

## TS-h2490FU-7232P-32G



|                  |                              |
|------------------|------------------------------|
| Cena             | <b>53 780,06 zł</b>          |
| Dostępność       | <b>Na zamówienie</b>         |
| Numer katalogowy | <b>QNA_TSH2490FU7232P32G</b> |
| Kod producenta   | <b>TS-h2490FU-7232P-32G</b>  |
| Kod EAN          | <b>4711103092828</b>         |
| Producent        | <b>QNAP</b>                  |
| Port 10 GbE      | <b>4</b>                     |
| Pamięć RAM       | <b>32GB</b>                  |
| Porty 1GbE RJ-45 | <b>2</b>                     |

### Opis produktu



### QNAP TS-h2490FU-7232P-32G

**QNAP TS-h2490FU-7232P-32G** został stworzony na potrzeby zapewnienia niezwykle wydajności i wysokiej oszczędności kosztów. Wyposażony w 24 wnetki na SSD U.2 NVMe Gen 3 x4 SSD model TS-h2490FU zapewnia do 472K/205K IOPS losowego odczytu/zapisu o ultra niewielkich opóźnieniach. Oparty na systemie ZFS system operacyjny QuTS hero obsługuje liniową deduplikację danych i kompresję na potrzeby redukcji zużycia w zakresie we/wy oraz zużycia pamięci masowej SSD, co znacznie wydłuża czas eksploatacji dysków SSD przy wyższym wskaźniku ceny do wydajności dla macierzy pamięci masowej all-flash. W połączeniu z niemal nieograniczoną funkcją migawek, funkcją SnapSync w czasie rzeczywistym oraz możliwościami rozbudowy pamięci masowej do poziomu petabajtów, model TS-h2490FU stanowi idealne rozwiązanie w przypadku zastosowań obejmujących intensywne we/wy, dla których ważne są niewielkie opóźnienia, i pozwala wyeliminować wąskie gardła w zakresie produktywności w nowoczesnych centrach danych i w zadaniach wirtualizacji oraz krytycznych dla celu zadaniach tworzenia kopii zapasowych/przywracania danych.

#### Cechy wyjątkowe dysku sieciowego **TS-h2490FU-7232P-32G**:

- Liniowa deduplikacja danych i kompresja, nadmiarowa alokacja puli oraz TRIM pozwalają na maksymalne zwiększenie wydajności i długości eksploatacji SSD.
- Gniazda PCIe Gen 4 umożliwiają instalację kart 10GbE/25GbE/40GbE/100GbE, kart QM2 lub kart Fibre Channel w celu zwiększenia wydajności zastosowań.
- Możliwość nawiązywania wielu połączeń 25GbE SFP28 i 2,5GbE RJ45 przyspiesza wirtualizację, intensywny dostęp do plików i duże zadania związane z tworzeniem kopii zapasowych/przywracaniem danych.
- Obsługa pamięci masowej wirtualizacji i hosting maszyn wirtualnych oraz aplikacji kontenerowych.
- Konstrukcja umożliwiająca rozbudowę w miarę rozwoju firmy poprzez podłączanie obudów do rozbudowy SAS 12 Gb/s, aby uzyskać pojemność pamięci masowej na poziomie petabajtów.
- Bramy pamięci masowej w chmurze umożliwiają zastosowania w chmurze hybrydowej, dodatkowo umożliwiając rezerwację pamięci podręcznej na serwerze NAS, zapewniając dostęp do danych w chmurze z niewielkimi opóźnieniami.

Podstawowe funkcje **serwera QNAP** dla rozwiązań biznesowych:

**Dostęp do danych z pracy oraz z dowolnego miejsca na świecie.**



System QNAP zapewnia szybki, a przede wszystkim bezpieczny sposób na udostępnianie danych każdemu i wszędzie. Dzięki aplikacji File Station oraz wbudowanemu **serwerowi VPN** można przeszukiwać, organizować i przenosić pliki pomiędzy QNAP, a dowolnym urządzeniem w sieci. Udostępnianie plików dla każdej platformy Windows, MAC czy Linux.



#### Rozszerzenie funkcjonalności TS-h2490FU-7232P-32G dzięki wirtualizacji.

Aplikacja **Virtualization Station** przekształca model **TS-h2490FU** w NAS typu dwa-w-jednym, mogący działać jako NAS typu wszystko-w-jednym oraz jako platforma wirtualizacji obsługująca różne **systemy operacyjne** i umożliwiającą szybkie tworzenie, importowanie i eksportowanie maszyn wirtualnych, tworzenie migawek i wykonywanie operacji na pulpicie w przeglądarce internetowej.

#### Obsługa standardu 25GbE.



**Model TS-h2490FU** zapewnia niespotykaną wcześniej łączność sieciową dzięki dwóm, dwuportowym, fabrycznie zainstalowanym kartom **25GbE SFP28 SmartNIC** (które korzystają z serii Broadcom NetXtreme®-E Series BCM57414, Mellanox® ConnectX®-4 Lx lub SmartNIC na tym samym poziomie).

#### Innowacyjny system QTS hero.



Niezależnie od tego, gdzie przechowujesz swoje wrażliwe dane, nieuczciwe osoby zawsze próbują wykorzystać słabości systemu. Na pomoc przychodzi system QTS hero z systemem plików ZFS. System plików ZFS zapewnia integralność oraz bezpieczeństwo danych, elastyczność i niezawodność a co ważne dostępność wszystkich aplikacji QTS.

