

 QNAP®

# TS-435XeU

Short depth rackmount 4-bay NAS

Space-efficient design with  
2.5GbE/10GbE connectivity  
and M.2 NVMe SSD caching



4GB DDR4 memory  
Expandable to 32GB



10GbE and 2.5GbE ports  
Satisfy bandwidth-demanding applications

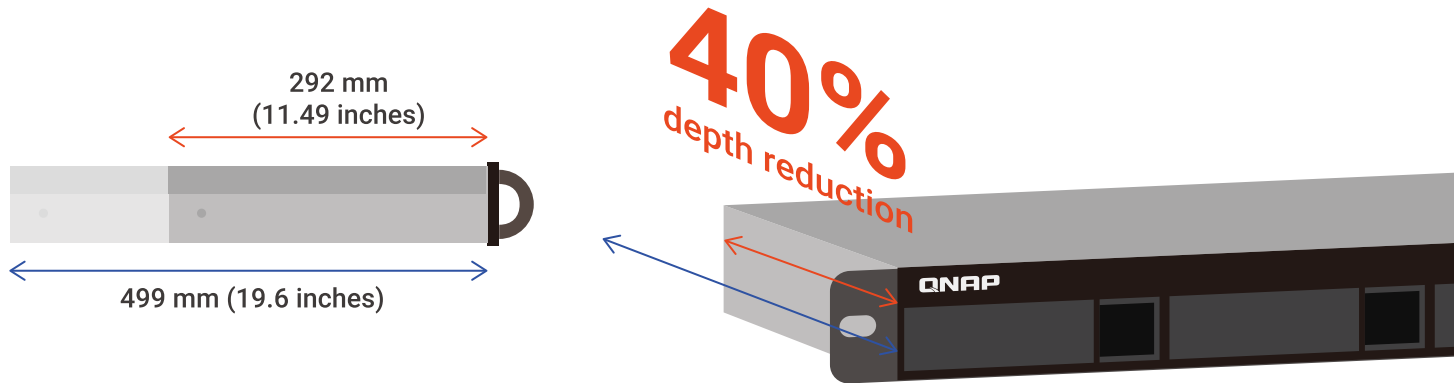


Short depth design  
38% reduction in size

- 1U short depth rackmount (292 mm/11.5 inches deep)
- Marvell OCTEON TX2™ CN9130 series CN9131 ARMv8 64-bit Cortex-A72 quad-core 2.2 GHz processor
- 2 x 10GbE SFP+ ports and 2 x 2.5GbE RJ45 ports for faster data transfer, large file access, backup and restoration.
- Dual M.2 PCIe Gen 3 NVMe SSD slots enable cache acceleration or SSD storage pools for improved performance.
- Scale storage capacity to fit growing data needs by connecting QNAP's expansion units.

## Smaller footprint for bigger opportunities

The TS-435XeU has a more compact design than a typical 4-bay rackmount NAS, with a depth of only 292 mm (11.49 inches). With the optional RAIL-S01, it can easily fit into most small racks, and save valuable space for cabling and cooling. The reduced physical footprint not only makes deployment more flexible, but also makes the affordable hardware more suitable for fast-growing small and medium enterprises.



## A powerful 2.2GHz quad-core processor with AES-128-GMAC support for accelerated SMB signing

The TS-435XeU features an OCTEON TX2™ Marvell® CN9131 ARM®v8 Cortex-A72 quad-core 2.2 GHz processor with workload-optimized hardware accelerators for efficiency. It includes 4 GB DDR4 memory (expandable to 32 GB) and SATA 6 Gb/s support for optimal storage performance.

SMB signing (also known as security signatures) is a security mechanism in the SMB protocol. QTS 5.1.0 supports AES-128-GMAC signing acceleration (for Windows Server 2022 and Windows 11), boosting SMB 3.1.1 efficiency and optimizing NAS CPU utilization for a balance of security and performance.

