TS-873A

Brand: QNAP
Product Code: TS-873A
Availability: 10
Weight: 7.40kg
Dimensions: 180.20mm x 329.30mm x 279.60mm
Call for Price:

Short Description

AMD Ryzen™ quad-core 2.2 GHz 2.5GbE NAS supports M.2 NVMe SSD and PCIe expansion for adding 10GbE high-speed connectivity and M.2 SSD; QTS and QuTS hero dual operating system for greater flexibility

Description

Featuring an AMD Ryzen™ V1000 series V1500B quad-core processor that delivers great system performance with up to quad-core / 8 threads and Turbo Core up to 2.2 GHz. The TS-873A features two 2.5GbE RJ45 ports and two PCIe Gen 3 slots for you to flexibly deploy 5GbE/10GbE networks. Two M.2 NVMe SSD slots for Qtier Technology and SSD Caching enable constant storage optimization. The TS-873A supports QTS and QuTS hero, allowing users to flexibly switch operating system based on their requirements.

- **2.5GbE connectivity**

  Both 2.5GbE ports are backwards compatible with 1GbE/ 100MbE speeds. Up to 5 Gbps transfer speeds can be achieved by using port trunking.

- **Flexible PCIe expansion**

  Add extra functionality with PCIe cards, including 10GbE ports, SSD caching, extra USB 3.2 Gen 2 ports, wireless networking, or Fibre Channel.

- **GPU applications**

  Supports entry-level NVIDIA® graphics cards for video processing or GPU-passthrough to VMs.

- **SSD cache acceleration**

  Features two M.2 PCIe NVMe SSD slots for Qtier Technology and SSD Caching enable constant storage optimization.

- **Virtualization applications**

  Host containerized applications and virtual machines with various operating systems.

- **Supports QTS/QuTS hero OS**

  Features QTS operating system and supports switching to ZFS-based QuTS hero for greater reliability.

High performance AMD Ryzen™ processor

The TS-873A is powered by an AMD Ryzen™ V1000 series V1500 quad-core 2.2 GHz processor with up to 64GB RAM (ECC memory is supported*) and features USB 3.2

Gen 2 ports for speeds up to 10 Gb/s. The TS-873A also provides one USB Type-C port for supporting more devices to transfer large media files across devices, providing you with a more efficient workflow.

*Using ECC memory requires the removal of pre-installed memory, as you cannot use non-ECC memory with ECC memory.

Virtualization Certifications Supported by TS-873A

vmware®
READY

Microsoft
Hyper-V

citrix
Ready™

veeAM
READY
Repository
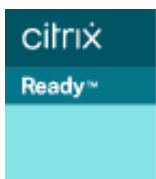
Transform your network with a wallet-friendly 2.5GbE switch