**Dowiedz się więcej na temat systemu QNAP QTShero:**



## Specyfikacja sprzętowa

|          |                                                                                    |
|----------|------------------------------------------------------------------------------------|
| Procesor | 8-rdzeniowy/16-wątkowy procesor AMD EPYC™ 7232P/7252 o taktowaniu do 3,2 GHz       |
|          | Architektura procesora 64-bitowy x86                                               |
|          | Mechanizm szyfrowania Tak (AES-NI)                                                 |
|          | Pamięć systemowa 32 GB RDIMM DDR4 ECC                                              |
|          | Maksymalna pojemność pamięci 4 TB (16 x 256 GB)                                    |
|          | Gniazdo pamięci 16 x RDIMM DDR4                                                    |
|          | Pamięć flash 5GB (ochrona systemu operacyjnego przed podwójnym roz                 |
|          | Wnęka dysków 24 dyski 2,5-calowe U.2 PCIe NVMe                                     |
|          | System jest dostarczany bez dysku SSD.                                             |
|          | Lista zgodności dysków SSD znajduje się na stronie <a href="https://">https://</a> |
|          | Kompatybilność dysków 2,5-calowe dyski SSD U.2 NVMe Gen 3 x4                       |
|          | Wymieniany podczas pracy Tak                                                       |
|          | Obsługa przyspieszenia pamięci podręcznej Tak                                      |
|          | SSD Tak                                                                            |
|          | SR-IOV Tak                                                                         |
|          | Port 2,5 Gigabit Ethernet (2,5G/1G/100M) 2 (2,5G/1G/100M/10M)                      |
|          | Port 25 Gigabit sieci Ethernet 2 porty 25GbE SFP28 SmartNIC                        |
|          | Wake on LAN (WOL) Tylko port 2,5GbE                                                |
|          | Ramka Jumbo Tak                                                                    |
|          | Gniazdo PCIe 5                                                                     |
|          | Gniazdo 1: PCIe Gen4 x4                                                            |
|          | Gniazdo 2: PCIe Gen4 x8 lub x4                                                     |
|          | Gniazdo 3: PCIe Gen4 x4                                                            |
|          | Gniazdo 4: PCIe Gen4 x8                                                            |
|          | Gniazdo 5: PCIe Gen4 x16 lub x8                                                    |
|          | *Gniazda 4 i 5 są fabrycznie instalowane z kartami sieciowymi                      |
|          | wydajność, gniazda należy zarezerwować dla kart 25GbE.                             |
|          | **Gniazdo 2 zapewnia tryb PCIe Gen4 x8 w przypadku niekie                          |
|          | Gen4 x4 w przypadku korzystania z gniazda 3.                                       |
|          | ***Gniazdo 5 zapewnia szerokość PCIe Gen4 x16 w przypa                             |
|          | szerokość PCIe Gen4 x8 w przypadku korzystania z gniazda                           |
|          | Wymiary kart dla gniazda PCIe 1 225 x 68,9 x 28,76 mm /                            |
|          | Wymiary kart dla gniazda PCIe 2 225 x 68,9 x 18,76 mm /                            |
|          | Wymiary kart dla gniazda PCIe 3 225 x 68,9 x 18,76 mm /                            |
|          | Wymiary kart dla gniazda PCIe 4 225 x 68,9 x 39,08 mm /                            |
|          | Wymiary kart dla gniazda PCIe 5 225 x 68,9 x 18,76 mm /                            |

|                                            |                                                           |
|--------------------------------------------|-----------------------------------------------------------|
| Port USB 3.2 Gen 1                         | W przypadku niekorzystania z następnego gniazda PCIe mo   |
| Kształt                                    | 2                                                         |
| Wskaźniki LED                              | Do montażu stelażowego                                    |
| Przyciski                                  | Dysk twardy, stan, 10 GbE, LAN, stan portów rozszerzeń pa |
| Wymiary (wys. x szer. x gł.)               | Zasilanie, reset                                          |
| Waga (netto)                               | 88,3 × 480,97 × 510,23 mm                                 |
| Waga (brutto)                              | 16.77 kg                                                  |
| Temperatura robocza                        | 20.95 kg                                                  |
| Temperatura przechowywania                 | 0-40°C                                                    |
| Wilgotność względna                        | -20-70°C                                                  |
| Zasilacz                                   | 5-95% bez kondensacji, temperatura mokrego termometru     |
|                                            | 1100W PSU (x2), 100-240Vac,                               |
|                                            | Maks. moc w watach:                                       |
|                                            | 1100 W przy 200-240Vac                                    |
|                                            | 850 W przy 100-240Vac                                     |
| Pobór mocy: Tryb pracy, typowy             | 277,64 W                                                  |
|                                            | Testy wykonane przy całkowicie zapełnionych dyskach.      |
| Wentylator                                 | 4 x 60mm, 12VDC                                           |
| Ostrzeżenie systemowe                      | Brzęczyk                                                  |
| Standardowa gwarancja                      | 5                                                         |
| Maks. liczba połączeń współbieżnych (CIFS) | 10 000                                                    |
| — z maks. pojemnością pamięci              |                                                           |

## Specyfikacja oprogramowania

|                                    |                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating System                   | QTS 5.2.3                                                                                                                                                                                                                                                                                                                            |
| Supported Client Operating Systems | <ol style="list-style-type: none"> <li>1. Apple Mac OS 10.10 or later</li> <li>2. Ubuntu 14.04, CentOS 7, RHEL 6.6, SUSE 12 or later Linux</li> <li>3. IBM AIX 7, Solaris 10 or later UNIX</li> <li>4. Microsoft Windows 7, 8, 10 and 11</li> <li>5. Microsoft Windows Server 2008 R2, 2012, 2012 R2, 2016, 2019 and 2022</li> </ol> |
| Supported Browsers                 | <ol style="list-style-type: none"> <li>1. Apple Safari (latest version)</li> <li>2. Google Chrome (latest version)</li> <li>3. Microsoft Edge (latest version)</li> <li>4. Mozilla Firefox (latest version)</li> </ol>                                                                                                               |
| 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                       | Tak                                                                                                                                                                                                                                                                                                                                  |
| SED Storage Pool                   | Tak                                                                                                                                                                                                                                                                                                                                  |
| Maximum Pool size                  | 308 TB                                                                                                                                                                                                                                                                                                                               |
| Maximum number of storage pool     | 128                                                                                                                                                                                                                                                                                                                                  |
| Volume Type                        | Thick, Thin, Static                                                                                                                                                                                                                                                                                                                  |
| Maximum volume size                | 250 TB                                                                                                                                                                                                                                                                                                                               |
| Maximum number of volume           | Note: At least 4 GB RAM is required.<br>128                                                                                                                                                                                                                                                                                          |
| Maximum shared folder size         | 250 TB                                                                                                                                                                                                                                                                                                                               |
| Maximum number of shared folder    | 512                                                                                                                                                                                                                                                                                                                                  |
| JBOD Expansion                     | Tak                                                                                                                                                                                                                                                                                                                                  |
| VJBOD / VJBOD Cloud                | Tak                                                                                                                                                                                                                                                                                                                                  |
| iSCSI Service                      | Tak                                                                                                                                                                                                                                                                                                                                  |
| Fibre Channel Service              | Tak                                                                                                                                                                                                                                                                                                                                  |
| LUN Type                           | Thick, Thin                                                                                                                                                                                                                                                                                                                          |
| File-based iSCSI LUN               | Tak                                                                                                                                                                                                                                                                                                                                  |
| Block-based iSCSI LUN              | Tak                                                                                                                                                                                                                                                                                                                                  |
| Maximum LUN size                   | 250 TB                                                                                                                                                                                                                                                                                                                               |
| Maximum number of targets LUN      | Note: At least 4 GB RAM is required.<br>128                                                                                                                                                                                                                                                                                          |