### x86 64-bit NAS

# 2X Faster

AES-CMAC: 619 MB/s Read

AES-128-GMAC: 1238 MB/s Read

### ARM 64-bit NAS

# 10X Faster

AES-CMAC: 68 MB/s Read

AES-128-GMAC: 738 MB/s Read

Test environment: Crystal Disk Mark 1MB throughput

Client: Windows Server 2022 (AMD EPYC 7232P 3.0GHz, DDR4 128GB) with 10GbE NICs

x86 NAS: TS-h1887XU-RP-E2336-32G, QTS 5.1.0 (GMAC), QTS 5.0.1 (CMAC), Samsung 870 EVO 1TB, RAID 50, onboard Aquantia X550 10GbE NIC

ARM NAS: TS-1232PXU-RP-4G, QTS 5.1.0 (GMAC), QTS 5.0.1 (CMAC), Samsung 860PRO 512GB, RAID 5, onboard Annapurna SFP+ 10GbE NIC

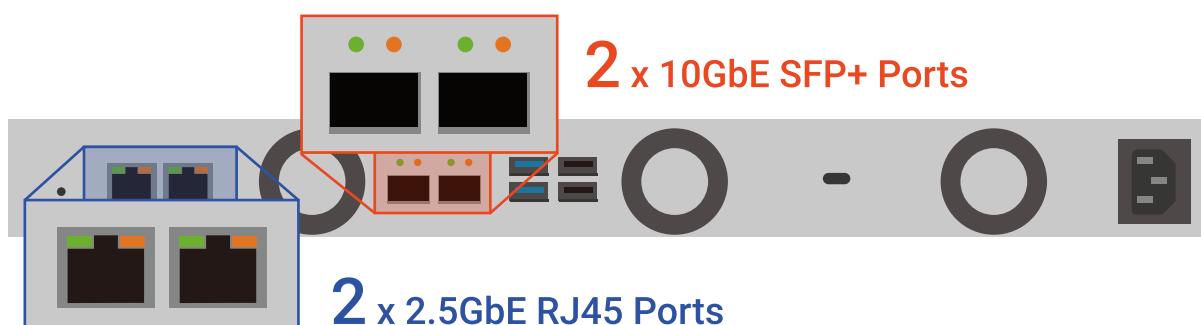
## Excellent performance

	Read	Write
2 x 10GbE SMB 512K Sequential Throughput	2224 MB/s	794 MB/s
2 x 2.5GbE SMB 512K Sequential Throughput	570 MB/s	588MB/s

Tested in QNAP Labs. Figures may vary by environment.

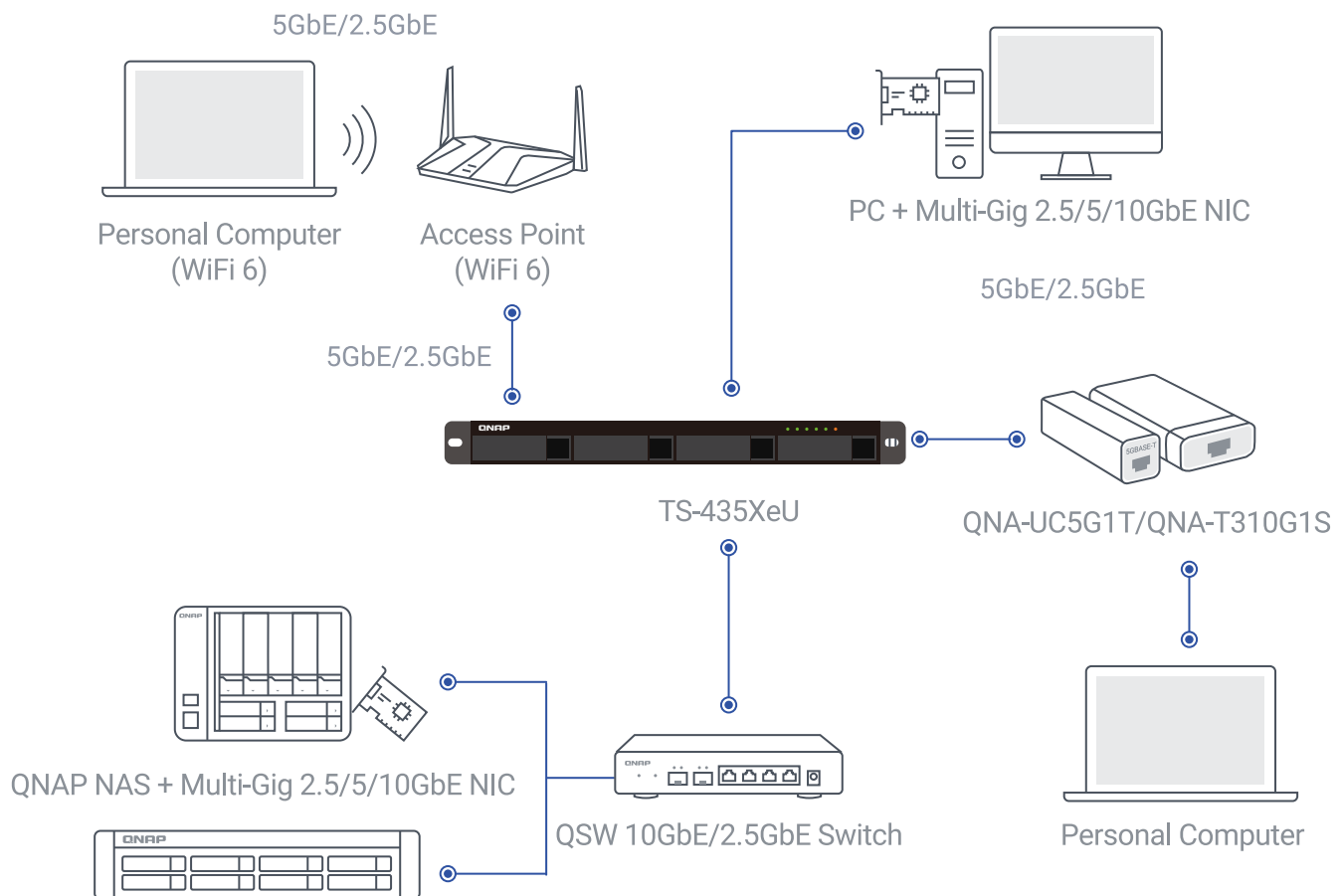
## Streamlined workflows with high-speed 10GbE and 2.5GbE

