

QNAP TS-h2490FU-7302P-128G



Cena	102 186,95 zł
Dostępność	Na zamówienie
Numer katalogowy	QNA_TSH2490FU7302P128G
Kod producenta	TS-h2490FU-7302P-128G
Kod EAN	4713213518380
Producent	QNAP
Port 10 GbE	4
Pamięć RAM	128GB
Porty 1GbE RJ-45	2

Opis produktu



QNAP TS-h2490FU-7302P-128G

QNAP TS-h2490FU-7302P-128G 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 **QNAP TS-h2490FU-7302P-128G**:

- 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.
- Brama pamięci masowej w chmurze umożliwia 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-7302P-128G 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:



Produkt posiada dodatkowe opcje:

Gwarancja oraz wsparcie: Standard , EPA Care Pack (+ 909,85 zł)

Szyny: Bez szyn Rack , Szyny Rack 2U RAIL-B02 TVS-471U i pozostałe modele 2U (+ 387,26 zł)

Specyfikacja sprzętowa

Procesor	AMD EPYC™ 7302P 16-core/32-thread processor, up to 3.3 GHz	
	Architektura procesora	64-bitowy x86
	Mechanizm szyfrowania	Tak (AES-NI)
	Pamięć systemowa	128 GB RDIMM DDR4 ECC (8 x 16 GB)
	Maksymalna pojemność pamięci	4 TB (16 x 256 GB)
	Gniazdo pamięci	16 x Long-DIMM DDR4
	Pamięć flash	5 GB (ochrona systemu operacyjnego przed podwójnym rozbojem)
	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 https://www.qnap.com/compatibility
	Kompatybilność dysków	2,5-calowe dyski SSD U.2 NVMe Gen 3 x4
	Wymieniany podczas pracy	Tak
	Obsługa przyspieszenia pamięci podręcznej	Tak
	SSD	
	Port 2,5 Gigabit Ethernet (2,5G/1G/100M)	2 (także obsługa 10M)
	Port 25 Gigabit sieci Ethernet	4 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 niekorzystania z gniazda 3. *Gniazdo 5 zapewnia tryb PCIe Gen4 x16 w przypadku niekorzystania z gniazda 4.
Port USB 3.2 Gen 1		2
Kształt		Do montażu stelażowego
Wskaźniki LED		Dysk twardy, stan, 10 GbE, LAN, stan portów rozszerzeń pamięci
Przyciski		Zasilanie, reset
Wymiary (wys. x szer. x gł.)		88,3 × 480,97 × 510,23 mm
Waga (netto)		15,2 kg
Waga (brutto)		21,86 kg
Temperatura robocza		0 - 35°C (32°F - 95°F)
Temperatura dysków		-20 - 70°C (-4°F - 158°F)
Wilgotność względna		5-95% bez kondensacji, temperatura mokrego termometru
Zasilacz		1100 W PSU (x2), 200-240 V prądu przemiennego, Maks. moc w watach:
		1100 W przy 200-240 V prądu przemiennego
		850 W przy 100-240 V prądu przemiennego
Pobór mocy: Tryb pracy, typowy		277,64 W
		Testy wykonane przy całkowicie zapełnionych dyskach.
Wentylator		4 x 60 mm, 12 V prądu stałego
Ostrzeżenie systemowe		Brzęczyk
Max. Number of Concurrent Connections (CIFS) - with Max. Memory		10,000

