#### QNAP

## TVS-hx74

ZFS QuTS hero NAS series supports PCIe Gen 4 expandability, 10/25GbE and M.2 NVMe SSD caching



TUS-h874 169.254.100.100



# Powerful CPU provides multi-tasking ability, NAS can be Storage, VMs and surveillance station

Not only back-up and file server. NAS in now days are also multiple function server, such as iSCSi/SMB server, VMs and surveillance station



File Server



SQL server



VMs



surveillance



**Backup Server** 

### Powered by Intel 12 Gen desktop CPUs

Pentium Gold G7400 /Core i3-12100 / Core i5-12400



#### TVS-h474-PT-8G

- 2-core Pentium G7400 2C/4T 3.7GHz
- DDR4 8GB RAM (1 x 8GB)
- 2.5GbE port x2



#### TVS-h874-i5-32G

- 6-core Core i5-12400 6C/12T 4.6GHz
- DDR4 32GB RAM (2 x 16GB)
- 2.5GbE port x2



#### TVS-h674-i5-32G

- 6-core Core i5-12500 6C/12T 4.6GHz
- DDR4 32GB RAM (2 x 16GB)
- 2.5GbE port x2

#### TVS-h674-i3-16G

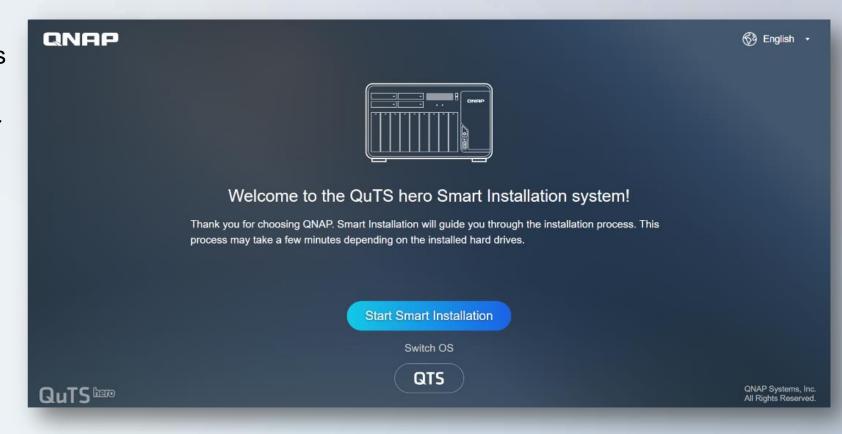
- 4-core Core i3-12100 4C/8T 4.3GHz
- DDR4 16GB RAM (1 x 16GB)
- 2.5GbE port x2

## Switch NAS operating systems between QuTS hero and QTS for higher everyday performance

Supports QTS - QNAP's standard NAS operating system – that provides performance, efficient memory utilization, and the advantage of Qtier auto-tiering. You can also migrate drives from your current QTS-based NAS to the TVS-hx74.

#### Note:

QTS and QuTS hero use different file systems. You must remove all the drives from the TVS-hx74 before switching from QuTS hero to QTS.



## Choose between QTS and ZFS based QuTS hero

#### **ZFS-based QuTS hero ensures performance and data integrity**

Faced with the explosive growth of data, VDI popularity, increasing SSD adoption, 8K media, and other disruptive IT trends, modern businesses need dependable storage systems to meet future demands. QNAP's new "QuTS hero" operating system combines the app-based QTS with a 128-bit ZFS file system to provide flexible storage management, comprehensive data protection and optimized performance to meet the needs of business-critical applications.

Learn More: Why QNAP business NAS uses ZFS	QuTS hero	QTS
Filesystem	ZFS	Ext4
SSD Cache	Read Cache	Read/Write Cache Read Cache Write Cache
Inline Compression	Yes (LZ4 compression, ideal for RAW files and document files)	No
Inline Deduplication	Yes (At least 16 GB RAM required)	No
HBS with QuDedup for Remote Backup	Yes	Yes
Power Failure Protection (Hardware)	Uninterruptible power supply (UPS)	Uninterruptible power supply (UPS)
Power Failure Protection (Software)	ZIL Copy-On-Write (Service continues after power recovery)	No (Risk of filesystem-level corruption on power-loss and system downtime required for "Check File System")
Permission Management	Rich ACL (14 types)	POSIX ACLs (3 types) + certain special permissions
Capacity Expansion	Upgrade RAID capacity Change higher capacity disk drives Attach expansion enclosures/JBODs	Add a disk drive to a RAID group Upgrade RAID capacity Change higher capacity disk drives Attach expansion enclosures/JBODs
Data Security	Better (Self-Healing & Copy-on-Write)	Standard
Recommendation SSD Configuration for Video Editing Applications	Use SSD Pools	Editing (from original/RAW files): Use SSD Pools Post production: Enable Read/Write cache
3. 4 processor	Note: Set the block size 128K when creating Folders/LUNs	Note: Set the block size to 32K or 64K when creating Volumes, and choose "All I/O" for cache mode.

### Up to 6-core 12-thread powerful Intel CPU

## Powerful 12 Gen *Intel* ® *Pentium*™ Gold and *Core*™ i3 / i5 family CPU

Intel 12 Gen powerful CPU provides strong performance, up to 12MB cache and 4.4GHz. Also integrated with UHD graphics, which support HDMI out put and boost AI application performance

Max frequency

4.4 GHz

1.75X
Single core compared with 72XT

6-core / 12-thread

6-core

3.55x
CPU mark compared to 72XT

k compared to 72XT

\*Performance compare



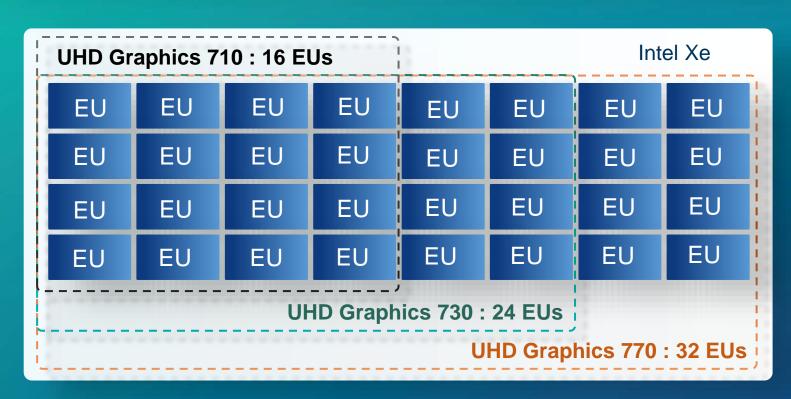
\*CPU is different for each SKU, please check on our website for detail specification

### Detailed CPU specification on TVS-hx74

Model	Core/Thread	Cores	Max. Freq.	Model
Pentium™ G7400	2-core/4-thread	2	3.7GHz	TVS-h474
Core™ i3-12100	4-core/8-thread	4	4.3GHz	TVS-h674
Core™ i5-12400	6-core/12-thread	6	4.4GHz	TVS-h674 TVS-h874

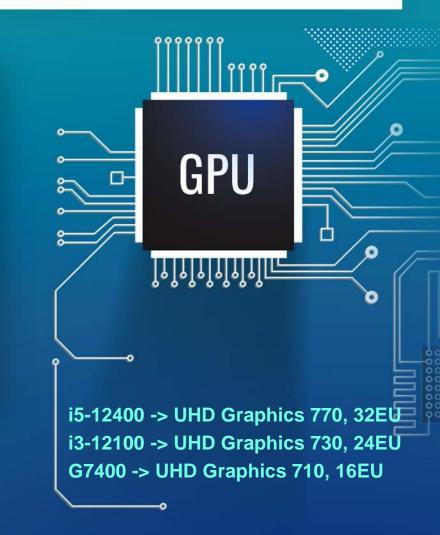


## UHD 700 series GPU, up to 32 EU, support HDMI output and boost performance for OpenVINO \ QuMagie

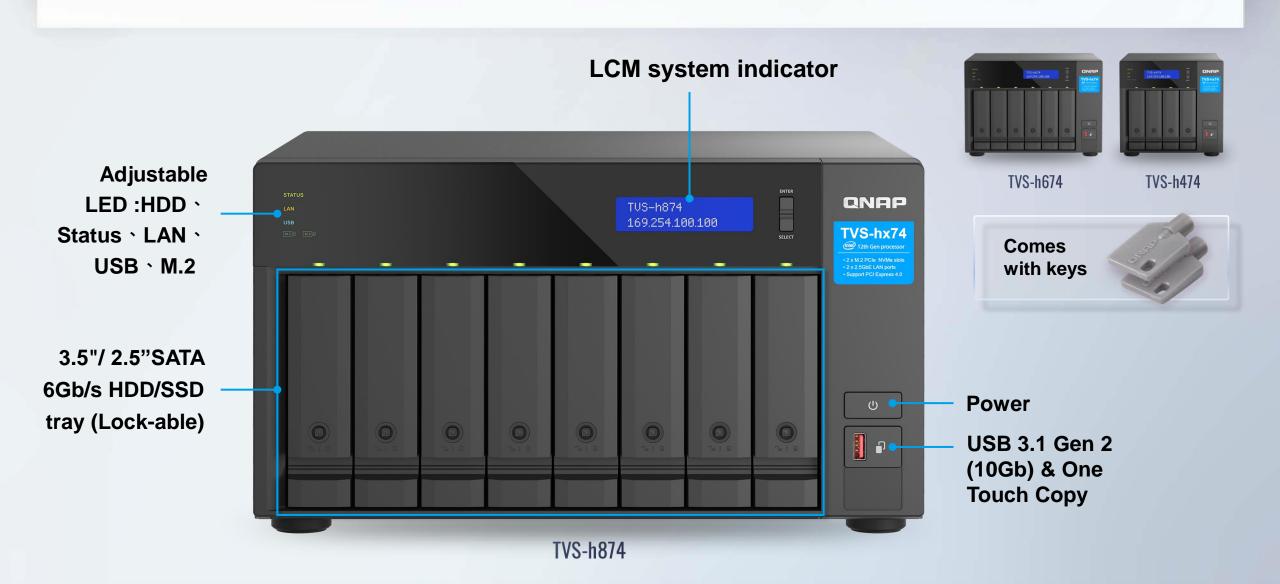


Intel 12 Gen CPU with new Intel Xe architecture - Intel UHD Graphics 700 series graphics, provide up to 32 EUs(EUs; Execution Units) bring performance upgrade for NAS to have HDMI output and transcoding.