The TS-435XeU has two 10GbE SFP+ ports and two 2.5GbE RJ45 ports for high-speed networking to satisfy bandwidth-demanding applications (including massive file transfer, high-speed backup/restoration, containers, and multimedia transmission) with the support of port trunking and load balancing. QNAP's managed and unmanaged 2.5GbE/10GbE switches are a perfect match for organizations to build budget-friendly high-speed networks for productive team collaboration.



## Future-proof your IT infrastructure for high-speed networks

QNAP provides comprehensive, budget-friendly storage and networking solutions, allowing you to easily and flexibly upgrade network environments for bandwidth-hungry applications.



### ■ 2.5GbE/10GbE NAS

A fast NAS with one or more 2.5GbE/10GbE LAN ports.

### ■ Add Ethernet ports to laptops

Laptops and upgrade-limited computers can use the portable QNAP Thunderbolt™ 3 to 10GbE adapter that allows you to connect to 5G/2.5G/1G/100M networks via Thunderbolt™.

### ■ Upgrade computers and servers

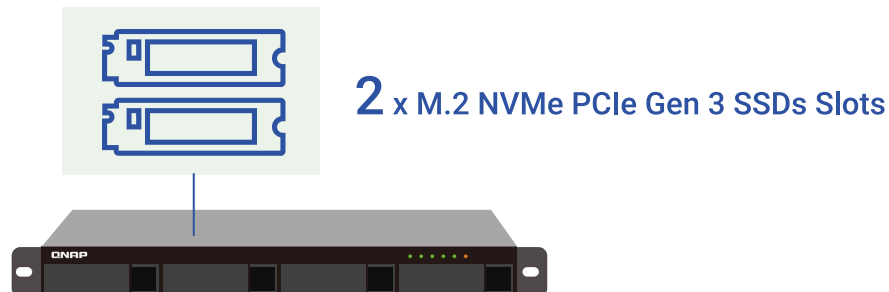
Computers and servers with available PCIe slots can install QNAP network expansion cards that support 10G/5G/2.5G/1G/100M Multi-Gig.

### ■ A switch that supports 2.5GbE+

QNAP switches allow connecting multiple workstations and devices for high-speed collaboration.

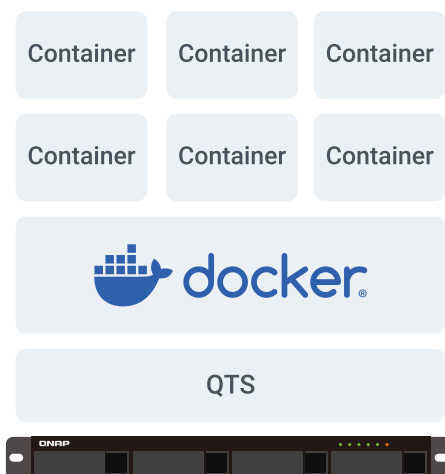
## Get performance benefits from SSD caching and Qtier Technology

To attain optimal I/O and reduce latency, you can configure SSD caching by using either 2.5-inch SSDs or the two built-in M.2 2280 SSD slots (supports high-performance NVMe PCIe Gen 3 SSDs, sold separately) in the TS-435XeU. Coupled with QNAP's SSD-aware features, the TS-435XeU maximizes performance with high cost-effectiveness.