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## 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

## Auto Tiering

Tak

## RAID Type

Requires minimum 2GB memory.

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

Tak

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

Tak

## RAID Expansion (by adding Disk)

Tak

## RAID Expansion (by replacing bigger Disks)

Tak

## Storage Pool Expansion (by adding RAID Group)

Tak

## RAID Hot Spare

Global, Local

## RAID Sync/Rebuild/Scrubbing

Tak

## 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

Tak

## Disk S.M.A.R.T. Scan

Tak

## Disk S.M.A.R.T. Data Migration

Tak

## Ironwolf Health Management

Tak

## Secure Erase

Tak

## SSD Trim

Tak

## SSD Life Estimation

Tak

## Disk Roaming

Tak

## Disk Standby

Tak

## Volume Snapshot

Tak

## LUN Snapshot

Tak

## 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

Tak

## Self-serve Snapshot Recovery

Tak

## Application Consisted Snapshot

Tak

## Snapshot Full Clone

Tak

## Snapshot Replica / Vault

Tak

## SSD read-only Cache

Tak

## SSD read-write cache

Tak

## SSD write-only cache

Tak

## SSD Cache Maximum Size

[Check your QNAP NAS cache capacity and RAM requirements](#)

## SSD Cache RAID

0, 1, 5, 6, 10

## SSD profiling tool

Tak

## External Device Management

Tak

## Mount Smart Phone (MTP)

Tak

## External RAID Device (QNAP so on)

Tak

## Management (External Device Mode)

Tak

## External RAID Device (QNAP so on)

Tak

|                                                            |                                                                                                                                                                                                                           |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Management (NAS Mode)                                      |                                                                                                                                                                                                                           |
| File Server                                                | <ol style="list-style-type: none"> <li>1. File sharing across Windows, Mac, and Linux/UNIX</li> <li>2. Microsoft networking (CIFS/SMB)</li> <li>3. Apple networking (AFP)</li> <li>4. NFS version 3/4 services</li> </ol> |
| FTP Server                                                 | <ol style="list-style-type: none"> <li>1. QuFTP</li> <li>2. FTP, SFTP and TFTP protocols</li> <li>3. FTP over SSL/TLS (explicit FTPS)</li> <li>4. FXP support</li> </ol>                                                  |
| Maximum FTP connection                                     | 1024                                                                                                                                                                                                                      |
| File Station (Web)                                         | Tak                                                                                                                                                                                                                       |
| Object Storage                                             | Tak                                                                                                                                                                                                                       |
| Local user account                                         | 4,096                                                                                                                                                                                                                     |
| Local group account                                        | 512                                                                                                                                                                                                                       |
| Domain user/group account                                  | 200,000                                                                                                                                                                                                                   |
| Domain Security                                            | Tak                                                                                                                                                                                                                       |
| Domain Controller                                          | Tak                                                                                                                                                                                                                       |
| Shared folder permission                                   | Tak                                                                                                                                                                                                                       |
| Advanced folder permission                                 | Tak, (AFP, CIFS/SMB, FTP, and File Station)                                                                                                                                                                               |
| Windows ACL                                                | Tak, (CIFS/SMB)                                                                                                                                                                                                           |
| User quota                                                 | Tak                                                                                                                                                                                                                       |
| Group quota                                                | Tak                                                                                                                                                                                                                       |
| Folder quota                                               | Tak, (Snapshot shared folder)                                                                                                                                                                                             |
| Home folder                                                | Tak                                                                                                                                                                                                                       |
| Resource Monitor                                           | Tak                                                                                                                                                                                                                       |
| SNMP                                                       | V2, V3                                                                                                                                                                                                                    |
| Network recycle bin                                        | <ol style="list-style-type: none"> <li>1. Recover files deleted using AFP, CIFS/SMB, and File Station</li> <li>2. Automatic cleanup and file type filter</li> </ol>                                                       |
| System Log & Notification Center                           | Log recording: 3,000 event per second                                                                                                                                                                                     |
| Smart Fan                                                  | Tak                                                                                                                                                                                                                       |
| Schedule on/off                                            | Tak                                                                                                                                                                                                                       |
| Internet protocol                                          | IPv4, IPv6                                                                                                                                                                                                                |
| Virtual Switch                                             | Tak                                                                                                                                                                                                                       |
| Port trunking                                              | Tak, (7 modes)                                                                                                                                                                                                            |
| VLAN                                                       | Tak                                                                                                                                                                                                                       |
| DHCP Server                                                | Tak                                                                                                                                                                                                                       |
| DDNS (Dynamic Domain Name Service)                         | Tak                                                                                                                                                                                                                       |
| Network access protection with auto-blocking               | SSH, Telnet, HTTP(S), FTP, CIFS/SMB, and AFP                                                                                                                                                                              |
| Security Counselor                                         | Tak                                                                                                                                                                                                                       |
| Malware Remover                                            | Tak                                                                                                                                                                                                                       |
| AES 256-bit Volume Encryption validated by FIPS 140-2 CAVP | Tak                                                                                                                                                                                                                       |
| 2-step verification                                        | Tak                                                                                                                                                                                                                       |
| Allow/Deny List                                            | Tak                                                                                                                                                                                                                       |
| Access Protection                                          | Tak                                                                                                                                                                                                                       |
| Service binding                                            | Tak                                                                                                                                                                                                                       |
| Firewall                                                   | Tak                                                                                                                                                                                                                       |
| vSphere Web Client Plug-in                                 | Tak                                                                                                                                                                                                                       |
| VMware vSphere VAAI for iSCSI                              | Tak                                                                                                                                                                                                                       |
| VMware vSphere VAAI for NAS                                | Tak                                                                                                                                                                                                                       |
| Windows ODX                                                | Tak                                                                                                                                                                                                                       |
| Windows/VMware Snapshot Agent                              | Tak                                                                                                                                                                                                                       |
| HTTP/HTTPS Connections                                     | TLS 1.0/1.1/1.2/1.3                                                                                                                                                                                                       |
| Supports WebDAV Connection                                 | Tak                                                                                                                                                                                                                       |
| Supports Virtual Hosts                                     | 32                                                                                                                                                                                                                        |
| Qsync                                                      | Tak                                                                                                                                                                                                                       |
| [Qsync] Management Mode                                    | Note: At least 1 GB RAM is required.                                                                                                                                                                                      |
| [Qsync] Qsync client supported platforms                   | User customization, Central                                                                                                                                                                                               |
| [Qsync] Maximum number of version control                  | Windows, macOS, Ubuntu, Android, and iOS                                                                                                                                                                                  |
| HybridMount                                                | 64                                                                                                                                                                                                                        |
|                                                            | Tak                                                                                                                                                                                                                       |
| [HybridMount] File Cloud Gateway                           | Note: At least 1 GB RAM is required.                                                                                                                                                                                      |
| [HybridMount] Network Drive Mount                          | Concurrent Connections = 20 Upload & 20 Download                                                                                                                                                                          |
|                                                            | Tak                                                                                                                                                                                                                       |