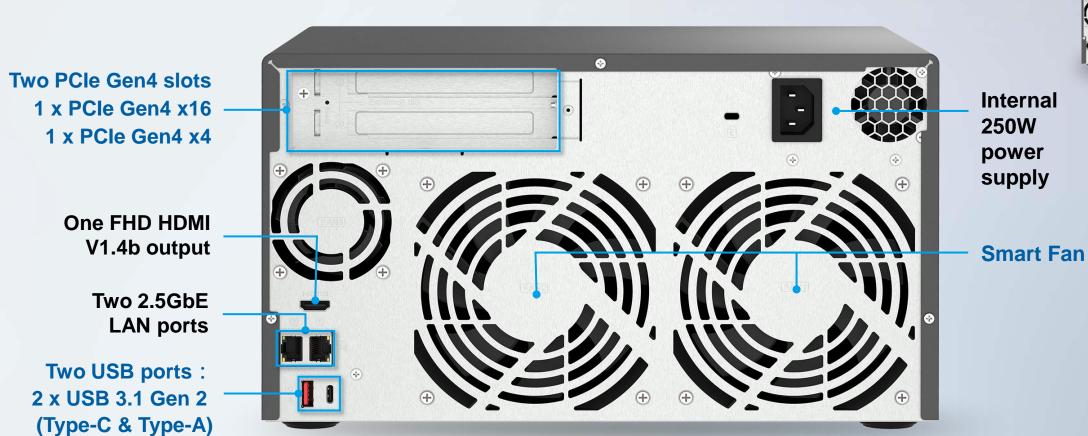
QNAP has also intergrade with out Al application, GPU can now boost performance of OpenVINO, QuMagie, etc.



### TVS-h474 / h674 / h874 Front view



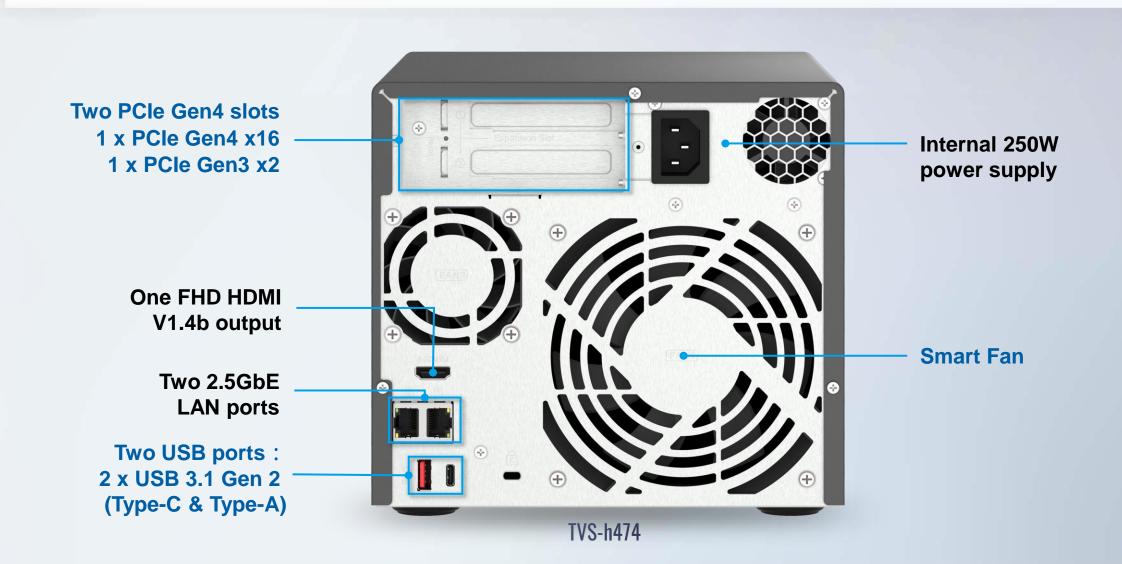
### TVS-h674 / h874 Rear view





TVS-h674

### TVS-h474 Rear view



## Built in HDMI port for video output or Surveillance station





### **HybridDesk Station**



### Compartmentalized smart cooling

Enhanced design over the previous generation to separately detects the CPU and hard drive temperatures for dynamically adjusting separate fan speeds for an quieter operations in the office.



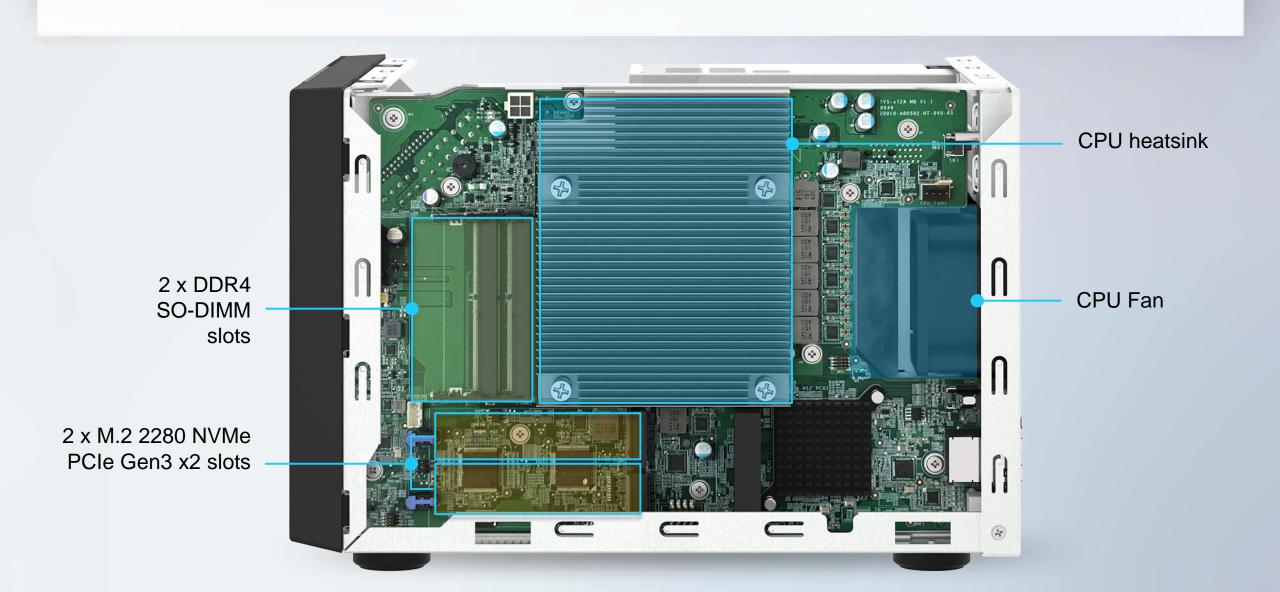
**CPU** side



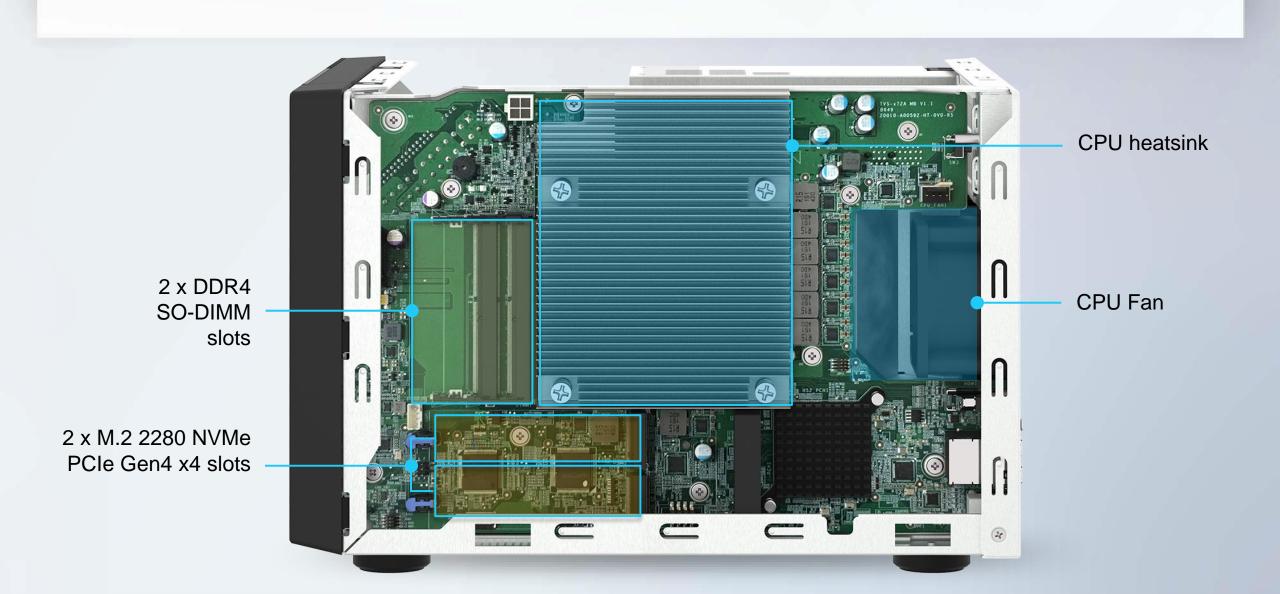


<sup>\*</sup>Sound pressure is measured at the front bystander position with low fan speed.

### TVS-h474 Internal view



### TVS-h674/h874 Internal view



## Large pre-installed 8/16/32 GB DDR4 RAM, upgradeable to max 128GB and also optional ECC RAM support

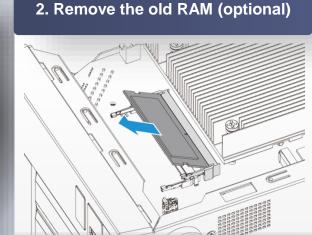
#### NAS ordering P/N

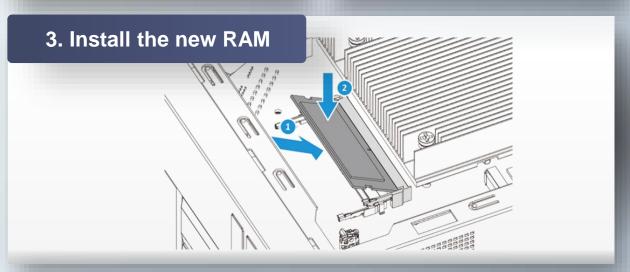
Ordering P/N	Memory
TVS-h474-PT-8G	8GB (1 x 8GB non ECC)
TVS-h674-i3-16G	16GB (1 x 16GB non ECC)
TVS-h674-i5-32G	32GB (2 x 16GB non ECC)
TVS-h874-i5-32G	32GB (2 x 16GB non ECC)

- 2 x DDR4 SO-DIMM slots, max. 128 GB (2 x 64 GB), dual channel memory with ECC support
- QNAP 8/16/32 GB RAM modules for easy upgrade and better multi-app or multi-user usage.

Note: Do not install ECC and Non-ECC RAM on the same NAS at the same time.







