

TS-h3077AFU-R5-32G



Cena	24 670,95 zł
Dostępność	Oczekujemy
Numer katalogowy	QNA_TSH3077AFUR532G
Kod producenta	TS-h3077AFU-R5-32G
Kod EAN	4711103084687
Producent	QNAP
Port 10 GbE	2
Pamięć RAM	32GB
Port 2,5 GbE	2

Opis produktu



QNAP TS-h3077AFU-R5-32G

QNAP TS-h3077AFU-R5-32G Oparty na systemie ZFS, wysoce niezawodny serwer NAS typu all-flash z procesorem AMD Ryzen™ serii 7000 — usprawniający uniwersalną działalność biznesową dzięki **pamięci masowej w skali petabajtów i potencjałowi 100 GbE**. Model TS-h3077AFU jest wyposażony w procesory serii AMD Ryzen™ 7000. Pierwsza generacja procesorów na nowej platformie AMD Socket AM5 **zapewnia wyższą wydajność i energooszczędność** w porównaniu do procesorów podobnej klasy. Wbudowany w urządzenie TS-h3077AFU układ graficzny AMD Radeon™ zapewnia energooszczędną grafikę wysokiej jakości, umożliwiając **przetwarzanie filmów w wysokiej rozdzielczości, zdjęć i** jednoczesne wykonywanie wielu zadań. Urządzenie TS-h3077AFU jest wyposażone w trzy gniazda PCIe Gen 4, co zapewnia dodatkowe funkcje (takich jak łączność 100 GbE), aby sprostać **rosnącym obciążeniom i wymaganiom biznesowym**.

Cechy wyjątkowe dysku sieciowego **TS-h3077AFU**:

- **System operacyjny QuTS hero** maksymalizuje wydajność i żywotność dysków SSD dzięki technologiom takim jak wbudowana deduplikacja danych, QSAL (QNAP SSD Antiwear Leveling) i nie tylko.
- Możliwość zwiększenia do 100/25 GbE za pomocą karty sieciowej PCIe i **przyspieszenia wirtualizacji**, zapewnienia intensywnego dostępu do plików, transferu plików multimedialnych i intensywnych zadań tworzenia kopii zapasowych/przywracania danych.
- Model TS-h3077AFU będzie **dostępny i obsługiwany przez QNAP przez długi czas do roku 2030**.
- Obsługa wiodącej w branży pamięci DDR5 RAM. **Możliwość rozbudowy do 128 GB** w celu obsługi większej liczby zadań, obsługa pamięci ECC.
- Możliwość podłączenia do ośmiu 24-wnękowych obudów JBOD (TL-R2400PES-RP), co pozwala uzyskać pojemność pamięci masowej poziomu PB 192 dysków.
- **Energooszczędny układ graficzny AMD Radeon™** usprawnia edycję/transkodowanie wideo i jednoczesne wykonywanie wielu zadań.

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-h3077AFU dzięki wirtualizacji.

Dzięki ultraszybkiej pamięci DDR5, zoptymalizowanej pod kątem przetwarzania dużych ilości danych, TS-h3077AFU jest **idealny do wirtualizacji serwerów** i korzystania z infrastruktury wirtualnego pulpitu (VDI).



Obsługa standardu 100/25GbE.

Model TS-h3077AFU zapewnia Twojej organizacji przepustowość do obsługi najbardziej wymagających aplikacji, w tym centrów przechowywania, wirtualizacji, masowego transferu plików, **szybkiego tworzenia kopii zapasowych/odtworzenia i transmisji multimedialnych**. Wykorzystanie trunkingu portów (agregacja łączy) zapewnia redundancję sieci w celu poprawy odporności na awarie.

Innowacyjny system QTS hero.



Urządzenie TS-h3077AFU typu all-flash **zapewnia niskie opóźnienia i wysoką wydajność IOPS**. Oparty na systemie plików ZFS system operacyjny QuTS hero zapewnia integralność i niezawodność danych przy jednoczesnej obsłudze wielu rozwiązań do tworzenia kopii zapasowych.

Dowiedz się więcej na temat systemu QNAP QTShero:

Specyfikacja sprzętowa

Procesor	AMD Ryzen™ 5 7000 series 6-core/12-thread processor, burst up to 5.1 GHz
	AMD Radeon Graphics
	Architektura procesora
	Koprocesor arytmetyczny FPU
	Mechanizm szyfrowania
	Transkodowanie wspomagane sprzętowo
	Pamięć systemowa
	Maksymalna pojemność pamięci
	Gniazdo pamięci
	Pamięć flash
	Wnęka dysków
	Kompatybilność dysków
	Wymieniany podczas pracy
	Obsługa przyspieszenia pamięci podręcznej SSD
	GPU pass-through
	Port 2,5 Gigabit Ethernet (2,5G/1G/100M)
	Port 10 Gigabit sieci Ethernet
	Wake on LAN (WOL)
	Ramka Jumbo
	Gniazdo PCIe
	Port USB 3.2 Gen 2 (10 Gb/s)
	Kształt
	Wskaźniki LED
	Przyciski
	Wymiary (wys. x szer. x gł.)
	Waga (netto)
	Waga (brutto)
	Temperatura robocza
	Temperatura przechowywania
	Wilgotność względna
	Zasilacz
	64-bitowy x86
	Tak
	Tak (AES-NI)
	Tak
	32 GB UDIMM DDR5 (1x 32 GB)
	128 GB (4 x 32 GB)
	4 x UDIMM DDR5
	Support optional ECC memory
	5GB (ochrona systemu operacyjnego przed podwójnym roz
	30 x 2.5-inch SATA 6Gb/s, 3Gb/s
	2,5-calowe dyski SSD SATA
	Tak
	Tak
	3
	Slot 1: Gen 4 x 4
	Slot 2: Gen 4 x 8 or Gen 4 x 4*
	Slot 3: Gen4 x 4
	*Slot 2 provides the width of PCIe Gen4 x8 when Slot 1 is in use.
	Gen4 x4 when Slot 1 is in use.
	2 x Type-A USB 3.2 Gen 2 10Gbps
	2U, do montażu stelażowego
	Power Status, SSD 1-30, Status, LAN, storage expansion po
	Zasilanie, reset
	88,3 x 482 x 549,7 mm
	Nie uwzględnia ucha ani wystającej części jednostki zasilan
	12,73 kg
	18,69 kg
	0-40°C
	-20-70°C
	5-95% bez kondensacji, temperatura mokrego termometru
	550W(x2), 100-240V