Specyfikacja oprogramowania

Operating System	QTS 5.2.3
Supported Client Operating Systems	- Apple Mac OS 10.10 or later - Ubuntu 14.04, CentOS 7, RHEL 6.6, SUSE 12 or later Linux - IBM AIX 7, Solaris 10 or later UNIX - Microsoft Windows 7, 8, 10 and 11 - Microsoft Windows Server 2008 R2, 2012, 2012 R2, 2016, 2019 and 2022
Supported Browsers	- Apple Safari (latest version) - Google Chrome (latest version) - Microsoft Edge (latest version) - Mozilla Firefox (latest version)
Supported Languages	Chinese (Traditional & Simplified), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Romanian, Russian, Spanish, Swedish, Thai, and Turkish
Storage Pool	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
	Note: At least 4 GB RAM is required.
Maximum number of volume	128
Maximum shared folder size	250 TB
Maximum number of shared folder	512
JBOD Expansion	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.
LUN feature	128
	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)	
External RAID Device (QNAP so on)	Tak
Management (NAS Mode)	
File Server	1. File sharing across Windows, Mac, and Linux/UNIX 2. Microsoft networking (CIFS/SMB) 3. Apple networking (AFP) 4. NFS version 3/4 services
FTP Server	1. QuFTP 2. FTP, SFTP and TFTP protocols 3. FTP over SSL/TLS (explicit FTPS) 4. FXP support
Maximum FTP connection	1024
File Station (Web)	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	1. Recover files deleted using AFP, CIFS/SMB, and File Station 2. Automatic cleanup and file type filter
System Log & Notification Center	Log recording: 3,000 event per second
Smart Fan	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

Note: At least 1 GB RAM is required.

[HybridMount] File Cloud Gateway	Concurrent Connections = 20 Upload & 20 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
Note: This feature is supported by all QNAP NAS devices with at least 2 GB of memory	
[Qsirch] Previews	Photos, music, videos, PDFs, Gmail, and others
[Qsirch] Integrate Mac Finder	Tak
[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, 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	

Q'center Server	virtual appliance marketplaces (VMware vSphere ESXi and Microsoft Hyper-V).
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
Container Station	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. 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 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. 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 https://www.qnap.com/go/qvr-nas-selector .
[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
[QVR Elite] Recording Technique	Tak
[QVR Elite] License Type	Note: At least 1 GB RAM is required. The maximum number of channels supported varies by NAS model, network configuration, and camera settings. For more information, visit https://www.qnap.com/go/qvr-nas-selector .
[QVR Elite] User-defined trigger events	Standard MP4 file based
[QVR Elite] QVR Pro Client (Desktop)	Subscription-based
[QVR Elite] QVR Pro Client (Mobile)	Tak
[QVR Elite] Recording camera streams	Windows, macOS, and QNAP HybridDesk Station
[QVR Elite] Free built-in camera channels	Android and iOS
QVR Pro Client	H.264
[QVR Pro Client] Dynamic View Layout	2
[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. Tak
[QVR Center] Central monitoring across multiple servers	Tak
QVR Guard	Tak
[QVR Guard] Failover design	Note: At least 4 GB RAM is required. Tak
[QVR Guard] Viewing task details	Tak
[QVR Guard] Automatic switch between Standby and Takeover modes	Tak
QVR Human	Tak
QVR Face	Tak
QVR DoorAccess Operating System Supported Client Operating Systems	The maximum number of channels supported varies by NAS model, network configuration, and camera settings. For more information, visit https://www.qnap.com/solution/qvr-face/en-us/ Tak QuTS hero h5.2.3
Supported Browsers	1. Apple Mac OS 10.10 or later 2. Ubuntu 14.04, CentOS 7, RHEL 6.6, SUSE 12 or later Linux 3. IBM AIX 7, Solaris 10 or later UNIX 4. Microsoft Windows 7, 8, 10, and 11 1. Apple Safari (latest version) 2. Google Chrome (latest version) 3. Microsoft Edge (latest version) 4. Mozilla Firefox (latest version)
Supported Languages	Chinese (Traditional & Simplified), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Romanian, Russian, Spanish, Swedish, Thai, and Turkish
Storage Pool	Tak
SED Storage Pool	Tak
Maximum Pool size	1024 TB
Maximum number of storage pool	128
Shared Folder Type	Thick, Thin
Maximum shared folder size	1024 TB
Maximum number of shared folder	256
JBOD Expansion	Tak
VJBOD / VJBOD Cloud	Tak
iSCSI Service	Tak
Fibre Channel Service	Tak
LUN Type	Thick, Thin
Block-based iSCSI LUN	Tak
Maximum LUN size	1024 TB
Maximum number of targets LUN	256
RAID Type	1. 8-bay (and more): Single, RAID 0 (Stripe), 1, 5, 6, 10, 50, 60, Triple Mirror, Triple Parity 2. 6-bay: Single, RAID 0 (Stripe), 1, 5, 6, 10, 50, Triple Mirror, Triple Parity 3. 4-bay: Single, RAID 0 (Stripe), 1, 5, 6, 10, Triple Mirror, Triple Parity 4. 3-bay: Single, RAID 0 (Stripe), 1, 5, Triple Mirror, Triple Parity
RAID Group	To ensure data security, system stability, and storage performance, the maximum number of drives for a single RAID group is now 16 (applicable to RAID 5, RAID 6, RAID TP, and subgroups of RAID 50 and RAID 60). Nevertheless, users can combine multiple RAID groups into a large storage pool that