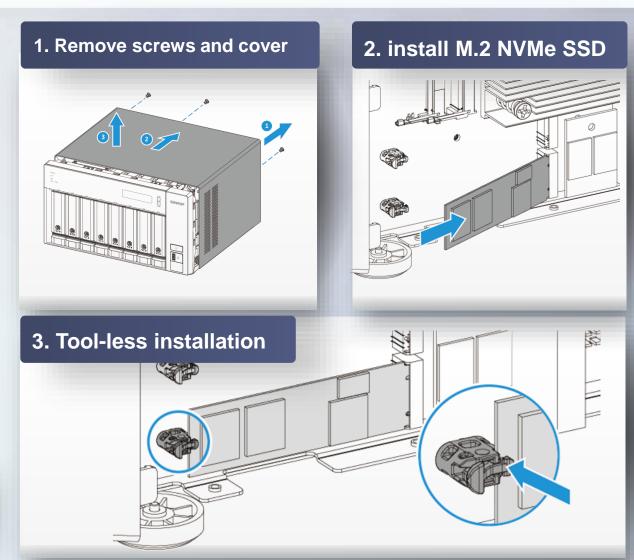
## 2 x M.2 SSD slots as default shared folder to improve overall performance in QuTS hero

- Use 2 x M.2 slot as System Drive & Default Shared Folders to improve performance in QuTS hero

  The first Storage Pool you create is where the system drive, default shared folders, and apps are stored. In this step, it is recommended to create an SSD RAID with at least two SSDs to attain optimal system performance and efficient app metadata management. (With an all-HDD configuration, the first Storage Pool is also where the system drive and default shared folders are stored.)
- Improve random data access speeds with an SSD cache
- Maximize the value of SSDs with Qtier Technology

Note: Qtier is only supported in the QTS OS, not in the QuTS hero OS.

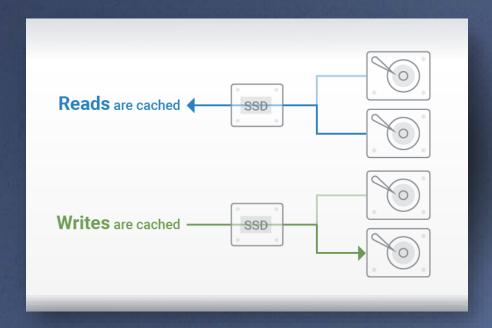




### **SSD Cache Acceleration Improve QNAP NAS** performance with an SSD cache

#### What is SSD cache acceleration?

An SSD cache is a way of obtaining faster storage, reduced latency, and improved all-round NAS performance and access speeds by storing frequently-accessed data on SSDs. It is greatly beneficial for IOPS-demanding applications such as databases (online transaction processing, email servers), virtual machines, and virtual desktop infrastructure (VDI).











QTS NAS	

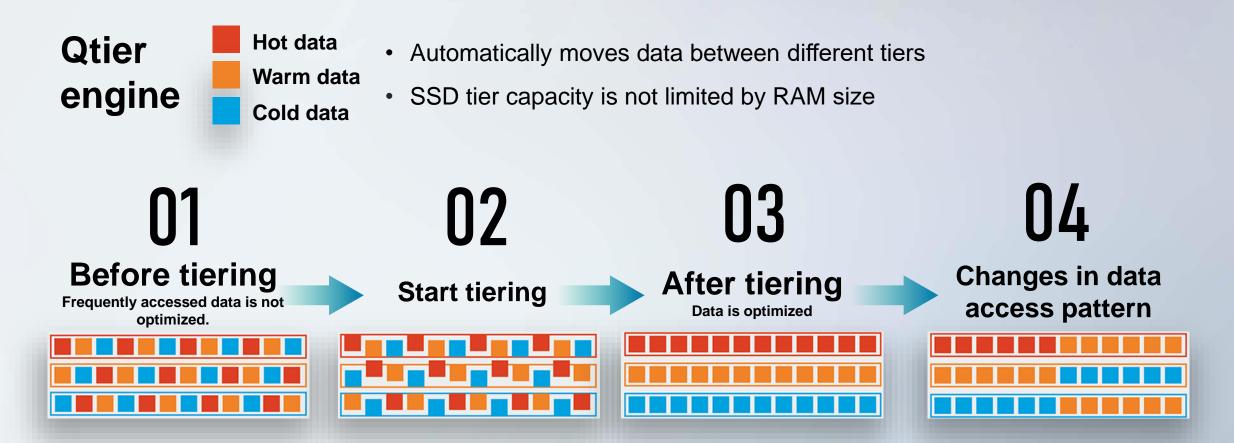
#### **QuTS** hero NAS

OTC F O O (and later)

#### Oute have

	Q15 5.0.0 (and later)	Quis nero	
SSD Cache Capacity	RAM Requirement		
512GB	-	≧ 16GB	
1TB	<u>≥</u> 2 GB	≥ 32GB	
2TB	-	≥ 64GB	
4TB	≥ 4 GB	≧ 128GB	
8TB	≥ 8 GB (ARM CPU)	-	
16TB	≥ 8 GB (x86 CPU)	≥ 512GB	
30TB	-	≧ 1TB	
120TB	-	≧ 4TB	

# M.2 NVMe SSD and Qtier auto-tiering for speed and capacity



Note: Qtier is only supported in the QTS OS, not in the QuTS hero OS.

# Built-in 2 x 2.5 GbE LAN ports, aggregated for maximum 5Gbps bandwidth



2.5GbE-supported motherboards, Wi-Fi 6 AP, switches, and LAN cards are now becoming popular

#### 2.5GbE benefits



#### 2.5X the speed



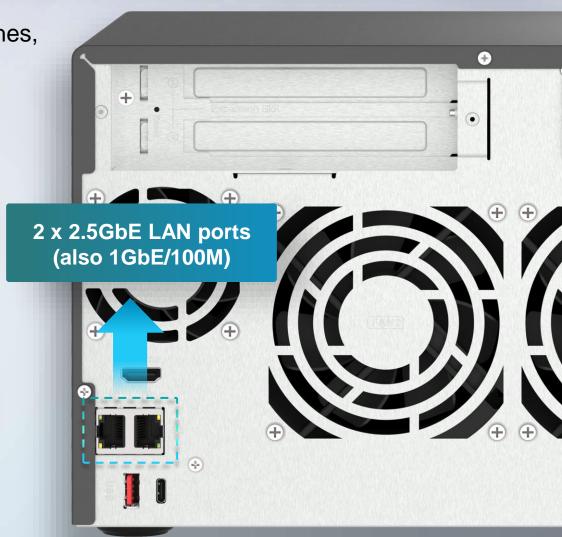
1GbE 2.5GbE

Huge leap in performance

#### Same cable



Use the same Cat.5e/ Cat.6/ Cat. 6A LAN cables



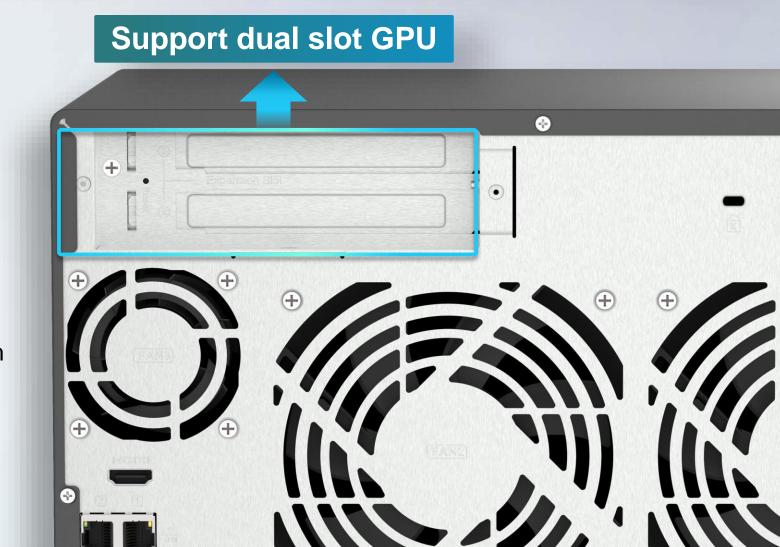
### TVS-hx74 support dual slot width GPU

TVS-hx74 series support dual slot width and no additional power pin required GPU

Maximum dimension:

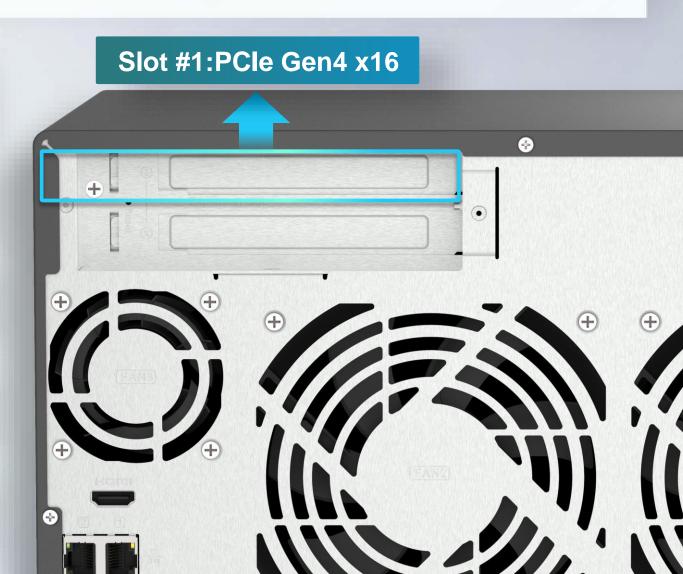
TVS-h474: 169\*47\*68.9 mm

TVS-h674 & TVS-h874: 169\*47\*111.5 mm



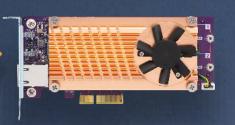
## Slot # 1 support network, storage, Wi-Fi and expansion card





# PCIe Slot #2 support QM2 expansion for expand SSD slots or Ethernet ports





#### **QM2-2P10G1TB**

Bandwidth: PCle Gen2 x4 2 x M.2 PCle Gen2 x2 + 1 x 10GBASE-T

#### QM2-2P410G1T/2T

Bandwidth: PCIe Gen4 x8 2 x M.2 PCIe Gen4 x4 + 1 or 2 x 10GBASE-T

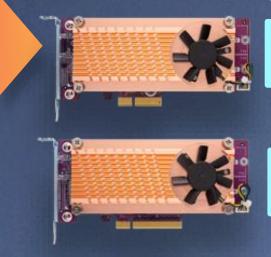
#### QM2-2P-344

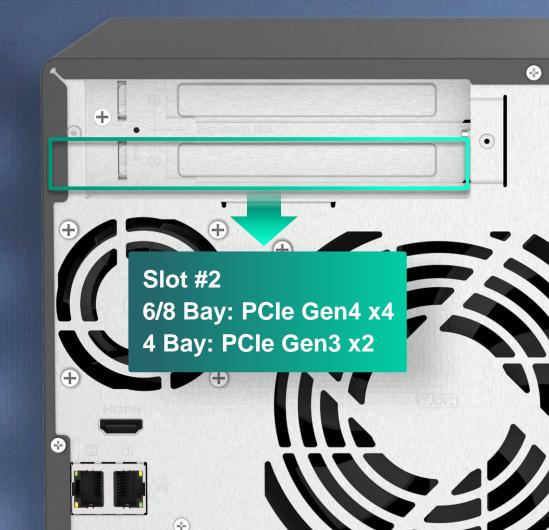
Bandwidth: PCle Gen3 x4 2 x M.2 PCle Gen3 x4