Upgrading your network shouldn't break the bank, and 2.5GbE connectivity provides immediately noticeable improvements compared to standard 1GbE. QNAP offers 2.5GbE switches that supports Multi-Gigabit NBASE-T™ and allows you to use existing CAT5e cables to connect multiple computers and NAS, assisting organizations in implementing high-speed, secure and scalable network environments without going over budget.
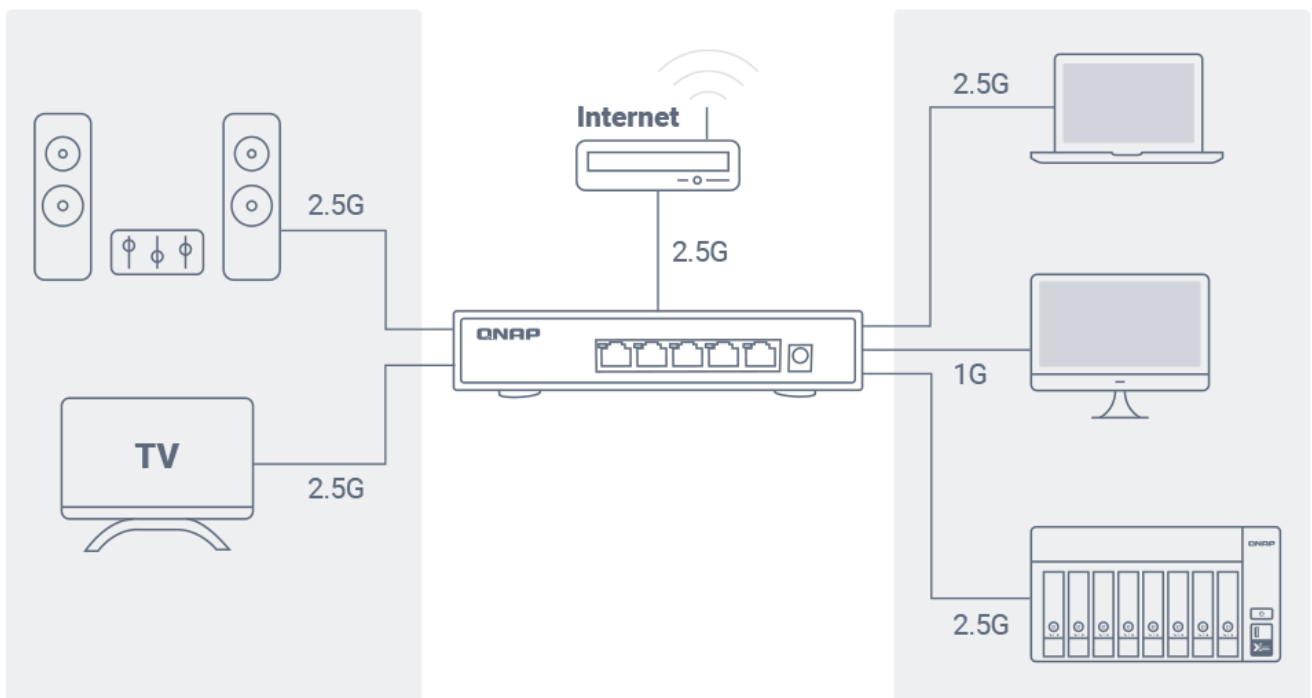
Switch to QuTS hero operating system for optimal data integrity and reliability

The TS-873A also supports QuTS hero - QNAP's ZFS-based NAS operating system. Providing end-to-end data integrity, data reduction (inline data deduplication, compression, and compaction), and much more, QuTS hero uses additional system

resources to ensure an optimal environment for protecting business data.

QTS

Suited for cross-teams file sync, and HDD-SSD hybrid storage applications

QuTS hero

Featuring highly reliable data protection and data reduction, and optimized for SSD-based applications

Obtain performance benefits from M.2 SSD caching

The TS-873A features 2 M.2 NVMe SSD slots for you to enjoy SSD caching or Qtier auto tiering Technology

Improve random data access speeds with an SSD cache
SSD caches accelerate IOPS performance and reduce latency for storage volumes. They are perfect for IOPS-demanding applications (including databases and virtualization) and can significantly improve overall workflows.

Maximize the value of SSDs with Qtier Technology

Qtier™ Technology empowers the TS-873A with auto tiering that helps continuously optimize storage efficiency by automatically moving data between M.2 SSDs, 2.5-inch SSDs, and high-capacity HDDs based on the data's access frequency. Qtier™ 2.0 features IO-awareness that empowers SSD-tiered storage with a cache-like reserved space to handle burst I/O in real time, greatly maximizing the advantages of SSDs.

Upgrade to 10GbE and abundant capability with PCIe expansion

The TS-873A features two PCIe Gen 3 x4 slots that allows for various expansion cards for expanding application potential.

SAS/ SATA expansion card

Designed for connecting the TS-873A to TL SATA, TL SAS and REXP expansion units to increase storage capacity.

5GbE/10GbE network card

Enable lightning-fast throughput for bandwidth-demanding tasks, such as virtualization, massive data transmission, and fast backup/restoration.

QM2 M.2 SSD/10GBE CARD

Adds M.2 NVMe SSD/ SATA SSD caching or 10GbE (10GBASE-T) connectivity to the NAS for optimized performance and bandwidth.

USB 3.2 GEN 2 (10GBPS) expansion card

Enjoy higher network speeds or boost the USB connectivity for faster file transfer.

Wi-Fi 6 wireless adapter

Install a PCIe 802.11AX network adapter (based on the Intel® AX200) in your NAS to create a seamless Wi-Fi 6 network environment or add a QWA-AC2600 wireless adapter with WirelessAP Station to build a wireless access point.