	contains more than 16 drives, using RAID 50, RAID 60, or RAID 10 as the RAID configuration. This enhancement will only be applied to new RAID groups. All existing RAID groups and storage systems will not be affected.
RAID 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)	Check maximum number of snapshots of your NAS
Maximum Snapshot (Per Volume / LUN)	Check maximum number of snapshots of your NAS
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	Check your QNAP NAS cache capacity and RAM requirements
SSD Cache RAID	0, 1, 10 (journal)
External Device Management	Tak
Mount Smart Phone (MTP)	Tak
External RAID Device (QNAP so on) Management (External Device Mode)	Tak
External RAID Device (QNAP so on) Management (NAS Mode)	Tak
File Server	1. File sharing across Windows, Mac, and Linux/UNIX 2. Microsoft networking (CIFS/SMB) 3. Apple networking (AFP) 4. NFS version 3/4 services
FTP Server	1. FTP, SFTP and TFTP protocols 2. FTP over SSL/TLS (explicit FTPS) 3. FXP support
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	1. Recover files deleted using AFP, CIFS/SMB, and File Station 2. Automatic cleanup and file type filter
System Log & Notification Center	Log recording: 3,000 event per second
Smart Fan	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
[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
[HybridMount] File Cloud Gateway	Note: At least 1 GB RAM is required.
[HybridMount] Network Drive Mount	Concurrent Connections = 80 Upload & 80 Download
[HybridMount] Free cloud gateway sessions	Tak
HBS (Hybrid Backup Sync)	2
[HBS (Hybrid Backup Sync)] NAS to NAS backup	Note: At least 1 GB RAM is required.
[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
[Boxafe] Office 365 Backup	Note: At least 4 GB RAM is required.
[Boxafe] Google Workspace Backup	Tak
[Boxafe] Full-text search	Tak

Qsirch	Tak
	Note: This feature is supported by all QNAP NAS devices with at least 2 GB of memory
[Qsirch] Previews	Photos, music, videos, PDFs, Gmail, and others
[Qsirch] Integrate Mac Finder	Tak
[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	Tak

exporting	
[Container Station] Console mode	Tak
Linux Station	Tak
Notification: At least 4 GB RAM is required.	
[Linux Station] Supports Ubuntu versions	16.04, 18.04, and 20.04
Linux Station Center	Tak
QVR Elite	Tak
Note: At least 1 GB RAM is required. The maximum number of channels supported varies by NAS model, network configuration, and camera settings. For more information, visit https://www.qnap.com/go/qvr-nas-selector .	
[QVR Elite] Recording Technique	Standard MP4 file based
[QVR Elite] License Type	Subscription-based
[QVR Elite] User-defined trigger events	Tak
[QVR Elite] QVR Pro Client (Desktop)	Windows, macOS, and QNAP HybridDesk Station
[QVR Elite] QVR Pro Client (Mobile)	Android and iOS
[QVR Elite] Recording camera streams	H.264
[QVR Elite] Free built-in camera channels	2
[QVR Elite] Expandable camera channels	Developing
[QVR Pro Client] Live 4K H.265 (6M) channel Number @ 8 x 1080P H.264 recording channels (Use HybridDesktop Platform) (Expected)	N/A
[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
Note: At least 4 GB RAM is required.	
[QVR Center] Log management	Tak
[QVR Center] Central monitoring across multiple servers	Tak