#### QM2-2P-384

Bandwidth: PCle Gen3 x8 2 x M.2 PCle Gen3 x4



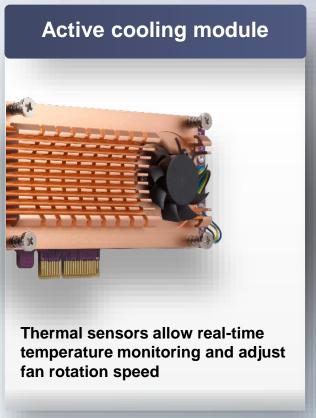


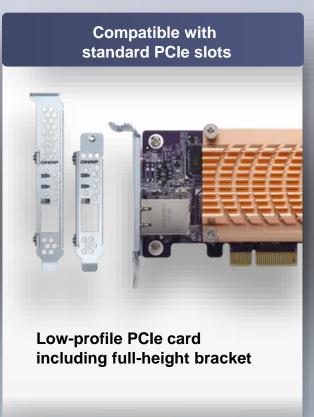


# QM2 cards add support for SSD caching and 10GbE connectivity

- QM2 M.2 SSD PCIe cards allow adding 2 or 4
  M.2 NVMe / SATA SSDs to TS-x73A. Enable
  SSD caching or create RAID 5 group with the
  two on-board M.2 NVMe SSDs using Qtier.
- Maximize the storage capacity and performance without occupying any 3.5" drive bays. Some QM2 models even combine M.2 SSD and 10GBASE-T connectivity into one solution.







### QNAP 16/32Gb Fibre Channel card for FC SAN



QXP-16G2FC
Dual-port 16Gbps
QXP-32G2FC
Dual-port 32Gbps

FC HBA with 16/32Gb FC transceivers

Manage Fibre Channel connection using iSCSI & Fibre Channel app



16/32Gb FC transceiver

TRX-16GFCSFP-SR TRX-32GFCSFP-SR

### **Budget-friendly unmanaged switches** for multi-user environment



#### QSW-1105-5T (Unmanaged)

5 x 2.5GbE Multi-Gig RJ45

Fanless & metal housing

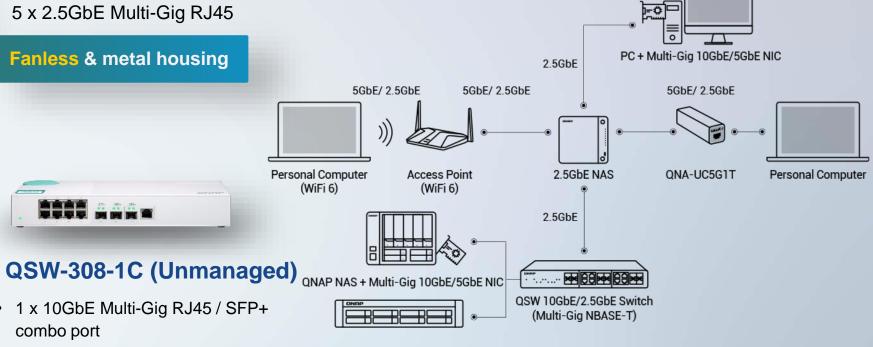


#### QSW-1208-8C (Unmanaged)

- 8 x 10GbE Multi-Gig RJ45 / SFP+ combo port
- 4 x 10GbE SFP+



- 1 x 10GbE Multi-Gig RJ45 / SFP+ combo port
- 2 x 10GbE SFP+
- 8 x 1GbE RJ45



## Layer-2 managed switches for multi-user environment and efficient deployment



#### QSW-M1208-8C (Managed)

- 8 x 10GbE Multi-Gig RJ45 / SFP+ combo
- 4 x 10GbE SFP+



#### QSW-M1204-4C (Managed)

- 4 x 10GbE Multi-Gig RJ45 / SFP+ combo
- 8 x 10GbE SFP+



#### QSW-M408-4C (Managed)

- 4 x 10GbE Multi-Gig RJ45 / SFP+ combo
- 8 x 1GbE RJ45



#### QSW-M804-4C (Managed)

- 4 x 10GbE Multi-Gig RJ45 / SFP+ combo
- 4 x 10GbE SFP+



#### QSW-M408-2C (Managed)

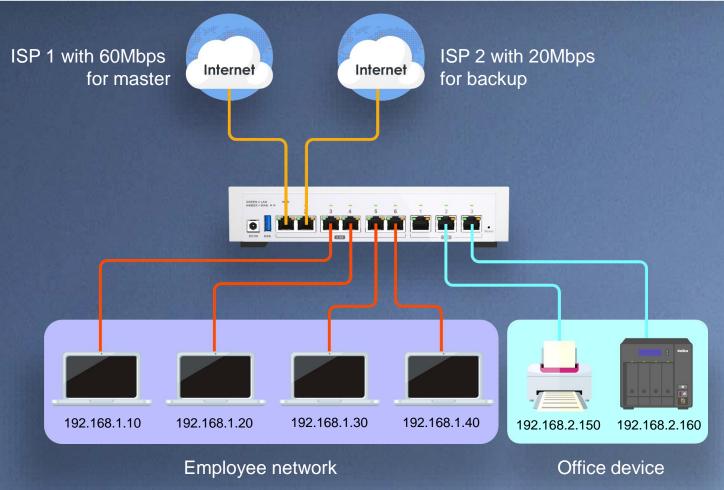
- 2 x 10GbE Multi-Gig RJ45 / SFP+ combo
- 2 x 10GbE SFP+
- 8 x 1GbE RJ45

#### Keep existing wiring for 2.5GbE

	CAT 5e	CAT 6	CAT 6A
100M	<b>√</b>	✓	✓
1G	✓	✓	✓
2.5G	✓	✓	✓
5G	✓	✓	✓
10G	X	√(55m)	✓

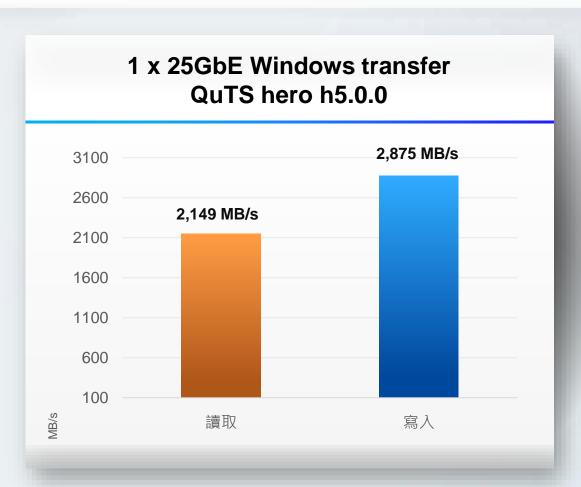
## SOHO/SB – few edge devices in same subnet, no additional switch and AP request

- There are not so much edge devices, which means can connect to router directly
- Need to parallel multiple physical interfaces for assigning same subnet network
- It needs dual WAN for back up usage



Employee network: 192.168.1.x
Office device network: 192.168.2.x

## TVS-h874 optional 25GbE card for fast performance



Test Environment:

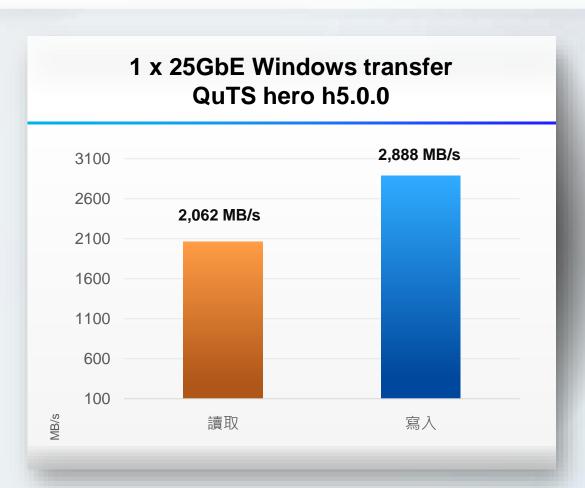
NAS: TVS-h874 with QXG-25G2SF-CX6

OS: QTS 5.0

Volume type: RAID 5; 8 x Samsung 860 EVO 1TB Client PC: Windows Server 2019, Intel Xeon W-1250. 32GB RAM. QNAP QXG-25G2SF-CX4 NIC



## TVS-h674 optional 25GbE card for fast performance



Test Environment:

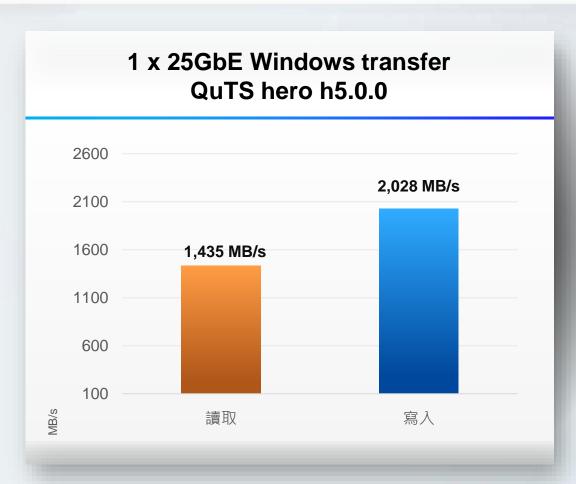
NAS: TVS-h674 with QXG-25G2SF-CX6

OS: QTS 5.0

Volume type: RAID 5; 6 x Samsung 860 EVO 1TB Client PC: Windows Server 2019, Intel Xeon W-1250. 32GB RAM, QNAP QXG-25G2SF-CX4 NIC



## TVS-h474 optional 25GbE card for fast performance



Test Environment:

NAS: TVS-h474 with QXG-25G2SF-CX6

OS: QTS 5.0

Volume type: RAID 5; 4 x Samsung 860 EVO 1TB Client PC: Windows Server 2019, Intel Xeon W-1250. 32GB RAM, QNAP QXG-25G2SF-CX4 NIC