Easy and Secure File Management

File Station allows direct management of files stored on the TS-873A and in the cloud. Users can easily upload files from their PC, drag/drop files between folders,

rename/delete files, and configure file/folder permissions to prevent unauthorized access. Microsoft Office Online can also be used to directly view/edit Microsoft Office documents stored on the TS-873A. Confidential/sensitive data can be encrypted to add extra security.
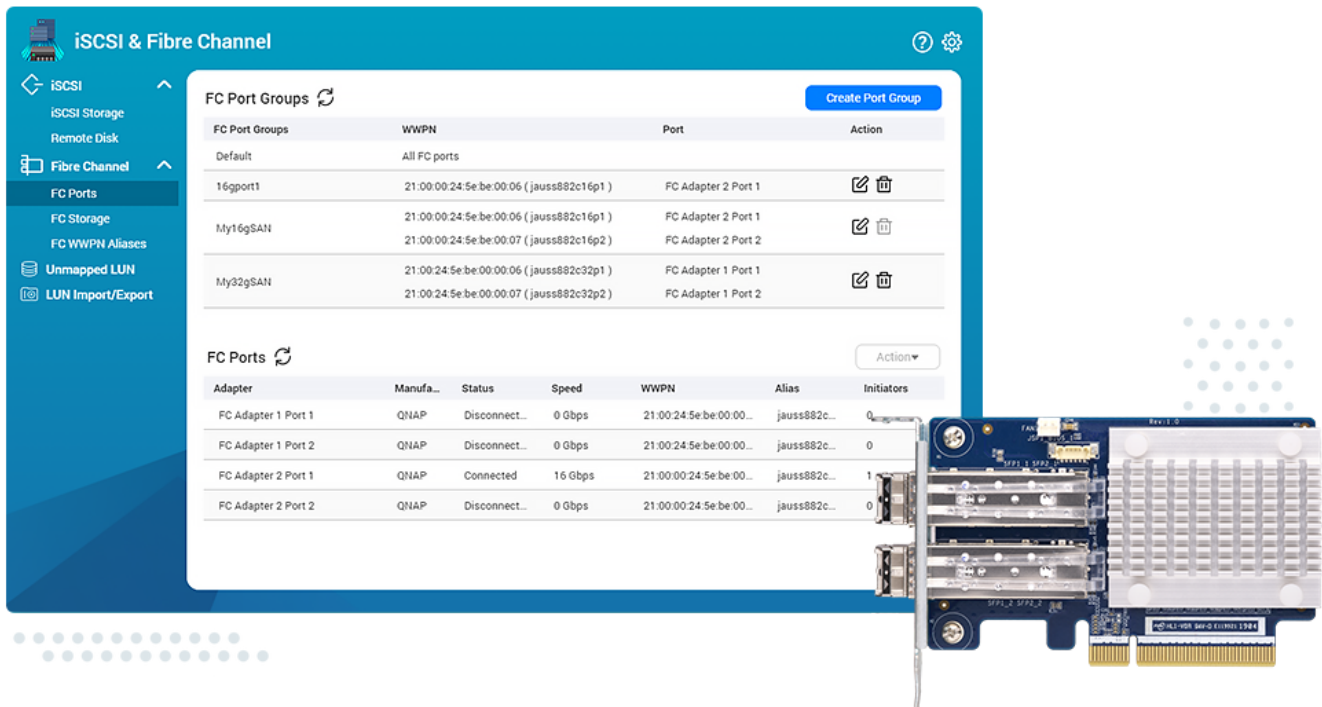
Install a graphics card for GPU-accelerated computing

Graphics cards are optimized for graphical calculations and transformations, but require significantly more power than other hardware. The TS-873A features PCIe slots to support high-profile graphics cards that do not need power cables, including NVIDIA® GeForce® GTX1650 graphics cards to boost performance of applications such as video editing , 4K UHD transcoding, imaging processing in QTS and performance of virtual machines via GPU passthrough.

Build an affordable Fibre Channel SAN environment

Common Fibre Channel Storage Area Networks (SAN) devices are often costly. By installing a QNAP 16Gb Fibre Channel card (QXP-16G2FC 16Gb) in the TS-873A, you can set a Fibre Channel Target using the iSCSI & Fibre Channel app. Moreover, the LUN Masking and Port Binding features provide an additional layer of data security.

High-speed 2.5GbE VM Backup Solution

With Hyper Data Protector, the TS-873A becomes an agentless backup tool for unlimited VMware® vSphere and Microsoft® Hyper-V VM backup. Hyper Data Protector features incremental backup, global deduplication, backup scheduling and recovery compression. With 2.5GbE connectivity, backup and restoration times are greatly reduced, providing a cost-effective solution for disaster recovery.