|                                                                                                                                         |                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| [HybridMount] Free cloud gateway sessions                                                                                               | 2                                                              |
| HBS (Hybrid Backup Sync)                                                                                                                | Tak                                                            |
| Note: At least 1 GB RAM is required.                                                                                                    |                                                                |
| [HBS (Hybrid Backup Sync)] NAS to NAS backup                                                                                            | Tak                                                            |
| [HBS (Hybrid Backup Sync)] Cloud Backup                                                                                                 | Tak                                                            |
| [HBS (Hybrid Backup Sync)] Cloud Sync                                                                                                   | Tak                                                            |
| [HBS (Hybrid Backup Sync)] 2-way and Active Sync                                                                                        | Tak                                                            |
| [HBS (Hybrid Backup Sync)] Backup Deduplication                                                                                         | Tak                                                            |
| [HBS (Hybrid Backup Sync)] Apple Time Machine Backup                                                                                    | Tak                                                            |
| [HBS (Hybrid Backup Sync)] External drive backup                                                                                        | Tak                                                            |
| [HBS (Hybrid Backup Sync)] Maximum number of backup job                                                                                 | 400                                                            |
| Hyper Data Protector                                                                                                                    | Tak                                                            |
| Boxafe                                                                                                                                  | Tak                                                            |
| Note: At least 4 GB RAM is required.                                                                                                    |                                                                |
| [Boxafe] Office 365 Backup                                                                                                              | Tak                                                            |
| [Boxafe] Google Workspace Backup                                                                                                        | Tak                                                            |
| [Boxafe] Full-text search                                                                                                               | Tak                                                            |
| Qsirsch                                                                                                                                 | Tak                                                            |
| Note: This feature is supported by all QNAP NAS devices with at least 2 GB of memory                                                    |                                                                |
| [Qsirsch] Previews                                                                                                                      | Photos, music, videos, PDFs, Gmail, and others                 |
| [Qsirsch] Integrate Mac Finder                                                                                                          | Tak                                                            |
| [Qsirsch] Advanced picture search                                                                                                       | Tak                                                            |
| [Qsirsch] Search filters                                                                                                                | Tak                                                            |
| QuMagie                                                                                                                                 | Tak                                                            |
| Note: At least 1 GB RAM is required.                                                                                                    |                                                                |
| [QuMagie] Browse photos                                                                                                                 | Tak                                                            |
| [QuMagie] Virtual and smart albums                                                                                                      | Tak                                                            |
| [QuMagie] AI-assisted photo management                                                                                                  | People, things, places, and others                             |
| Antivirus (free)                                                                                                                        | Tak                                                            |
| McAfee (License)                                                                                                                        | Tak                                                            |
| QVPN Service                                                                                                                            | Tak                                                            |
| Note: At least 1 GB RAM is required.                                                                                                    |                                                                |
| [QVPN Service] Remote Access                                                                                                            | PPTP, L2TP/IPSec, OpenVPN, WireGuard, QBelt (QNAP proprietary) |
| [QVPN Service] Supported utility and mobile app                                                                                         | Windows, macOS, iOS, and Android                               |
| [QVPN Service] Supported maximum clients                                                                                                | 100                                                            |
| LDAP Server                                                                                                                             | Tak                                                            |
| RADIUS                                                                                                                                  | Tak                                                            |
| SQL server                                                                                                                              | Tak                                                            |
| License Center                                                                                                                          | Tak                                                            |
| Multimedia Console                                                                                                                      | Tak                                                            |
| Photo Station                                                                                                                           | Tak                                                            |
| Music Station                                                                                                                           | Tak                                                            |
| Video Station                                                                                                                           | Tak                                                            |
| Download Station                                                                                                                        | Tak                                                            |
| Notes Station                                                                                                                           | Tak                                                            |
| Qfiling                                                                                                                                 | Tak                                                            |
| Media Streaming add-on                                                                                                                  | Tak                                                            |
| QmailAgent                                                                                                                              | Tak                                                            |
| QuWAN                                                                                                                                   | Tak                                                            |
| DA Driver Analyzer                                                                                                                      | Tak                                                            |
| Q'center                                                                                                                                | Tak                                                            |
| Note: The application is available in the App Center and in virtual appliance marketplaces (VMware vSphere ESXi and Microsoft Hyper-V). |                                                                |