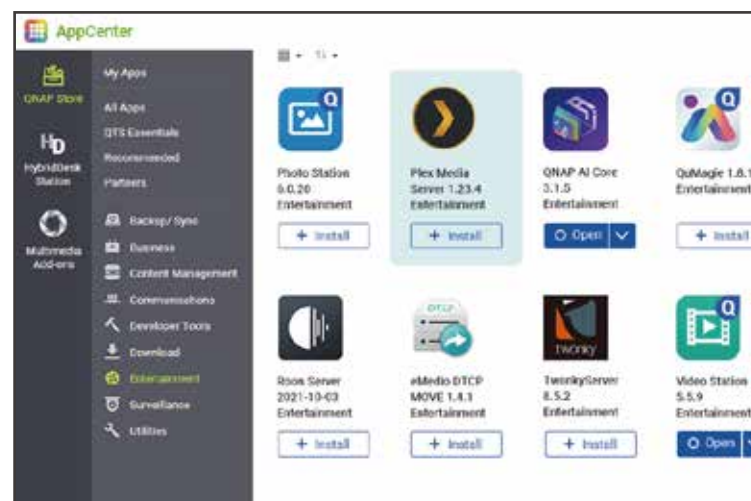
## Host container applications

Run Docker® Containers on TS-435XeU and download thousands of Container Apps from Docker Hub®. Use Container Station to develop software, create sandboxes and deploy microservices.



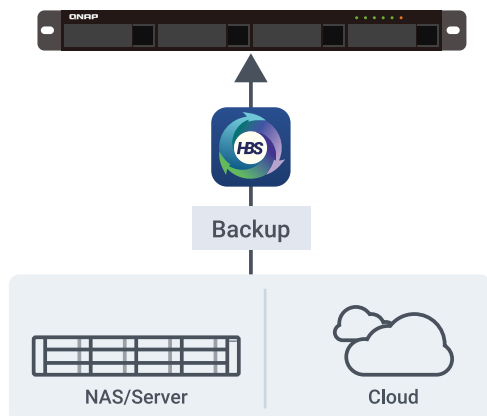
## A multimedia server for video streaming

The TS-435XeU can be easily placed in a media cabinet. By installing streaming apps such as Plex® Media Server from the QTS App Center, you can stream media files stored on the TS-435XeU to mobiles and media streaming devices (including DLNA®, Roku®, Amazon Fire TV® and Google Chromecast™).



## All-in-one backup solution

The TS-435XeU supports various apps that cover all your backup needs.



### Remote backup for NAS

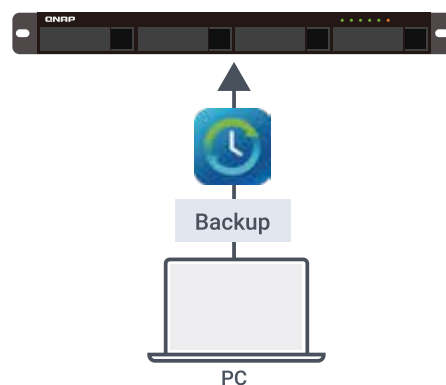
Hybrid Backup Sync makes it easy to back up data from a TS-435XeU to another QNAP NAS or remote server.

### Cloud backup for NAS

Use Hybrid Backup Sync to back up NAS data to myQNAPcloud Storage or other mainstream cloud space.

### PC/Laptop backup

For Windows®, install NetBak Replicator to back up your PC to QNAP NAS. In macOS®, just set up the built-in Time Machine® to secure your data.



## Multi-version snapshots mitigate ransomware threats

The TS-435XeU supports block-based snapshots that record the state of the system at any time. It helps protect data, which can be restored back to a specific point of time, greatly helping in mitigating the threat of ransomware.



## Comprehensive security and privilege settings

The TS-435XeU is loaded with flexible privilege settings and security measures. Besides IP blocking, QNAP Authenticator, HTTPS connection, more apps help ensure optimal NAS protection against threats like malware and hackers.