QNAP Backup & Data Protection Solutions: Complete Apps & Utilities at Your Fingertips

QNAP provides comprehensive solutions for virtually all data protection requirements. Discover an array of apps/utilities to help you back up various sources, including:

[Boxafe](#) – Google Workspace (G Suite) /Microsoft 365 SaaS backup
[Hyper Data Protector](#) – VMware vSphere/Microsoft Hyper-V VM backup
[Hybrid Backup Sync](#) – QNAP NAS/file server/macOS backup
[NetBak Replicator](#) – Windows backup
[Snapshot](#) – QNAP NAS protection/backup
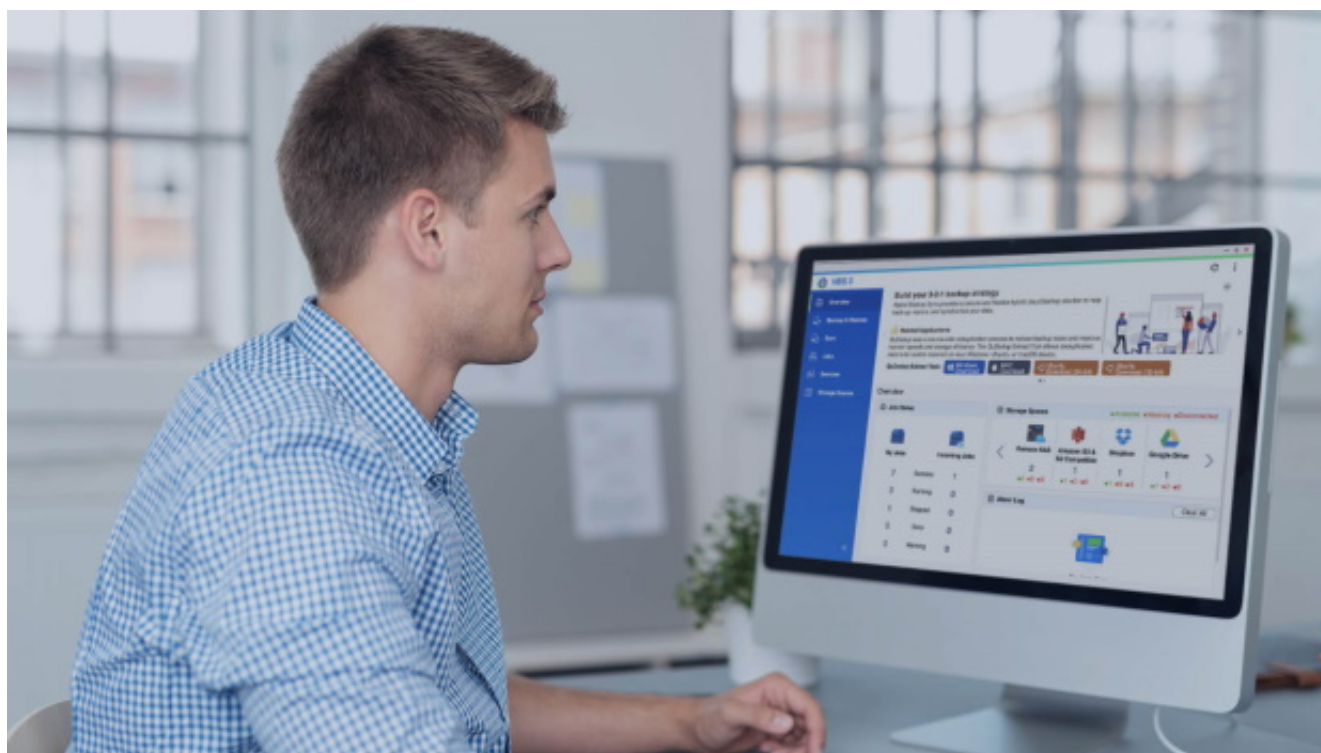
Flexible and economical storage expansion

QNAP provides easy storage capacity expansion solutions. Here are several ways to

expand your TS-873A storage as needed to accommodate data and business growth.
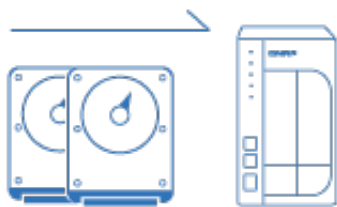
Upgrade RAID Capacity