|                                                                                                        |                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Q'center Server                                                                                        | Tak                                                                                                                                                                                                                                                                          |
| Q'center Agent                                                                                         | Tak                                                                                                                                                                                                                                                                          |
| Connect to Q'center                                                                                    | Tak                                                                                                                                                                                                                                                                          |
| Virtualization Station                                                                                 | Tak                                                                                                                                                                                                                                                                          |
| [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                                 | 12                                                                                                                                                                                                                                                                           |
|                                                                                                        | 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                                                                                      | Tak                                                                                                                                                                                                                                                                          |
| [Container Station] Supported type                                                                     | Note: At least 1 GB RAM is required. LXC/LXD and Docker                                                                                                                                                                                                                      |
| [Container Station] Docker Hub Registry                                                                | Note: LXD has been supported after Container Station 2.4                                                                                                                                                                                                                     |
| [Container Station] Container importing and exporting                                                  | Tak                                                                                                                                                                                                                                                                          |
| [Container Station] Console mode                                                                       | Tak                                                                                                                                                                                                                                                                          |
| Linux Station                                                                                          | Tak                                                                                                                                                                                                                                                                          |
| [Linux Station] Supports Ubuntu versions                                                               | Notification: At least 4 GB RAM is required. 18.04, and 20.04                                                                                                                                                                                                                |
| Linux Station Center                                                                                   | Tak                                                                                                                                                                                                                                                                          |
| QVR Pro                                                                                                | Tak                                                                                                                                                                                                                                                                          |
| [QVR Pro] Recording Technique                                                                          | 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 <a href="https://www.qnap.com/go/qvr-nas-selector">https://www.qnap.com/go/qvr-nas-selector</a> . |
| [QVR Pro] License Type                                                                                 | Index database based                                                                                                                                                                                                                                                         |
| [QVR Pro] User-defined trigger events                                                                  | Perpetual                                                                                                                                                                                                                                                                    |
| [QVR Pro] Metadata                                                                                     | Tak                                                                                                                                                                                                                                                                          |
| [QVR Pro] QVR Pro Client (Desktop)                                                                     | Tak                                                                                                                                                                                                                                                                          |
| [QVR Pro] QVR Pro Client (Mobile)                                                                      | Windows, macOS, and QNAP HybridDesk Station                                                                                                                                                                                                                                  |
| [QVR Pro] Recording camera streams                                                                     | Android and iOS                                                                                                                                                                                                                                                              |
| [QVR Pro] Free built-in camera channels                                                                | H.264                                                                                                                                                                                                                                                                        |
| QVR Elite                                                                                              | 8                                                                                                                                                                                                                                                                            |
|                                                                                                        | Tak                                                                                                                                                                                                                                                                          |
| [QVR Elite] Recording Technique                                                                        | 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 <a href="https://www.qnap.com/go/qvr-nas-selector">https://www.qnap.com/go/qvr-nas-selector</a> . |
| [QVR Elite] License Type                                                                               | Standard MP4 file based                                                                                                                                                                                                                                                      |
| [QVR Elite] User-defined trigger events                                                                | Subscription-based                                                                                                                                                                                                                                                           |
| [QVR Elite] QVR Pro Client (Desktop)                                                                   | Tak                                                                                                                                                                                                                                                                          |
| [QVR Elite] QVR Pro Client (Mobile)                                                                    | Windows, macOS, and QNAP HybridDesk Station                                                                                                                                                                                                                                  |
| [QVR Elite] Recording camera streams                                                                   | Android and iOS                                                                                                                                                                                                                                                              |
| [QVR Elite] Free built-in camera channels                                                              | H.264                                                                                                                                                                                                                                                                        |
| QVR Pro Client                                                                                         | 2                                                                                                                                                                                                                                                                            |
| [QVR Pro Client] Dynamic View Layout                                                                   | Tak                                                                                                                                                                                                                                                                          |
| [QVR Pro Client] Windows                                                                               | Tak                                                                                                                                                                                                                                                                          |
| [QVR Pro Client] Mac                                                                                   | Tak                                                                                                                                                                                                                                                                          |
| [QVR Pro Client] HybridDesktop                                                                         | Tak                                                                                                                                                                                                                                                                          |
| [QVR Pro Client] iOS                                                                                   | Tak                                                                                                                                                                                                                                                                          |
| [QVR Pro Client] Android                                                                               | Tak                                                                                                                                                                                                                                                                          |
| QVR Center                                                                                             | Tak                                                                                                                                                                                                                                                                          |