TVS-h474



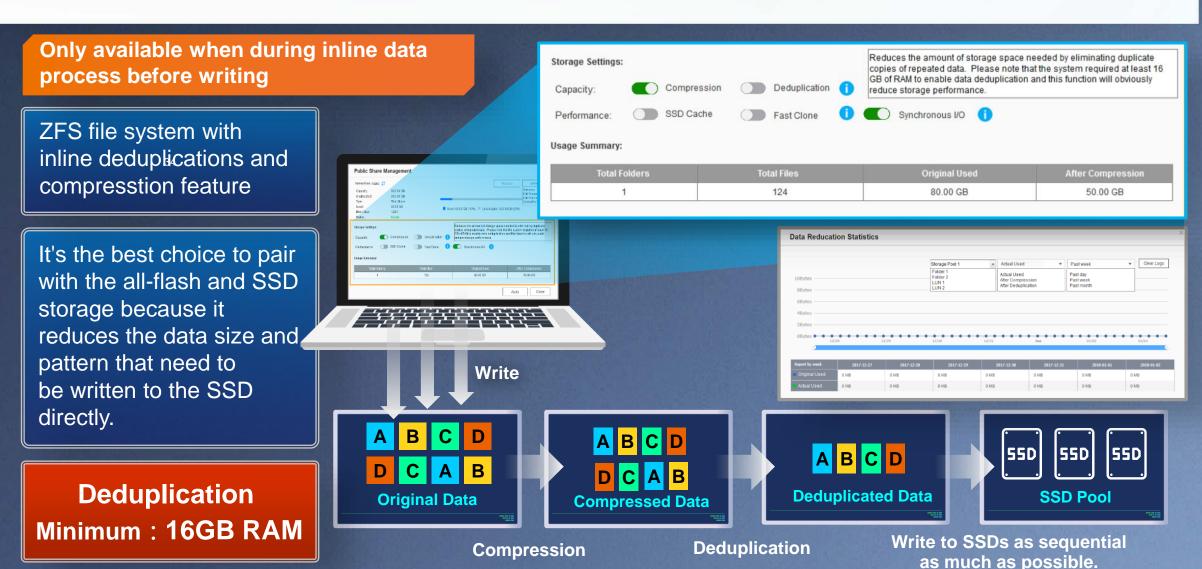
### Enterprise-level OS

**ZFS-based QuTS hero** 

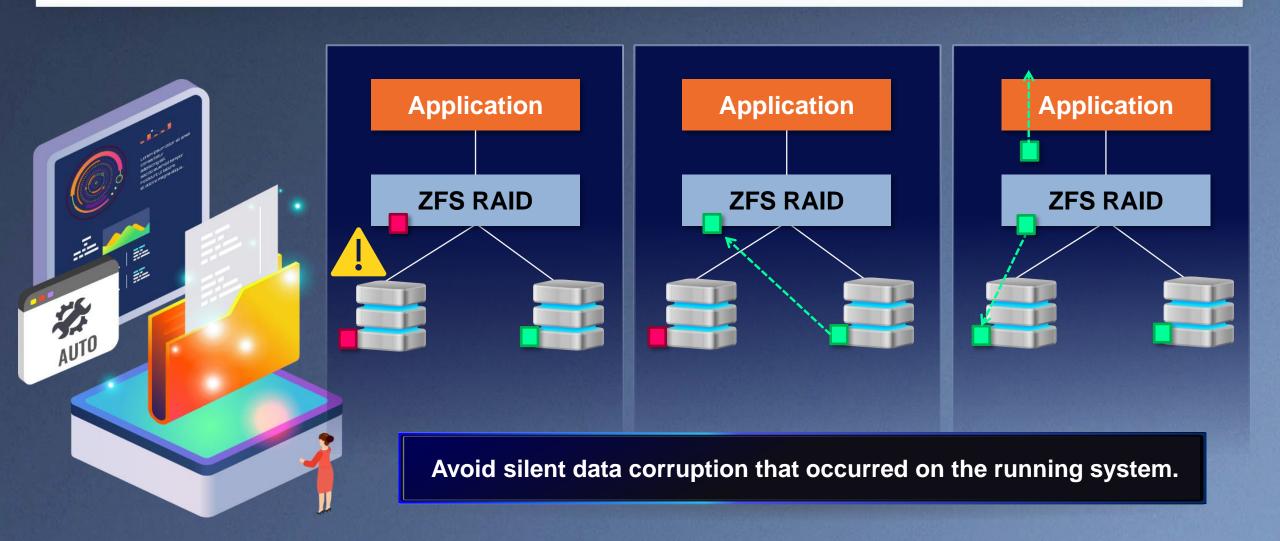
TVS-h874



## NAS & QuTS hero O.S. support powerful data reduction technologies to extend SSD endurance

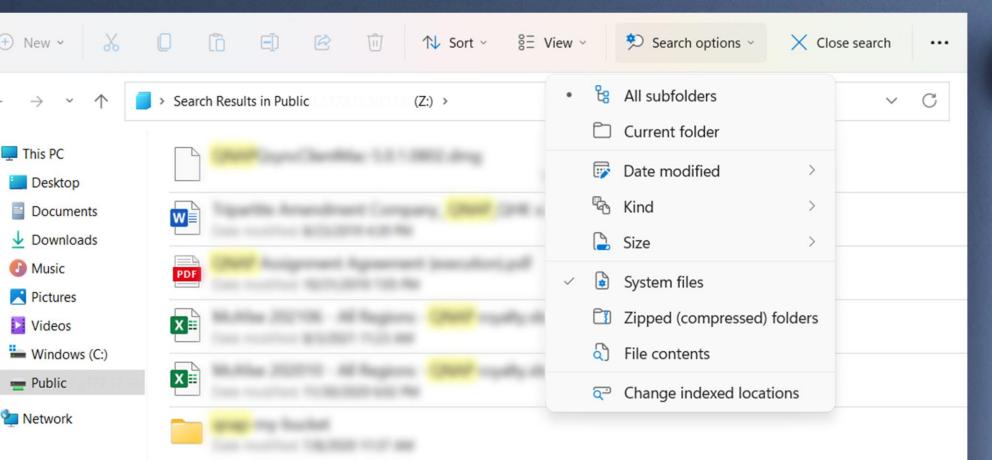


### Prevent silent data corruption & self-healing



# Convenient file search with Windows® Search Protocol (WSP) support for NAS shared folders

Windows® 10/ Windows Server® 2016 (or later) users can easily search NAS shared folders via Windows® when an SMB drive is mounted to the NAS. Advanced file search by time, file type, or size is supported for greater convenience.



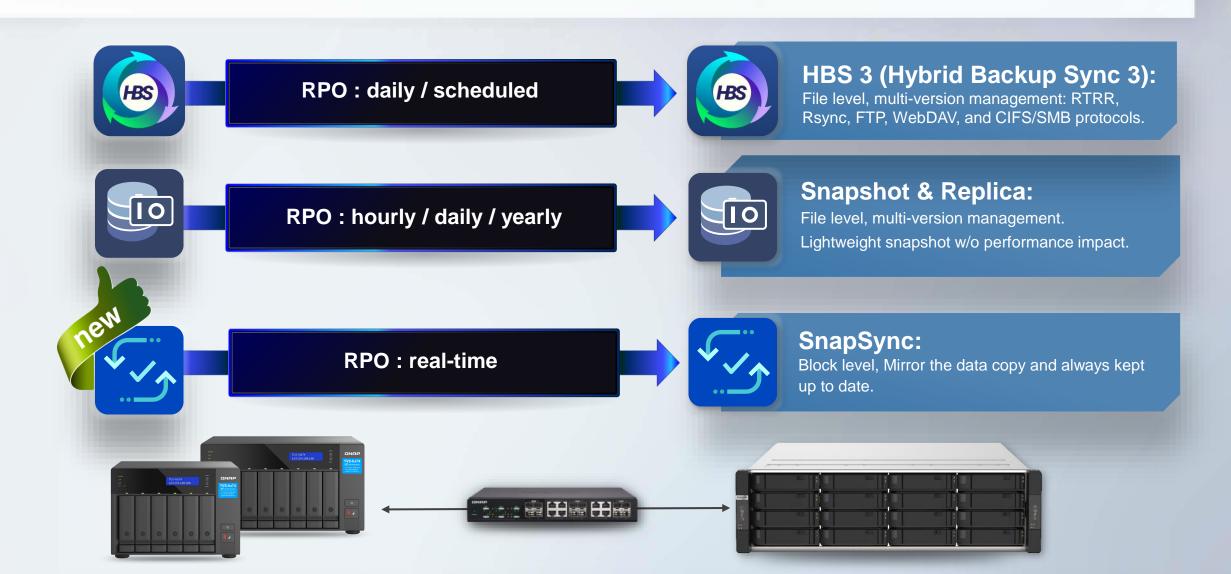


For an optimized full-text search experience, we recommend Qsirch PC Edition!

### Qsirch PC Edition

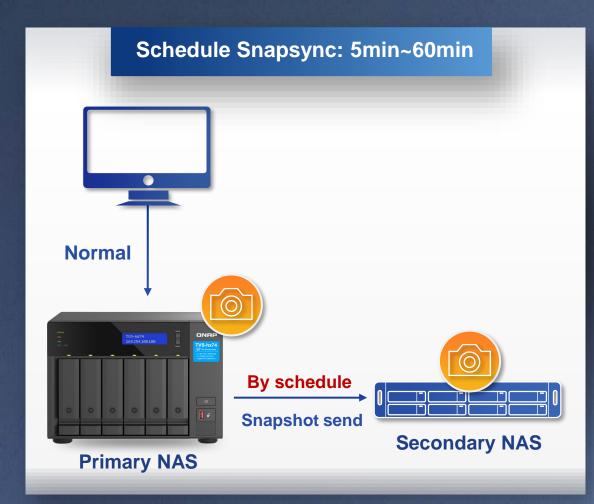
The most powerful search engine that integrate with NAS and PC local search.