Hot-swap lower-capacity drives with larger-capacity drives to expand your NAS capacity so it can grow with your business.
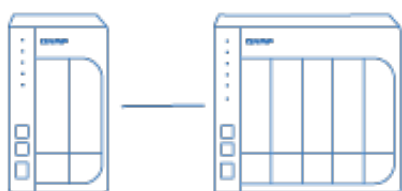
Attach Expansion Enclosures

Connect two TR-004 RAID expansion enclosures, or one 8-bay TL-D800S SATA 6 Gb/s JBOD, and use the QTS Storage & Snapshots Manager to easily handle NAS capacity expansion.
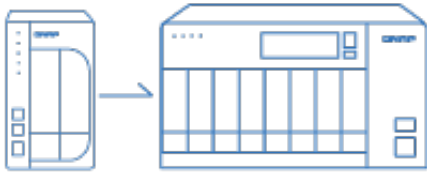
Migrate to a New NAS

Install your NAS hard drives into a larger QNAP NAS and retain all your existing data and configurations.

More productivity applications

Qsirch

QNAP's powerful, Google-like search tool for quickly finding specific images, music,

videos, documents, and emails by keywords, color, and more search conditions.

Boxafe

Backup/sync files, emails, calendars and contacts from Google™ Workspace and Microsoft® Office 365® into the TS-873A to safeguard enterprise cloud data.

QuMagie

An AI-powered photo management app, supporting automated photo categorization with AI Albums, iOS® Live Photo display, and powerful search tool for ultimate photo management and sharing solution.

Software Specs

Operating System	QTS 5.2.3
Supported Client Operating Systems	1. Apple Mac OS 10.10 or later
	2. Ubuntu 14.04, CentOS 7, RHEL 6.6, SUSE 12 or later Linux
	3. IBM AIX 7, Solaris 10 or later UNIX
	4. Microsoft Windows 7, 8, 10 and 11
	5. Microsoft Windows Server 2008 R2, 2012, 2012 R2, 2016, 2019 and 2022
Supported Browsers	1. Apple Safari (latest version)
	2. Google Chrome (latest version)
	3. Microsoft Edge (latest version)
	4. Mozilla Firefox (latest version)
Supported Languages	Chinese (Traditional & Simplified), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Romanian, Russian, Spanish, Swedish, Thai, and Turkish
Storage Pool	*??*
SED Storage Pool	*??*
Maximum Pool size	308 TB
Maximum number of storage pool	128
Volume Type	Thick, Thin, Static
Maximum volume size	250 TB
	Note: At least 4 GB RAM is required.
Maximum number of volume	128

Maximum shared folder size	250 TB
Maximum number of shared folder	512
JBOD Expansion	*??*
VJBOD / VJBOD Cloud	*??*
iSCSI Service	*??*
Fibre Channel Service	*??*
LUN Type	Thick, Thin
File-based iSCSI LUN	*??*
Block-based iSCSI LUN	*??*
Maximum LUN size	250 TB
	Note: At least 4 GB RAM is required.
Maximum number of targets LUN	128
LUN feature	1. LUN Mapping (LUN can be moved between iSCSI and FC) 2. LUN Masking 3. WWPN Aliases Import/Export 4. FC Port Group 5. FC Port Binding 6. Multipath IO (MPIO) 7. Online LUN capacity expansion 8. LUN snapshot 9. LUN snapshot replication and clone
Auto Tiering	*??*
	Requires minimum 2GB memory.
RAID Type	1. 8-bay (and more): JBOD, Single, RAID 0, 1, 5, 6, 10, 50, 60 2. 6-bay: JBOD, Single, RAID 0, 1, 5, 6, 10, 50 3. 4-bay: JBOD, Single, RAID 0, 1, 5, 6, 10 4. 2-bay: JBOD, Single, RAID 0, 1
RAID Group	*??*
	To ensure data security, system stability, and storage performance, the maximum number of drives for a single RAID group is now 16 (applicable to RAID 5, RAID 6, RAID TP, and subgroups of RAID 50 and RAID 60). Nevertheless, users can combine multiple RAID groups into a large storage pool that