|                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [QVR Center] Log management                                     | Note: At least 4 GB RAM is required.                                                                                                                                                                                                                                                                                                                                                                                            |
| [QVR Center] Central monitoring across multiple servers         | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| QVR Guard                                                       | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [QVR Guard] Failover design                                     | Note: At least 4 GB RAM is required.                                                                                                                                                                                                                                                                                                                                                                                            |
| [QVR Guard] Viewing task details                                | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [QVR Guard] Automatic switch between Standby and Takeover modes | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| QVR Human                                                       | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| QVR Face                                                        | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| QVR DoorAccess                                                  | The maximum number of channels supported varies by NAS model, network configuration, and camera settings. For more information, visit <a href="https://www.qnap.com/solution/qvr-face/en-us/">https://www.qnap.com/solution/qvr-face/en-us/</a>                                                                                                                                                                                 |
| Operating System                                                | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Supported Client Operating Systems                              | QuTS hero h5.2.3                                                                                                                                                                                                                                                                                                                                                                                                                |
| Supported Browsers                                              | <ol style="list-style-type: none"> <li>1. Apple Mac OS 10.10 or later</li> <li>2. Ubuntu 14.04, CentOS 7, RHEL 6.6, SUSE 12 or later Linux</li> <li>3. IBM AIX 7, Solaris 10 or later UNIX</li> <li>4. Microsoft Windows 7, 8, 10, and 11</li> </ol>                                                                                                                                                                            |
| Supported Languages                                             | <ol style="list-style-type: none"> <li>1. Apple Safari (latest version)</li> <li>2. Google Chrome (latest version)</li> <li>3. Microsoft Edge (latest version)</li> <li>4. Mozilla Firefox (latest version)</li> </ol>                                                                                                                                                                                                          |
| Storage Pool                                                    | 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                                                                                                                                                                                         |
| SED Storage Pool                                                | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Maximum Pool size                                               | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Maximum number of storage pool                                  | 1024 TB                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Shared Folder Type                                              | 128                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Maximum shared folder size                                      | Thick, Thin                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Maximum number of shared folder                                 | 1024 TB                                                                                                                                                                                                                                                                                                                                                                                                                         |
| JBOD Expansion                                                  | 256                                                                                                                                                                                                                                                                                                                                                                                                                             |
| VJBOD / VJBOD Cloud                                             | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| iSCSI Service                                                   | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Fibre Channel Service                                           | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| LUN Type                                                        | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Block-based iSCSI LUN                                           | Thick, Thin                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Maximum LUN size                                                | Tak                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Maximum number of targets LUN                                   | 1024 TB                                                                                                                                                                                                                                                                                                                                                                                                                         |
| RAID Type                                                       | 256                                                                                                                                                                                                                                                                                                                                                                                                                             |
| RAID Group                                                      | <ol style="list-style-type: none"> <li>1. 8-bay (and more): Single, RAID 0 (Stripe), 1, 5, 6, 10, 50, 60, Triple Mirror, Triple Parity</li> <li>2. 6-bay: Single, RAID 0 (Stripe), 1, 5, 6, 10, 50, Triple Mirror, Triple Parity</li> <li>3. 4-bay: Single, RAID 0 (Stripe), 1, 5, 6, 10, Triple Mirror, Triple Parity</li> <li>4. 3-bay: Single, RAID 0 (Stripe), 1, 5, Triple Mirror, Triple Parity</li> </ol>                |
|                                                                 | 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 Expansion (by replacing bigger Disks)    | Tak                                                                                                                                                                                                                       |
| Storage Pool Expansion (by adding RAID Group) | Tak                                                                                                                                                                                                                       |
| RAID Hot Spare                                | Global, Local                                                                                                                                                                                                             |
| RAID Sync/Rebuild/Scrubbing                   | Tak                                                                                                                                                                                                                       |
| End-to-End data integrity                     | Tak                                                                                                                                                                                                                       |
| Silent error detection and self-healing       | Tak                                                                                                                                                                                                                       |
| Internal drive                                | ZFS                                                                                                                                                                                                                       |
| External drive                                | EXT3, EXT4, NTFS, FAT32, HFS+, and exFAT                                                                                                                                                                                  |
| Disk, Enclosure Locate                        | Tak                                                                                                                                                                                                                       |
| Disk S.M.A.R.T. Scan                          | Tak                                                                                                                                                                                                                       |
| Disk S.M.A.R.T. Data Migration                | Tak                                                                                                                                                                                                                       |
| Ironwolf Health Management                    | Tak                                                                                                                                                                                                                       |
| Secure Erase                                  | Tak                                                                                                                                                                                                                       |
| SSD Trim                                      | Tak                                                                                                                                                                                                                       |
| SSD Life Estimation                           | Tak                                                                                                                                                                                                                       |
| Disk Roaming                                  | Tak                                                                                                                                                                                                                       |
| Disk Standby                                  | Tak                                                                                                                                                                                                                       |
| Shared Folder Snapshot                        | Tak                                                                                                                                                                                                                       |
| LUN Snapshot                                  | Tak                                                                                                                                                                                                                       |
| Maximum Snapshot (Per System)                 | <a href="#">Check maximum number of snapshots of your NAS</a>                                                                                                                                                             |
| Maximum Snapshot (Per Volume / LUN)           | <a href="#">Check maximum number of snapshots of your NAS</a>                                                                                                                                                             |
| Minimum Snapshot Interval                     | 1 minute                                                                                                                                                                                                                  |
| Snapshot Retention Policy                     | Tak                                                                                                                                                                                                                       |
| Self-serve Snapshot Recovery                  | Tak                                                                                                                                                                                                                       |
| Application Consisted Snapshot                | Tak                                                                                                                                                                                                                       |
| Snapshot Full Clone                           | Tak                                                                                                                                                                                                                       |
| Snapshot Instant Clone                        | Tak                                                                                                                                                                                                                       |
| Snapshot Replica / Vault                      | Tak                                                                                                                                                                                                                       |
| SSD read-only Cache                           | Tak                                                                                                                                                                                                                       |
| SSD read & write log cache                    | Tak                                                                                                                                                                                                                       |
| SSD dedicated ZIL cache                       | Tak                                                                                                                                                                                                                       |
| SSD Cache Maximum Size                        | <a href="#">Check your QNAP NAS cache capacity and RAM requirements</a>                                                                                                                                                   |
| SSD Cache RAID                                | 0, 1, 10 (journal)                                                                                                                                                                                                        |
| External Device Management                    | Tak                                                                                                                                                                                                                       |
| Mount Smart Phone (MTP)                       | Tak                                                                                                                                                                                                                       |
| External RAID Device (QNAP so on)             | Tak                                                                                                                                                                                                                       |
| Management (External Device Mode)             |                                                                                                                                                                                                                           |
| External RAID Device (QNAP so on)             | Tak                                                                                                                                                                                                                       |
| Management (NAS Mode)                         |                                                                                                                                                                                                                           |
| File Server                                   | <ol style="list-style-type: none"> <li>1. File sharing across Windows, Mac, and Linux/UNIX</li> <li>2. Microsoft networking (CIFS/SMB)</li> <li>3. Apple networking (AFP)</li> <li>4. NFS version 3/4 services</li> </ol> |
| FTP Server                                    | <ol style="list-style-type: none"> <li>1. FTP, SFTP and TFTP protocols</li> <li>2. FTP over SSL/TLS (explicit FTPS)</li> <li>3. FXP support</li> </ol>                                                                    |
| Maximum FTP connection                        | 1024                                                                                                                                                                                                                      |
| Shared Folder Data Compression                | Tak                                                                                                                                                                                                                       |
| Shared Folder Data Deduplication              | Tak                                                                                                                                                                                                                       |
| Shared Folder WORM                            | Tak                                                                                                                                                                                                                       |
| File Station (Web)                            | Tak                                                                                                                                                                                                                       |
| Object Storage                                | Tak                                                                                                                                                                                                                       |
| Local user account                            | 16,000                                                                                                                                                                                                                    |
| Local group account                           | 512                                                                                                                                                                                                                       |
| Domain user/group account                     | 200,000                                                                                                                                                                                                                   |
| Domain Security                               | Tak                                                                                                                                                                                                                       |
| Domain Controller                             | Tak                                                                                                                                                                                                                       |
| Shared folder permission                      | Tak                                                                                                                                                                                                                       |
| Windows ACL                                   | Tak                                                                                                                                                                                                                       |
| User quota                                    | Tak                                                                                                                                                                                                                       |
| Group quota                                   | Tak                                                                                                                                                                                                                       |
| Folder quota                                  | Tak                                                                                                                                                                                                                       |
| Home folder                                   | Tak                                                                                                                                                                                                                       |
| Resource Monitor                              | Tak                                                                                                                                                                                                                       |
| SNMP                                          | V2, V3                                                                                                                                                                                                                    |
| Network recycle bin                           | <ol style="list-style-type: none"> <li>1. Recover files deleted using AFP, CIFS/SMB, and File</li> </ol>                                                                                                                  |