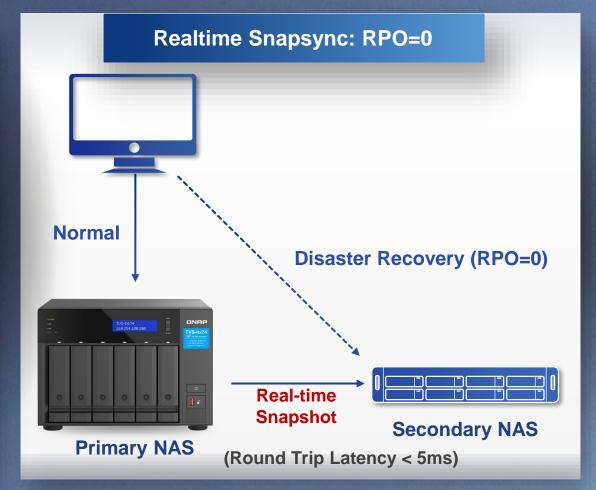
# License-free backup solutions to provide the most complete data backup protection



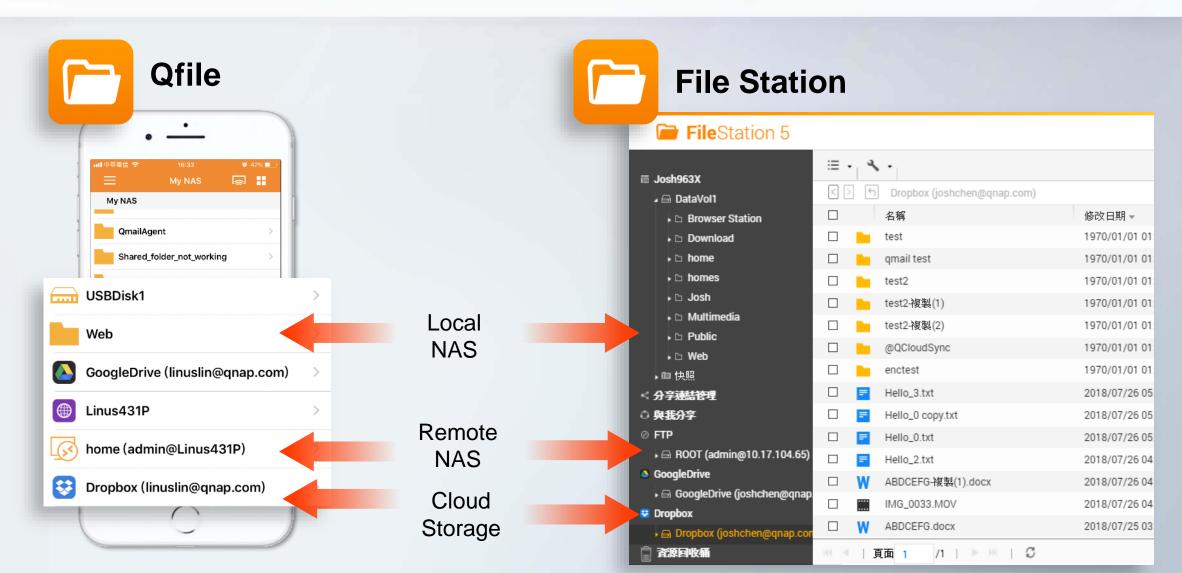
# Real-time SnapSync ensures minimal RPO with real-time disaster recovery

Back up data from the local NAS to another QNAP NAS using block-level replication in real time.

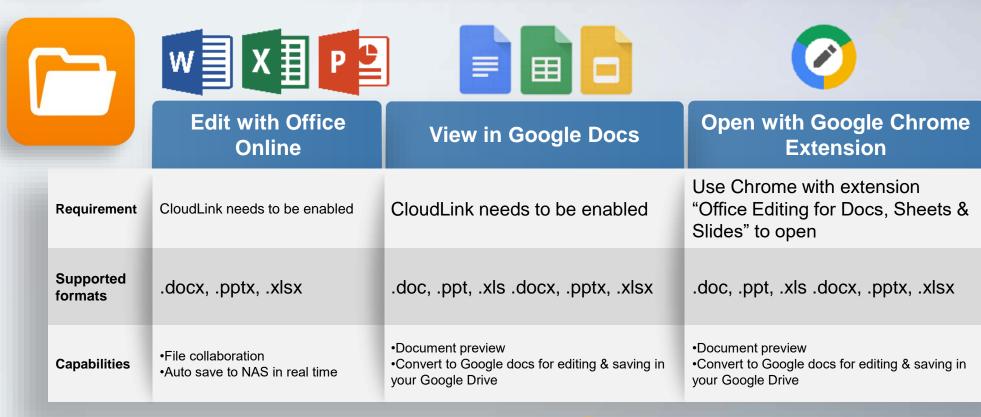




# Connect to Dropbox, OneDrive, Google Drive and more



# Easily make NAS your team collaboration portal with File Station





Select the default open action based on your preference in Settings > Documents.

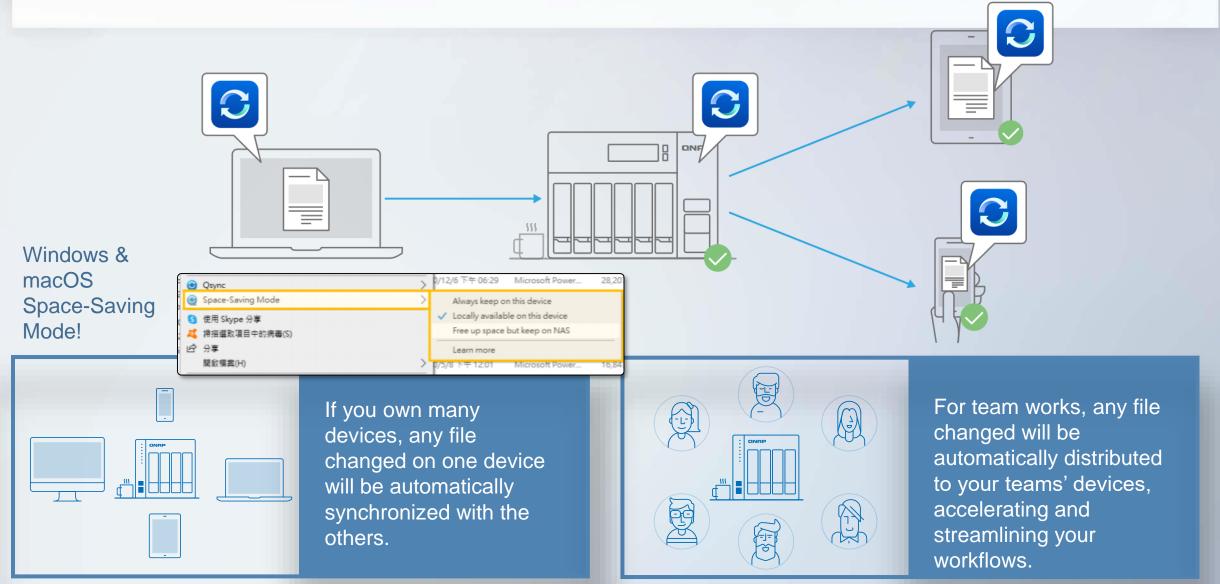


Save to NAS in real time

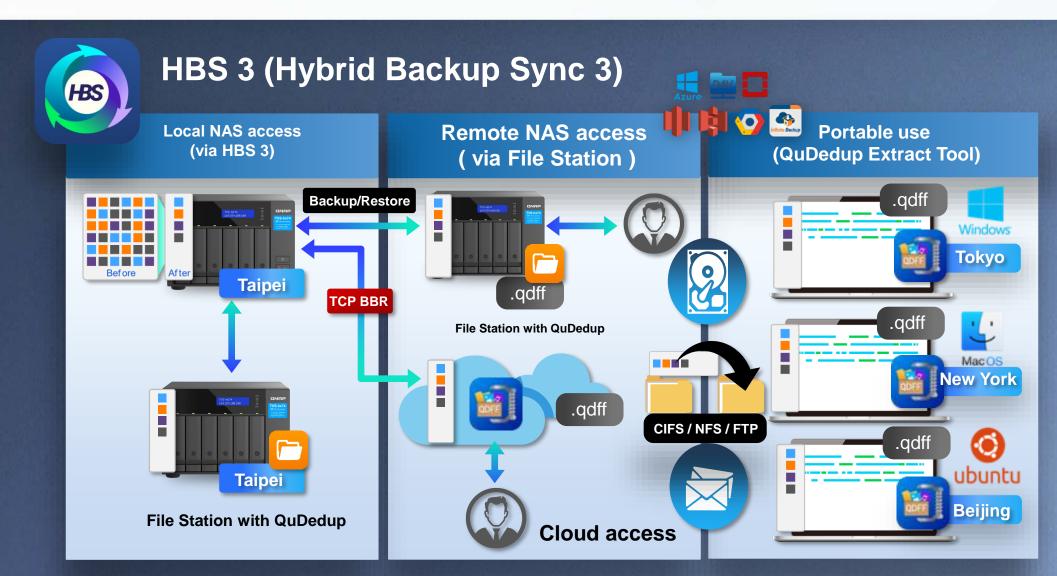


Multi-user online editing

# Qsync 5.0 – Cross-device file sync for individuals and teams



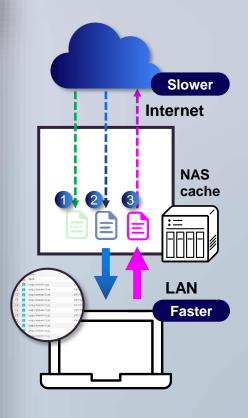
# Easy to use HBS 3.0 app fulfilling backup 3-2-1 practice with deduplication



## Mount cloud storage and file servers with HybridMount for greater storage & faster access

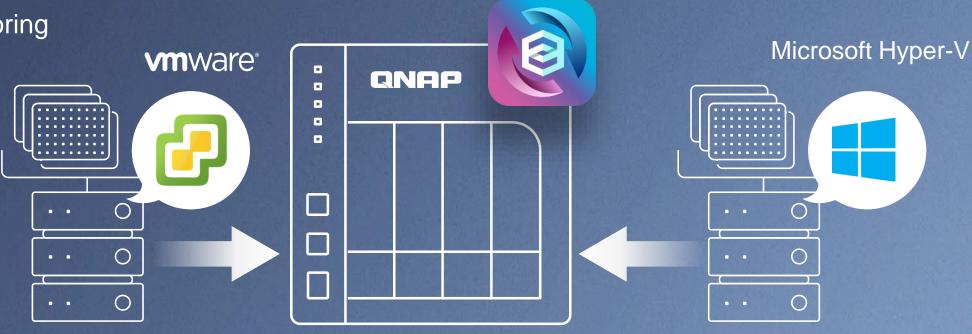
	Network Drive Mount	File Cloud Gateway	
Setup Method	Mount cloud drives	Select "File Cloud Gateway" mode and create a dedicated cache space	
Connections	No limit	2 free and perpetual connections. Purchase license for more connections	
Access Performance	Depends on network speed	High performance thanks to caching	
Access in File Station	Supported	Supported	
Access through SMB / NFS / AFP	Not Supported	Supported	
Sync with the cloud	Sync only when browsing	Sync constantly for quick access	
Integration with QTS Apps	Not supported	Supported	

- Online collaboration
- File data analysis



# Hyper Data Protector: All-in-one active backup solution for virtual machines

- Supports VMware and Microsoft Hyper-V
- Unlimited VM backups and license-free
- Active backup solution
- Restore at any time point
- Constant monitoring



Hyper Data Protector

# Boxafe: Comprehensive Backup Solution for Google Workspace and Microsoft 365



- Keep important data in your hands
- · Move older data out of the cloud to reduce cost

#### Google™ Workspace



#### **Gmail**

Backup all your emails and attachments in Gmail



#### **Google Drive**

Backup all your file versions in Google Drive and supports My Drive and Shared Drive