	contains more than 16 drives, using RAID 50, RAID 60, or RAID 10 as the RAID configuration. This enhancement will only be applied to new RAID groups. All existing RAID groups and storage systems will not be affected.
RAID Level Migration	*??*
RAID Expansion (by adding Disk)	*??*
RAID Expansion (by replacing bigger Disks)	*??*
Storage Pool Expansion (by adding RAID Group)	*??*
RAID Hot Spare	Global, Local
RAID Sync/Rebuild/Scrubbing	*??*
Internal drive	EXT4
External drive	EXT3, EXT4, NTFS, FAT32, HFS+, and exFAT (optional for ARM model) Note: To use exFat in certain models you must purchase an exFAT driver license from License Center.
Disk, Enclosure Locate	*??*
Disk S.M.A.R.T. Scan	*??*
Disk S.M.A.R.T. Data Migration	*??*
Ironwolf Health Management	*??*
Secure Erase	*??*
SSD Trim	*??*
SSD Life Estimation	*??*
Disk Roaming	*??*
Disk Standby	*??*
Volume Snapshot	*??*
LUN Snapshot	*??*
Maximum Snapshot (Per System)	[Check maximum number of snapshots of your NAS](#)
Maximum Snapshot (Per Volume / LUN)	[Check maximum number of snapshots of your NAS](#)
Minimum Snapshot Interval	5 minutes
Snapshot Retention Policy	*??*
Self-serve Snapshot Recovery	*??*
Application Consisted Snapshot	*??*
Snapshot Full Clone	*??*
Snapshot Replica / Vault	*??*

SSD read-only Cache	*??*
SSD read-write cache	*??*
SSD write-only cache	*??*
SSD Cache Maximum Size	[Check your QNAP NAS cache capacity and RAM requirements](#)
SSD Cache RAID	0, 1, 5, 6, 10
SSD profiling tool	*??*
External Device Management	*??*
Mount Smart Phone (MTP)	*??*
External RAID Device (QNAP so on) Management (External Device Mode)	*??*
External RAID Device (QNAP so on) Management (NAS Mode)	*??*
File Server	1. File sharing across Windows, Mac, and Linux/UNIX 2. Microsoft networking (CIFS/SMB) 3. Apple networking (AFP) 4. NFS version 3/4 services
FTP Server	1. QuFTP 2. FTP, SFTP and TFTP protocols 3. FTP over SSL/TLS (explicit FTPS) 4. FXP support
Maximum FTP connection	1024
File Station (Web)	*??*
Object Storage	*??*
Local user account	4,096
Local group account	512
Domain user/group account	200,000
Domain Security	*??*
Domain Controller	*??*
Shared folder permission	*??*
Advanced folder permission	*??* , (AFP, CIFS/SMB, FTP, and File Station)
Windows ACL	*??* , (CIFS/SMB)
User quota	*??*
Group quota	*??*
Folder quota	*??* , (Snapshot shared folder)
Home folder	*??*
Resource Monitor	*??*
SNMP	V2, V3
Network recycle bin	1. Recover files deleted using AFP, CIFS/SMB, and File Station

	2. Automatic cleanup and file type filter
System Log & Notification Center	Log recording: 3,000 event per second
Smart Fan	*??*
Schedule on/off	*??*
Internet protocol	IPv4, IPv6
Virtual Switch	
Port trunking	*??* , (7 modes)
VLAN	*??*
DHCP Server	*??*
DDNS (Dynamic Domain Name Service)	*??*
Network access protection with auto-blocking	SSH, Telnet, HTTP(S), FTP, CIFS/SMB, and AFP
Security Counselor	*??*
Malware Remover	*??*
AES 256-bit Volume Encryption validated by FIPS 140-2 CAVP	*??*
2-step verification	*??*
Allow/Deny List	*??*
Access Protection	*??*
Service binding	*??*
Firewall	*??*
VMware vSphere Ready	*??*
Windows Server certifcated	*??*
Citrix Ready	*??*
vSphere Web Client Plug-in	*??*
VMware vSphere VAAI for iSCSI	*??*
VMware vSphere VAAI for NAS	*??*
Windows ODX	*??*
Windows/VMware Snapshot Agent	*??*
HTTP/HTTPS Connections	TLS 1.0/1.1/1.2/1.3
Supports WebDAV Connection	*??*
Supports Virtual Hosts	32
Qsync	*??*
	Note: At least 1 GB RAM is required.
[Qsync] Management Mode	User customization, Central
[Qsync] Qsync client supported platforms	Windows, macOS, Ubuntu, Android, and iOS
[Qsync] Maximum number of version control	64
HybridMount	*??*