|                                                            |                                                  |
|------------------------------------------------------------|--------------------------------------------------|
|                                                            | Station                                          |
|                                                            | 2. Automatic cleanup and file type filter        |
| System Log & Notification Center                           | Log recording: 3,000 event per second            |
| Smart Fan                                                  | Tak                                              |
| Schedule on/off                                            | Tak                                              |
| Internet protocol                                          | IPv4, IPv6                                       |
| Virtual Switch                                             | Tak                                              |
| Port trunking                                              | Tak, (7 modes)                                   |
| VLAN                                                       | Tak                                              |
| DHCP Server                                                | Tak                                              |
| DDNS (Dynamic Domain Name Service)                         | Tak                                              |
| Network access protection with auto-blocking               | SSH, Telnet, HTTP(S), FTP, CIFS/SMB, and AFP     |
| Security Counselor                                         | Tak                                              |
| Malware Remover                                            | Tak                                              |
| AES 256-bit Folder Encryption validated by FIPS 140-2 CAVP | Tak                                              |
| 2-step verification                                        | Tak                                              |
| Allow/Deny List                                            | Tak                                              |
| Access Protection                                          | Tak                                              |
| Service binding                                            | Tak                                              |
| Firewall                                                   | Tak                                              |
| vSphere Web Client Plug-in                                 | Tak                                              |
| VMware vSphere VAAI for iSCSI                              | Tak                                              |
| VMware vSphere VAAI for NAS                                | Tak                                              |
| Windows ODX                                                | Tak                                              |
| Windows/VMware Snapshot Agent                              | Tak                                              |
| HTTP/HTTPS Connections                                     | TLS 1.0/1.1/1.2/1.3                              |
| Supports WebDAV Connection                                 | Tak                                              |
| Supports Virtual Hosts                                     | 32                                               |
| Qsync                                                      | Tak                                              |
|                                                            | 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                                                | Tak                                              |
|                                                            | Note: At least 1 GB RAM is required.             |
| [HybridMount] File Cloud Gateway                           | Concurrent Connections = 80 Upload & 80 Download |
| [HybridMount] Network Drive Mount                          | Tak                                              |
| [HybridMount] Free cloud gateway sessions                  | 2                                                |
| HBS (Hybrid Backup Sync)                                   | Tak                                              |
|                                                            | Note: At least 1 GB RAM is required.             |
| [HBS (Hybrid Backup Sync)] NAS to NAS backup               | Tak                                              |
| [HBS (Hybrid Backup Sync)] Cloud Backup                    | Tak                                              |
| [HBS (Hybrid Backup Sync)] Cloud Sync                      | Tak                                              |
| [HBS (Hybrid Backup Sync)] 2-way and Active Sync           | Tak                                              |
| [HBS (Hybrid Backup Sync)] Backup Deduplication            | Tak                                              |
| [HBS (Hybrid Backup Sync)] Apple Time Machine Backup       | Tak                                              |
| [HBS (Hybrid Backup Sync)] External drive backup           | Tak                                              |
| [HBS (Hybrid Backup Sync)] Maximum number of backup job    | 400                                              |
| Hyper Data Protector                                       | Tak                                              |
| Boxafe                                                     | Tak                                              |
|                                                            | Note: At least 4 GB RAM is required.             |
| [Boxafe] Office 365 Backup                                 | Tak                                              |
| [Boxafe] Google Workspace Backup                           | Tak                                              |
| [Boxafe] Full-text search                                  | Tak                                              |
| Qsirch                                                     | Tak                                              |