#### **Contacts**

Backup all your contacts in Google Contacts



#### Calendar

Backup all your events and attachments in Google Calendar

#### Microsoft 365®



#### **Outlook**

Backup all your emails and attachments in Outlook



#### **Contacts (People)**

Backup all your contacts in Outlook People



#### Calendar

Backup all your events and attachments in Outlook Calendar

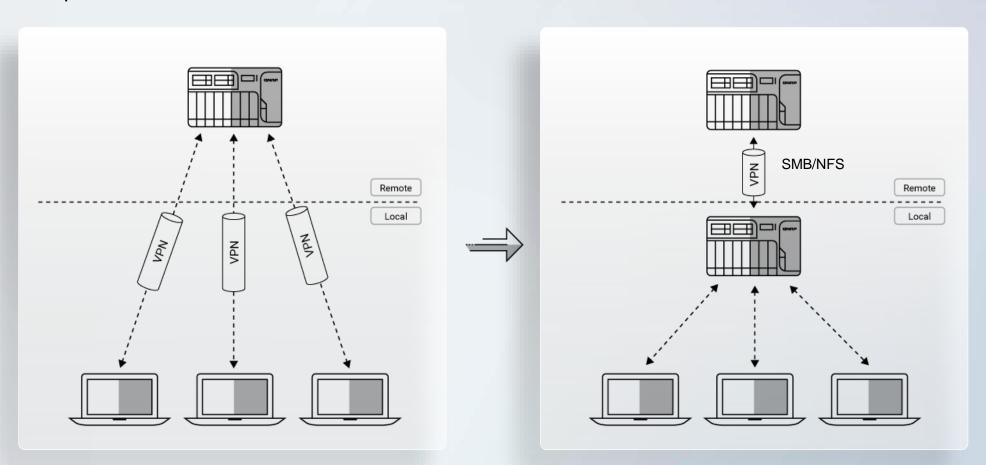
#### **OneDrive**



Backup all your files in OneDrive and support SharePoint

# HybridMount - Cascade share the access permission to remote devices

The remote data mounted by SMB/NFS can be shared with other devices with folder permission to achieve a cascade share architecture.

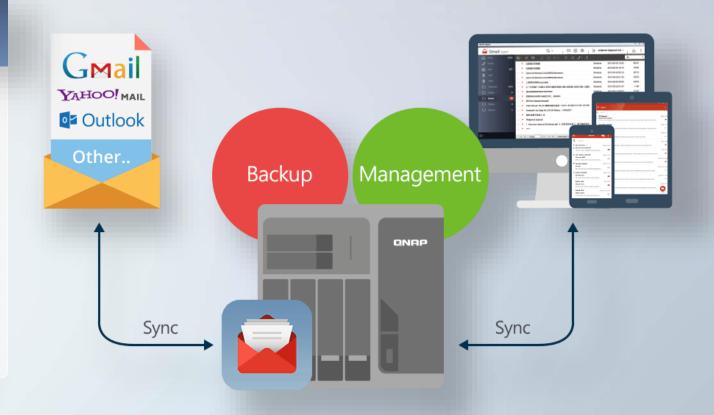


- To avoid local users accessing the remote data by VPN and to reduce the security concern and risk of VPN.
- No longer need to manage user accounts in the remote server. The local admin retains full control over assigning different permissions to local users.

### **QmailAgent – email backup solution**

#### **Best Email Retention Solution**

- Collectively manage and back up your personal and business emails.
- Easily auto back up all your emails and attachments.
- Quickly search and gain access to specific messages.
- Back up emails for disaster recovery.
- Encryption service protects backed up private emails.



# Install an NVIDIA graphics card to add HDMI output and improve VM / container performance



Support graphic cards that do not need power cables, including NVIDIA® GTX 1650, 1050, or 1030 to add an HDMI output and boost performance of GPU-accelerated computing, virtual machines, and containers via GPU passthrough.



Virtualization Station



**Container Station** 



Ubuntu Linux Station

#### Note:

- 1. Supported video formats depend on the hardware and software specifications of the devices. Playback capability and quality may vary due to factors including the original file formats/quality, hardware and software limitations, and output devices.
- 2. When Virtualization Station uses graphics cards, the NAS will temporarily stop hardware transcoding acceleration for QTS (and vice versa).
- 3. Consult the Compatibility List for information on supported NAS and graphics cards.

# All-in-one solution for hosting virtual machines and containerized apps



#### **Virtualization Station**

Virtualization Station allows you to create virtual machines (VM) on Turbo NAS, supporting Windows `Linux® `UNIX® `Android `QuTScloud operating systems.











#### **Container Station**

Experience LXD and Docker® lightweight virtualization technologies, download apps from the Docker Hub Registry®, import/export containers, and create abundant microservices.





Con	tainer

Application

**Application** 

Filesystem

**Application** 

**Filesystem** 

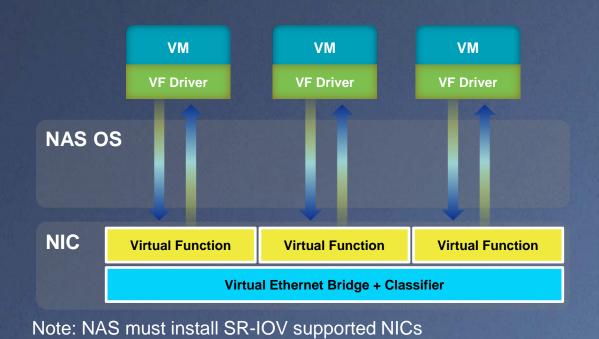
**Filesystem** 

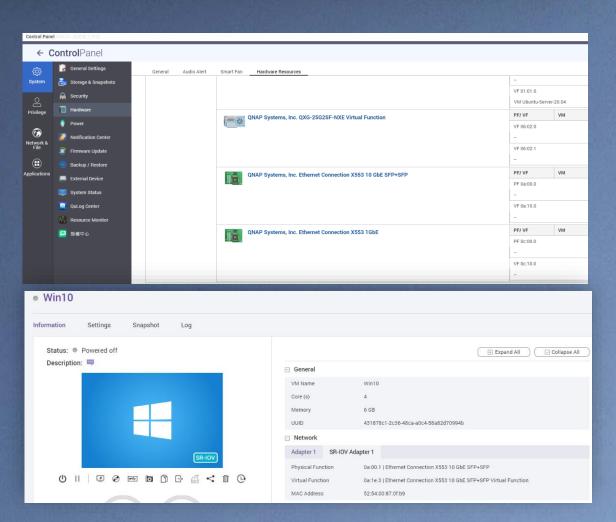
**Host OS** 

Hardware

# SR-IOV improves the network performance of virtual machines by 20% with HW acceleration

SR-IOV (Single-Root Input/Output Virtualization) let the services on your virtual machine enjoy the physical network speed.





# Establish and run dual systems - Ubuntu & QuTS hero



### **Ubuntu Linux Station**

- Run QuTS hero and Ubuntu dual system, dual system application to enjoy.
- One-click installation of multiple versions Ubunutu: 16.04 / 18.04 / 20.04
- Ubuntu Software Center enjoy a variety of application downloads
- Remotely access the Ubuntu Linux desktop through a browser /
- Install a PCIe graphic card to add an HDMI output screen, and use a USB keyboard and mouse with it.



## Smart and automatic file management



### **Qsirch 5**

### A powerful, Google<sup>™</sup>-like search tool

- Search image, music, video, document, and email by keyword and filters.
- 5 advanced image search: search by face, text in image, things, color and map.
- Supports Qfiling to perform archival tasks based on your search criteria.



### **Qfiling 3**

### **Automatically filing and archiving**



- 2 type of task: filing task, recycling task
- 3 type of scheduling rule: one-time, scheduling, real-time
- 9 editing module: Al face blur, encryption and decryption, video transcoding and so on

# Notification Center - diversity of active notification





#### Centralized setting

One interface to integrate all notification settings and operations



### Multiple notification methods

Meet your various notification scenarios



### Highly flexible rule setting

Easily filter important messages



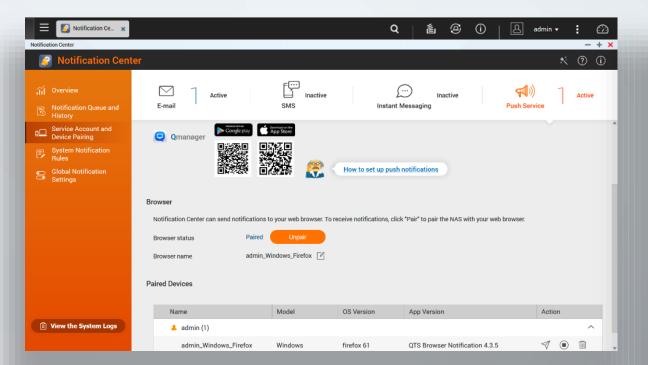
### Multi-language support

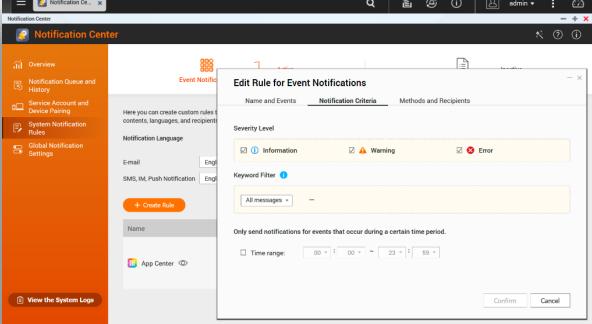
Support 23 language & composed by professionals



#### Double insurance

Notification history and test function





# QuLog Center proactively analyze and monitor connections

#### **Proactive analysis**

- List the top 5 Applications for Error/Warning Logs
- System access statistics such as connection types and logged in IP

#### **Quick filtering**

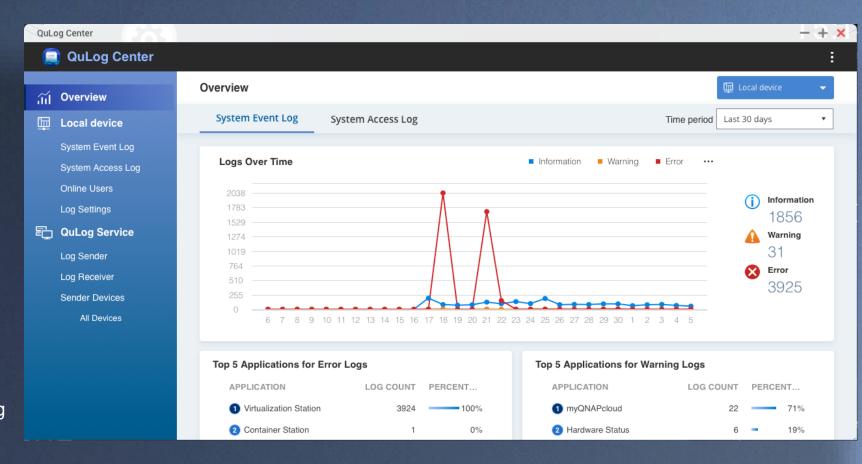
- Categorize by APP name or date
- Customize labels/styles/flags for advanced search

