with over 3,000 IP camera models, and expandable IP camera channel licenses. It supports real-time monitoring, video & audio recording and playback with a wide range of customizable settings. You can also install the Vmobile mobile app on your iOS® or Android™ devices to manage the monitored channels anytime and anywhere to safeguard your office environment, or install the Vcam mobile app to turn your device into a network camera to instantly record to your TS-563. The TS-563 offers 4 free IP camera channels and you can expand up to 40 channels by purchasing additional licenses.

Camera Channels
Default: 4 / Max: 40

Hardware & Software Specifications





	TS-563-2G	TS-563-8G
CPU	AMD x86 G-Series Quad-core 2.0 GHz processor	
Floating Point Unit	√	
Hardware Encryption Engine	√ (AES-NI)	
DRAM	System memory: TS-563-2G: 2GB x 1	System memory: TS-563-8G: 8GB x 1
	Total memory slots: 2 SODIMM Memory expandable up to: 16 GB (8GB x 2)	
Flash Memory	512MB	
Hard Disk Drive	5 x 3.5" or 2.5" SATA 6Gb/s, 3Gb/s HDD or SSD, hot swappable NOTE: 1. The system is shipped without HDD/SSD. 2. For the compatibility list, please visit www.qnap.com/compatibility	
LAN Port	2 Gigabit RJ-45 Ethernet ports, supporting port trunking Expandable up to 4 x GbE or 2 x 10GbE + 2 x GbE via PCIe NIC	
PCIe Slot	1 (PCIe Gen2 x 4)	
LED Indicators	Status, USB, HDD 1-5	
USB	5 USB 3.0 ports (front:1, rear:4)	
Buttons	Power, USB One-Touch-Copy, Reset	
Alarm Buzzer	System warning	
Form Factor	Desktop/tower	
Dimensions	185 x 210.6 x 235.4 mm (HxWxD) 7.28 x 8.29 x 9.27 inch (HxWxD)	
Weight	Net weight: 4.4 kg (9.7 lbs) Gross weight: 5.8 kg (12.79 lbs)	
Power Consumption (W)	S3 sleep: 2.26W HDD standby: 30.17W Typical operation: 47.68W (with 5 x 2 TB HDDs installed)	
Operating Temperature	0 - 40°C, 5~95% RH non-condensing, wet bulb: 27°C	
Power Supply	ATX 250W, 110-240V AC, 50-60Hz, 5A	
Secure Design	Kensington security slot for theft prevention	
Fan	12cm quiet cooling fan (12V DC)	

Volume Types	Single disk, RAID 0, 1, 5, 6, 10, 5 + spare
Storage Management	Flexible volume/LUN with Storage Pool, Online RAID capacity expansion and online RAID level migration, SSD cache, AES 256-bit full NAS encryption, SSD cache
Storage Expansion	Expand up to 21 drives via QNAP expansion enclosures: UX-800P, UX-500P (Max 2 enclosures)
Supported Client OS	Windows XP/Vista/7/8, Windows Server 2003/2008 R2/2012 R2, Apple Mac OS X, Linux & UNIX
File System	Internal: EXT4 External: EXT4, EXT3, NTFS, HFS+, FAT32
Networking Protocols	CIFS/SMB, AFP, NFS, FTP, FTPS, SFTP, TFTP, HTTP(S), Telnet, SSH, iSCSI, SNMP, SMTP, VPN (PPTP, OpenVPN, L2TP), WebDAV, Rsync
File Sharing	Max user accounts: 4096; Max groups: 512; Max shared folder: 512; Max concurrent connections: 700
Directory Service	Windows AD, domain controller, LDAP
Surveillance Station	Includes 4 free camera licenses, up to 40 camera channels via additional license purchase (http://license.qnap.com)
Features	File Station, Backup Station, FTP server, Web Server, Qsync, Notes Station, Print Server, VPN Server, VPN Client, Antivirus Protection, System Logs, Photo Station, Music Station, Video Station, Download Station (BT/HTTP/FTP), App Center, Background Transcoding
Streaming Server	DLNA Server, Airplay, Chromecast, iTunes Server
Remote Access	myQNAPcloud with CloudLink
Mobile Apps	Qfile, Qmanager, Qmusic, Qphoto, Qvideo, Qnotes, Qget, Qremote, Vmobile
Utilities	Qfinder, Qsync, NetBak Replicator, vSphere Client plug-in, QGet, myQNAPcloud Connect, Qsnap
Language	English, Chinese (Traditional & Simplified), Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Romanian, Russian, Spanish, Swedish, Thai, Turkish

* Some data encryption functions may not available in accordance with the legislative restrictions of some countries (such as Russia).
** For utilities and mobile apps, please refer to QNAP.com for the supported platforms.

Accessories

LAN Card				
Order P/N	LAN-10G2T-D	LAN-10G1T-D	LAN-10G1SR-D	LAN-1G2T-D
Description	Dual-port 10GBASE-T 10GbE NIC	Single-port 10GBASE-T 10GbE NIC	Single-port SFP+ 10GbE NIC	Dual-port GbE NIC

QNAP Systems, Inc.

TEL : +886-2-2641-2000 FAX : +886-2-2641-0555 Email: qnapsales@qnap.com
Address : 3F, No.22, Zhongxing Rd., Xizhi Dist., New Taipei City, 221, Taiwan

QNAP may make changes to specification and product descriptions at any time, without notice.
Copyright © 2015 QNAP Systems, Inc. All rights reserved.
QNAP® and other names of QNAP Products are proprietary marks or registered trademarks of QNAP Systems, Inc. Other products and company names mentioned herein are trademarks of their respective holders.

Netherlands (Warehouse Services)
Email: nlsales@qnap.com
TEL: +31(0)107600830

Germany
Email: desales@qnap.com
TEL: +49-89-381562991

China
Email: cnsales@qnap.com.cn
TEL: +86-400-628-0079

India
Email: indiasales@qnap.com

US
Email: usasales@qnap.com
TEL: +1-909-595-2782

Thailand
Email: thsales@qnap.com
TEL: +66-2-5415988

P/N: 51000-023834-RS
201505 (EN) A