|                                                                                                                                                                         |                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| [Qsirch] Previews                                                                                                                                                       | Note: This feature is supported by all QNAP NAS devices with at least 2 GB of memory |
| [Qsirch] Integrate Mac Finder                                                                                                                                           | Photos, music, videos, PDFs, Gmail, and others                                       |
| [Qsirch] Advanced picture search                                                                                                                                        | Tak                                                                                  |
| [Qsirch] Search filters                                                                                                                                                 | Tak                                                                                  |
| QuMagie                                                                                                                                                                 | Tak                                                                                  |
| Note: At least 1 GB RAM is required.                                                                                                                                    |                                                                                      |
| [QuMagie] Browse photos                                                                                                                                                 | Tak                                                                                  |
| [QuMagie] Virtual and smart albums                                                                                                                                      | Tak                                                                                  |
| [QuMagie] AI-assisted photo management                                                                                                                                  | People, things, places, and others                                                   |
| Antivirus (free)                                                                                                                                                        | Tak                                                                                  |
| McAfee (License)                                                                                                                                                        | Tak                                                                                  |
| QVPN Service                                                                                                                                                            | Tak                                                                                  |
| Note: At least 1 GB RAM is required.                                                                                                                                    |                                                                                      |
| [QVPN Service] Remote Access                                                                                                                                            | PPTP, L2TP/IPSec, OpenVPN, QBelt (QNAP proprietary)                                  |
| [QVPN Service] Supported utility and mobile app                                                                                                                         | Windows, macOS, iOS, and Android                                                     |
| [QVPN Service] Supported maximum clients                                                                                                                                | 100                                                                                  |
| LDAP Server                                                                                                                                                             | Tak                                                                                  |
| RADIUS                                                                                                                                                                  | Tak                                                                                  |
| SQL server                                                                                                                                                              | Tak                                                                                  |
| License Center                                                                                                                                                          | Tak                                                                                  |
| Multimedia Console                                                                                                                                                      | Tak                                                                                  |
| Photo Station                                                                                                                                                           | Tak                                                                                  |
| Music Station                                                                                                                                                           | Tak                                                                                  |
| Video Station                                                                                                                                                           | Tak                                                                                  |
| Download Station                                                                                                                                                        | Tak                                                                                  |
| Notes Station                                                                                                                                                           | Tak                                                                                  |
| Qfiling                                                                                                                                                                 | Tak                                                                                  |
| Media Streaming add-on                                                                                                                                                  | Tak                                                                                  |
| QmailAgent                                                                                                                                                              | Tak                                                                                  |
| QuWAN                                                                                                                                                                   | Tak                                                                                  |
| DA Driver Analyzer                                                                                                                                                      | Tak                                                                                  |
| Q'center                                                                                                                                                                | Tak                                                                                  |
| Note: The application is available in the App Center and in virtual appliance marketplaces (VMware vSphere ESXi and Microsoft Hyper-V).                                 |                                                                                      |
| Q'center Server                                                                                                                                                         | Tak                                                                                  |
| Q'center Agent                                                                                                                                                          | Tak                                                                                  |
| Connect to Q'center                                                                                                                                                     | Tak                                                                                  |
| Virtualization Station                                                                                                                                                  | Tak                                                                                  |
| Note: At least 4 GB RAM is required.                                                                                                                                    |                                                                                      |
| [Virtualization Station] Supports Virtual machine instances                                                                                                             | 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                                                                                                                               | GPU function is fine                                                                 |
| [Virtualization Station] Suggested number of virtual machine instances                                                                                                  | 12                                                                                   |
| 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                                                                                                                                                       | Tak                                                                                  |
| Note: At least 1 GB RAM is required.                                                                                                                                    |                                                                                      |
| [Container Station] Supported type                                                                                                                                      | LXC/LXD and Docker                                                                   |
| Note: LXD has been supported after Container Station 2.4                                                                                                                |                                                                                      |
| [Container Station] Docker Hub Registry                                                                                                                                 | Tak                                                                                  |
| [Container Station] Container importing and exporting                                                                                                                   | Tak                                                                                  |
| [Container Station] Console mode                                                                                                                                        | Tak                                                                                  |

|                                                                                                                                    |                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Linux Station                                                                                                                      | Tak                                                                                                                                                                                                                                                                          |
| [Linux Station] Supports Ubuntu versions                                                                                           | Notification: At least 4 GB RAM is required.<br>16.04, 18.04, and 20.04                                                                                                                                                                                                      |
| Linux Station Center                                                                                                               | Tak                                                                                                                                                                                                                                                                          |
| QVR Elite                                                                                                                          | Tak                                                                                                                                                                                                                                                                          |
| [QVR Elite] Recording Technique                                                                                                    | 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 <a href="https://www.qnap.com/go/qvr-nas-selector">https://www.qnap.com/go/qvr-nas-selector</a> . |
| [QVR Elite] License Type                                                                                                           | Standard MP4 file based                                                                                                                                                                                                                                                      |
| [QVR Elite] User-defined trigger events                                                                                            | Subscription-based                                                                                                                                                                                                                                                           |
| [QVR Elite] QVR Pro Client (Desktop)                                                                                               | Tak                                                                                                                                                                                                                                                                          |
| [QVR Elite] QVR Pro Client (Mobile)                                                                                                | Windows, macOS, and QNAP HybridDesk Station                                                                                                                                                                                                                                  |
| [QVR Elite] Recording camera streams                                                                                               | Android and iOS                                                                                                                                                                                                                                                              |
| [QVR Elite] Free built-in camera channels                                                                                          | H.264                                                                                                                                                                                                                                                                        |
| [QVR Elite] Expandable camera channels                                                                                             | 2                                                                                                                                                                                                                                                                            |
| [QVR Pro Client] Live 4K H.265 (6M) channel Number @ 8 x 1080P H.264 recording channels (Use HybridDesktop Platform) (Expected)    | Developing                                                                                                                                                                                                                                                                   |
| [QVR Pro Client] Live 1080P H.264 (5M) channel Number @ 8 x 1080P H.264 recording channels (Use HybridDesktop Platform) (Expected) | N/A                                                                                                                                                                                                                                                                          |
| [QVR Pro Client] Live 720P (3M) H.264 channel Number @ 8 x 1080P H.264 recording channels (Use HybridDesktop Platform) (Expected)  | N/A                                                                                                                                                                                                                                                                          |
| QVR Center                                                                                                                         | Tak                                                                                                                                                                                                                                                                          |
| [QVR Center] Log management                                                                                                        | Note: At least 4 GB RAM is required.                                                                                                                                                                                                                                         |
| [QVR Center] Central monitoring across multiple servers                                                                            | Tak                                                                                                                                                                                                                                                                          |

## Zawartość opakowania

TS-h2490FU  
 Kabel Ethernet x 1  
 Przewód zasilający x 2  
 Śruba z łbem płaskim x 96 (dla dysku twardego 2,5 cala)  
 Skrócona instrukcja instalacji (QIG)