- myQNAPcloud secures remote access
- Simplified privilege settings
- QuFirewall protection
- Superior security with QVPN
- Security Center
- Malware Remover



## The best file storage and collaboration center

The TS-435XeU integrates rich apps for storing, managing, synchronizing, searching, and archiving files. It supports SMB/CIFS, AFP, and NFS protocols for streamlined file sharing across Windows®, Mac®, and Linux®/UNIX®, and provides the smartest NAS solution for professionally managing your files.



File Station



Qsync



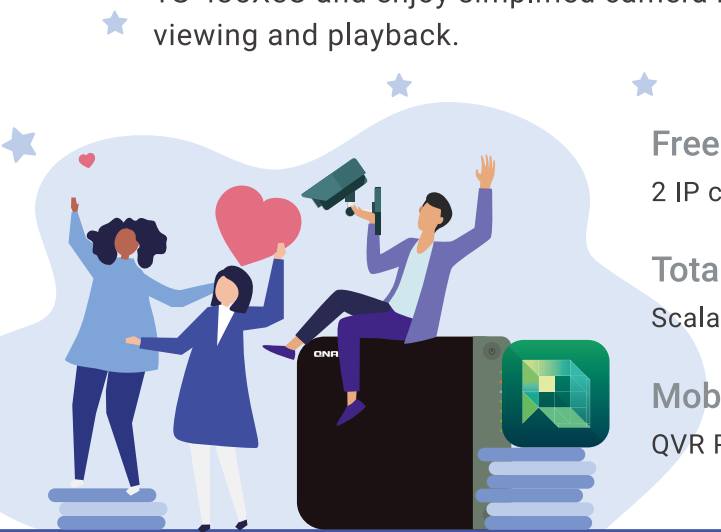
Qsirch



Qfiling

## Smart surveillance solution for 24/7 security

QVR Elite is QNAP's subscription-based smart surveillance solution, allowing you to easily build a surveillance system with lower TCO and higher scalability. Recordings are saved as MP4 files, allowing playback on nearly every device. QVR Elite also integrates QNAP AI-based solutions to build smart facial recognition for retail and door access systems with QNAP NAS. You can arrange a dedicated, independent storage space for surveillance data on the TS-435XeU and enjoy simplified camera management, storage space allocation, camera live viewing and playback.



### Free embedded channels

2 IP camera channels

### Total camera channels

Scalable with optional licenses

### Mobile app

QVR Pro Client and mobile app

### Subscription-based

Monthly US \$1.99 /channel

### Video format

MP4

### Scalable storage

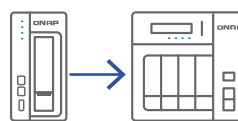
NAS expansion units

## Flexible and economical storage expansion

QNAP provides easy ways to expand your storage capacity. Here are several ways to expand your TS-435XeU storage as needed to accommodate data and business growth.



Attach QNAP expansion enclosures



Migrate to a new NAS



Mount cloud storage or remote file servers



Upgrade RAID capacity

## Hardware Specifications

NAS Model	TS-435XeU
CPU	Marvell OCTEON TX2™ CN9130 / CN9131 ARMv8 Cortex-A72 4-core 2.2GHz processor
System Memory	4 GB SODIMM DDR4 (1 x 4GB) (expandable to 32GB)
Flash Memory	4GB (Dual boot OS protection)
Drive Bay	4 x 3.5-inch SATA 6Gb/s, 3Gb/s
Drive Compatibility	3.5-inch bays: 3.5-inch SATA hard disk drives 2.5-inch SATA solid state drives
M.2 Slot	2 x M.2 2280 PCIe Gen 3 x1 slots
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M)
10 Gigabit Ethernet Port	2 x 10GbE SFP+
USB 2.0 port	2
USB 3.2 Gen 1 port	2
Form Factor	1U Short Depth Rackmount
Dimensions (HxWxD)	43.3 × 430 × 292.12 mm

## Software Specifications

Supported disk group type	RAID 0/1/5/6/10, RAID 5+ hot spare, single, JBOD
Supported protocols	CIFS/SMB, AFP (v3.3), FTP, FTPS, SFTP, TFTP, HTTP (S), Telnet, SSH, iSCSI, SNMP, SMTP and SMSC
File Server	File sharing across Windows, Mac, and Linux/UNIX Microsoft networking (CIFS/SMB) Apple networking (AFP) NFS version 3/4 services
File sharing	Maximum number of users: 4096 Maximum number of user groups: 512 Maximum shared folders: 512
Other Features	Qsync, HybridMount, HBS (Hybrid Backup Sync), Boxafe, Qsirch, QuMagie, QVPN Service, 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, Container Station