#### **Real-time monitoring**

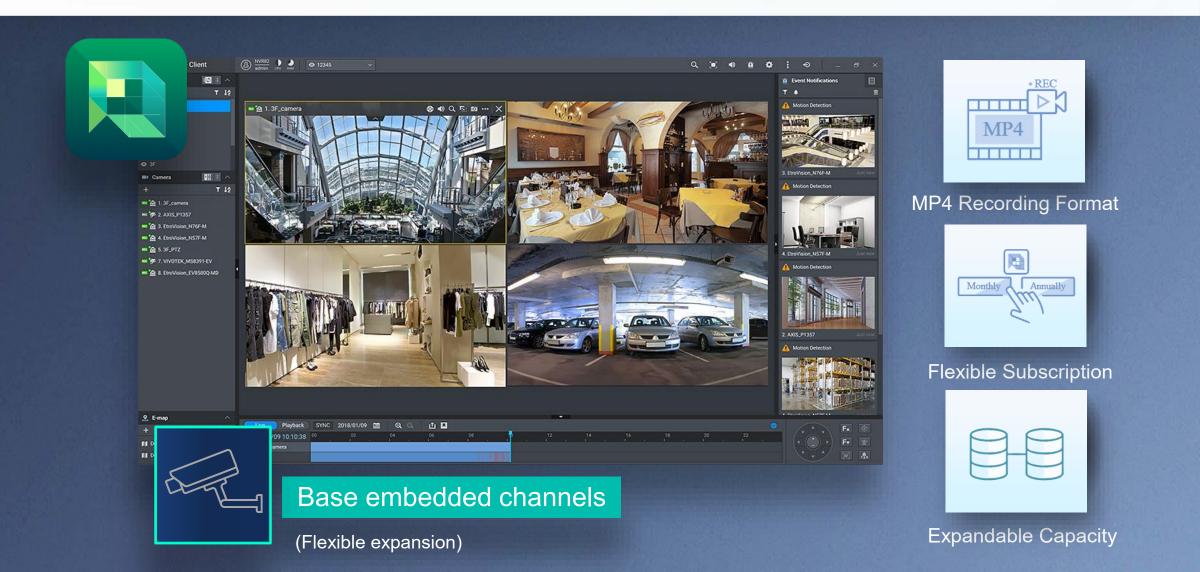
 View the online members and their connection types

#### **Unified management**

- Consolidate detailed local and remote NAS record files
- · Set the size of the space for the record
- Send NAS log files to a standard Syslog server
- Notify specified notifications by Notification Center



## **QVR Elite- Surveillance System**



### Compatible with a huge amount of camera models

### over 180 Brands









MOBOTIX







**Honeywell** 

**Brick**com



### **ONVIF Profile Supported**

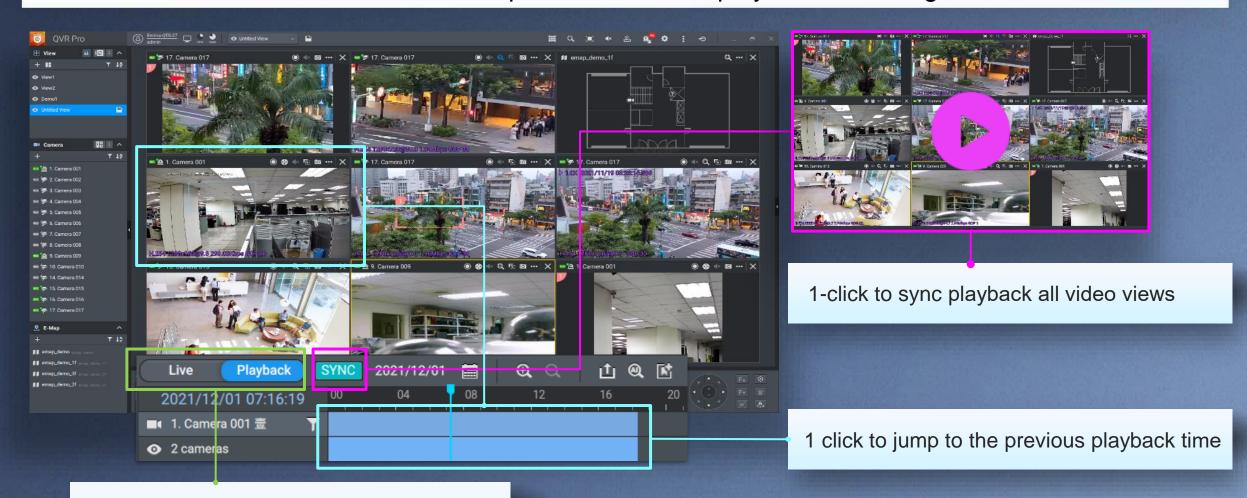


RTSP Stream Input / Output

RTMP Stream Input

## Unified interface for live view & playback, anywhere with a PC or mobile device

Monitor the live view of multiple channels and playback on 1 single interface.



1 click to switch between Live & Playback

## Surveillance Client for mobile and home environment



#### **QVR Pro Client**

### Mobile device recording and playback

Mobile device recording and playback protect important people, things, and objects anytime, anywhere.





#### **QVR Viewer**

### Apple TV Monitoring App

The new Apple TV monitoring application is a convenient APP installed on Apple TV for monitoring and playback.





### High-performance multimedia streaming platform



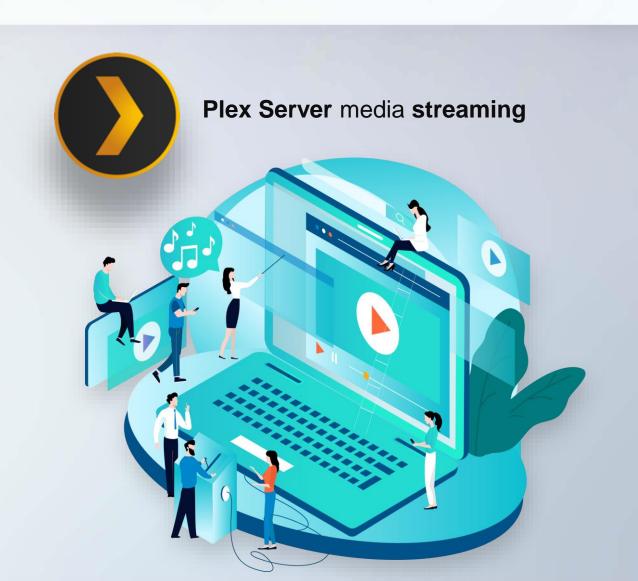
**QuMagie AI smart photo albums** and auto classification



CAYIN MediaSign Player HEVC (H.265) video transcoding



**Use Cinema28 for** multi-room streaming



## Multiple Storage

## **Expansion Solutions**

TVS-h874

QTS QuTS haro

TVS-h674

TVS-h474









## Storage expansion: TR-002 / TR-004 USB RAID units

- NAS with a USB port can support TR USB RAID enclosures
- Integrated USB Type-C port for plug & play, supporting USB Type-A & Type-C hosts
- NAS can connect max. 2 of TR-002/TR-004 enclosures







Optional

Type-C to Type-C cable

### Storage expansion: TL-D800C USB JBOD units

- NAS with a USB port can support TL USB JBOD enclosures
- USB Type-C provide speed up to USB 3.2 Gen 2 10Gb/s

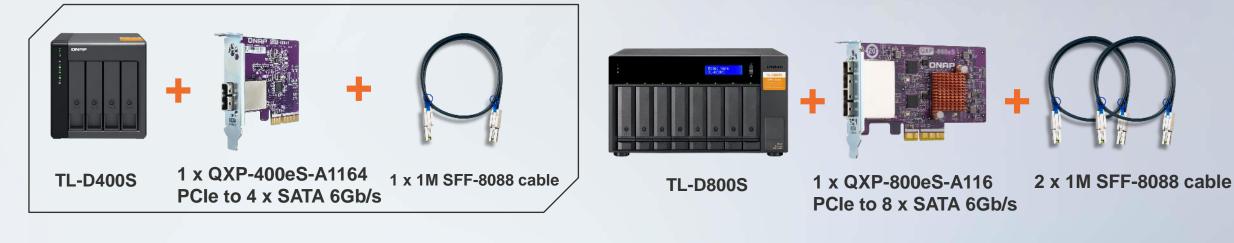


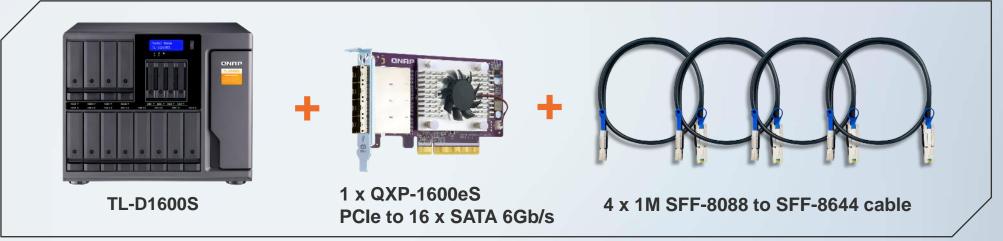
## High-speed storage expansion with PCIe to SATA enclosures

- Install a QNAP QXP SATA HBA on NAS to access the TL expansion units via PCIe Gen3 bandwidth
- Each SFF-8088 cable provides 4 x SATA 6Gb/s = 24 Gb/s bandwidth. Connect multiple cables for up to 64 Gb/s performance



### QXP SATA HBA and cables are included





# Brand new TVS-hx74 series Faster CPU \ more cores \ ZFS file system

	TVS-h474-PT-8G	TVS-h674-i3-16G	TVS-h674-i5-16G	TVS-h874-i5-32G		
CPU	Intel Pentium Gold G7400	Core i3-12100 Core i5-12400				
Memory		Max. 128GB (2 x 64GB)				
PCle	1 x PCIe Gen4 x16 1 x PCIe Gen3 x2	1 x PCIe Gen4 x16 1 x PCIe Gen4 x4				
Graphics	UHD Graphics 710; 16EUs	UHD Graphics 730; 24EUs UHD Graphics 770; 32EUs				
Drive slot	4 x 2.5"/3.5" HDD/SSD; SATA 6Gbps	6 x 2.5"/3.5" HDD/SSD; SATA 6Gbps		8 x 2.5"/3.5" HDD/SSD; SATA 6Gbps		
M.2 slots	2 x PCle Gen3 x2	2 x PCle Gen4 x4				
Ethernet	2 x 2.5GbE Optional 10/25GbE NICs					
os	Pre-install QuTS hero (ZFS) Optional QTS					

# 3-year standard warranty covering hardware repair and support services

Backed by a **3-year** warranty at no additional cost.

You can also purchase a warranty extension that extends your warranty coverage up to 5 years total (2 additional years).







## TVS-hx74

is your best choice!