[HybridMount] File Cloud Gateway	Note: At least 1 GB RAM is required. Concurrent Connections = 20 Upload & 20 Download
[HybridMount] Network Drive Mount	*??*
[HybridMount] Free cloud gateway sessions	2
HBS (Hybrid Backup Sync)	*??*
[HBS (Hybrid Backup Sync)] NAS to NAS backup	Note: At least 1 GB RAM is required. *??*
[HBS (Hybrid Backup Sync)] Cloud Backup	*??*
[HBS (Hybrid Backup Sync)] Cloud Sync	*??*
[HBS (Hybrid Backup Sync)] 2-way and Active Sync	*??*
[HBS (Hybrid Backup Sync)] Backup Deduplication	*??*
[HBS (Hybrid Backup Sync)] Apple Time Machine Backup	*??*
[HBS (Hybrid Backup Sync)] External drive backup	*??*
[HBS (Hybrid Backup Sync)] Maximum number of backup job	400
Hyper Data Protector	*??*
Boxafe	*??*
[Boxafe] Office 365 Backup	Note: At least 4 GB RAM is required. *??*
[Boxafe] Google Workspace Backup	*??*
[Boxafe] Full-text search	*??*
Qsirch	*??*
[Qsirch] Previews	Note: This feature is supported by all QNAP NAS devices with at least 2 GB of memory Photos, music, videos, PDFs, Gmail, and others
[Qsirch] Integrate Mac Finder	*??*
[Qsirch] Advanced picture search	*??*
[Qsirch] Search filters	*??*
QuMagie	*??*
[QuMagie] Browse photos	Note: At least 1 GB RAM is required. *??*

[QuMagie] Virtual and smart albums	*??*
[QuMagie] AI-assisted photo management	People, things, places, and others
Antivirus (free)	*??*
McAfee (License)	*??*
QVPN Service	*??*
[QVPN Service] Remote Access	Note: At least 1 GB RAM is required. PPTP, L2TP/IPSec, OpenVPN, WireGuard, QBelt (QNAP proprietary)
[QVPN Service] Supportedd utility and mobile app	Windows, macOS, iOS, and Android
[QVPN Service] Supported maximum clients	100
LDAP Server	*??*
RADIUS	*??*
SQL server	*??*
License Center	*??*
Multimedia Console	*??*
Photo Station	*??*
Music Station	*??*
Video Station	*??*
Download Station	*??*
Notes Station	*??*
Qfiling	*??*
Media Streaming add-on	*??*
QmailAgent	*??*
QuWAN	*??*
DA Driver Analyzer	*??*
Q'center	*??*
Q'center Server	Note: The application is available in the App Center and in virtual appliance marketplaces (VMware vSphere ESXi and Microsoft Hyper-V). *??*
Q'center Agent	*??*
Connect to Q'center	*??*
Virtualization Station	*??*
[Virtualization Station] Supports Virtual machine instances	Note: At least 4 GB RAM is required. Windows, Linux, Unix, and Android

[Virtualization Station] VM importing, exporting, cloning, snapshot capturing, backup, and restoration	All function is Fine.
[Virtualization Station] Virtual switches	Can create a virtual switch
[Virtualization Station] GPU pass-through	Not support GPU
[Virtualization Station] Suggested number of virtual machine instances	8
	The actual number of virtual machine instances may vary by the memory installed on NAS (e.g. 1 VM= 1 thread for 1 vCPU and 1GB memory). Please expend memory if needed.
Container Station	*??*
[Container Station] Supported type	Note: At least 1 GB RAM is required. LXC/LXD and Docker
	Note: LXD has been supported after Container Station 2.4
[Container Station] Docker Hub Registry	*??*
[Container Station] Container importing and exporting	*??*
[Container Station] Console mode	*??*
Linux Station	*??*
	Notification: At least 4 GB RAM is required.
[Linux Station] Supports Ubuntu versions	18.04, and 20.04
Linux Station Center	*??*
QVR Pro	*??*
	Note: At least 4 GB RAM is required. The maximum number of channels supported varies by NAS model, network configuration, and camera settings. For more information, visit https://www.qnap.com/go/qvr-nas-selector.
[QVR Pro] Recording Technique	Index database based
[QVR Pro] License Type	Perpetual
[QVR Pro] User-defined trigger events	*??*
[QVR Pro] Metadata	*??*

[QVR Pro] QVR Pro Client (Desktop)	Windows, macOS, and QNAP HybridDesk Station
[QVR Pro] QVR Pro Client (Mobile)	Android and iOS
[QVR Pro] Recording camera streams	H.264
[QVR Pro] Free built-in camera channels	8
QVR Elite	*??*
	Note: At least 1 GB RAM is required. The maximum number of channels supported varies by NAS model, network configuration, and camera settings. For more information, visit https://www.qnap.com/go/qvr-nas-selector.
[QVR Elite] Recording Technique	Standard MP4 file based
[QVR Elite] License Type	Subscription-based
[QVR Elite] User-defined trigger events	*??*
[QVR Elite] QVR Pro Client (Desktop)	Windows, macOS, and QNAP HybridDesk Station
[QVR Elite] QVR Pro Client (Mobile)	Android and iOS
[QVR Elite] Recording camera streams	H.264
[QVR Elite] Free built-in camera channels	2
QVR Pro Client	*??*
[QVR Pro Client] Dynamic View Layout	*??*
[QVR Pro Client] Windows	*??*
[QVR Pro Client] Mac	*??*
[QVR Pro Client] HybridDesktop	*??*
[QVR Pro Client] iOS	*??*
[QVR Pro Client] Android	*??*
QVR Center	*??*
	Note: At least 4 GB RAM is required.
[QVR Center] Log management	*??*
[QVR Center] Central monitoring across multiple servers	*??*
QVR Guard	*??*
	Note: At least 4 GB RAM is required.
[QVR Guard] Failover design	*??*
[QVR Guard] Viewing task details	*??*
[QVR Guard] Automatic switch between Standby and Takeover modes	*??*

QVR Face	*??*
	The maximum number of channels supported varies by NAS model, network configuration, and camera settings. For more information, visit https://www.qnap.com/solution/qvr-face/en-us/
QVR DoorAccess	*??*

Specification

NAS	
10 Gigabit Ethernet Port	Optional via a PCIe adapter
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter
Buttons	Power, Reset, USB Auto Copy
CPU Architecture	64-bit x86
CPU Model	AMD Ryzen™ Embedded V1500B 4-core/8-thread 2.2 GHz processor
Drive Bay	8 x 3.5-inch SATA 6Gb/s, 3Gb/s
Drive Compatibility	3.5-inch SATA hard disk drives 2.5-inch SATA solid state drives
Encryption Engine	?? (AES-NI)
Fan	System fan: 2 x 120mm CPU fan: 1 x 60mm
Flash Memory	5GB (Dual boot OS protection)
Floating Point Unit	??
Form Factor	Tower
GPU pass-through	??
Graphic Processors	Optional via a PCIe adapter
Hardware-accelerated Transcoding	Optional via a PCIe adapter
HDMI™ Output	Optional via a PCIe adapter
Hot-swappable	??
Jumbo Frame	??
Kensington Security Slot	??
LED Indicators	Status/Power, USB, LAN, Drive 1-8, M.2 SSD 1-2
M.2 Slot	2 x M.2 2280 PCIe Gen3 x1 slots
Max. Number of Concurrent Connections (CIFS) - with Max.	2000

Memory	
Maximum Memory	64 GB (2 x 32 GB)
Memory Slot	2 x SODIMM DDR4 Support ECC memory
Operating Temperature	0 - 40 °C (32°F - 104°F)
PCIe Slot	2 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x4
Power Consumption: Disk Standby Mode	25.668
Power Consumption: Operating Mode, Typical	54.067 W
Power Supply Unit	250W, 100-240V AC, 50-60Hz, 3.5A
Relative Humidity	5-95% RH non-condensing, wet bulb: 27?C (80.6?F)
SSD Cache Acceleration Support	??
Storage Temperature	-20 - 70°C (-4°F - 158°F)
System Memory	8 GB SODIMM DDR4 (1 x 8 GB)
System Warning	Buzzer
USB 3.2 Gen 2 (10Gbps) Port	3 x Type-A USB 3.2 Gen 2 10Gbps 1 x Type-C USB 3.2 Gen 1 5Gbps
Wake on LAN (WOL)	??

Product Gallery