Wentylator	Wentylator systemu: 3 x 60mm, 12VDC
Ostrzeżenie systemowe	Brzęczyk
Standardowa gwarancja	5
Maks. liczba połączeń współbieżnych (CIFS)	5000
— z maks. pojemnością pamięci	

Specyfikacja oprogramowania

Operating System	QTS 5.1.0
Supported Client Operating Systems	1. Apple Mac OS 10.10 or later 2. Ubuntu 14.04, CentOS 7, RHEL 6.6, SUSE 12 or later Linux 3. IBM AIX 7, Solaris 10 or later UNIX 4. Microsoft Windows 7, 8, 10 and 11
Supported Browsers	1. Apple Safari (latest version) 2. Google Chrome (latest version) 3. Microsoft Edge (latest version) 4. Mozilla Firefox (latest version)
Supported Languages	Chinese (Traditional & Simplified), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Romanian, Russian, Spanish, Swedish, Thai, and Turkish
Storage Pool	Ok
SED Storage Pool	Ok
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. 128
Maximum shared folder size	250 TB
Maximum number of shared folder	512
JBOD Expansion	Ok
VJBOD / VJBOD Cloud	Ok
iSCSI Service	Ok
Fibre Channel Service	Ok
LUN Type	Thick, Thin
File-based iSCSI LUN	Ok
Block-based iSCSI LUN	Ok
Maximum LUN size	250 TB
Maximum number of targets LUN	Note: At least 4 GB RAM is required. 128
LUN feature	1. LUN Mapping (LUN can be moved between iSCSI and FC) 2. LUN Masking 3. WWPN Aliases Import/Export 4. FC Port Group
Auto Tiering	Ok
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	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	Ok
RAID Expansion (by adding Disk)	Ok
RAID Expansion (by replacing bigger Disks)	Ok
Storage Pool Expansion (by adding RAID Group)	Ok
RAID Hot Spare	Global, Local
RAID Sync/Rebuild/Scrubbing	Ok
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	Ok
Disk S.M.A.R.T. Scan	Ok
Disk S.M.A.R.T. Data Migration	Ok
Ironwolf Health Management	Ok
Secure Erase	Ok
SSD Trim	Ok
SSD Life Estimation	Ok
Disk Roaming	Ok
Disk Standby	Ok
Volume Snapshot	Ok
LUN Snapshot	Ok
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	Ok
Self-serve Snapshot Recovery	Ok
Application Consisted Snapshot	Ok
Snapshot Full Clone	Ok
Snapshot Replica / Vault	Ok
SSD read-only Cache	Ok
SSD read-write cache	Ok
SSD write-only cache	Ok
SSD Cache Maximum Size	Check your QNAP NAS cache capacity and RAM requirements
SSD Cache RAID	0, 1, 5, 6, 10
SSD profiling tool	Ok
External Device Management	Ok
Mount Smart Phone (MTP)	Ok
External RAID Device (QNAP so on)	Ok
Management (External Device Mode)	Ok
External RAID Device (QNAP so on)	Ok
Management (NAS Mode)	Ok
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)	Ok
Object Storage	Ok
Local user account	4,096
Local group account	512
Domain user/group account	200,000
Domain Security	Ok
Domain Controller	Ok
Shared folder permission	Ok
Advanced folder permission	Ok, (AFP, CIFS/SMB, FTP, and File Station)
Windows ACL	Ok, (CIFS/SMB)
User quota	Ok
Group quota	Ok
Folder quota	Ok, (Snapshot shared folder)

Home folder	Ok
Resource Monitor	Ok
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	Ok
Schedule on/off	Ok
Internet protocol	IPv4, IPv6
Virtual Switch	Ok
Port trunking	Ok, (7 modes)
VLAN	Ok
DHCP Server	Ok
DDNS (Dynamic Domain Name Service)	Ok
Network access protection with auto-blocking	SSH, Telnet, HTTP(S), FTP, CIFS/SMB, and AFP
Security Counselor	Ok
Malware Remover	Ok
AES 256-bit Volume Encryption validated by FIPS 140-2 CAVP	Ok
2-step verification	Ok
Allow/Deny List	Ok
Access Protection	Ok
Service binding	Ok
Firewall	Ok
VMware vSphere Ready	Ok
Windows Server certificated	Ok
Citrix Ready	Ok
vSphere Web Client Plug-in	Ok
VMware vSphere VAAI for iSCSI	Ok
VMware vSphere VAAI for NAS	Ok
Windows ODX	Ok
Windows/VMware Snapshot Agent	Ok
HTTP/HTTPS Connections	TLS 1.0/1.1/1.2/1.3
Supports WebDAV Connection	Ok
Supports Virtual Hosts	32
Qsync	Ok
[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 = 20 Upload & 20 Download
[HybridMount] Free cloud gateway sessions	2
HBS (Hybrid Backup Sync)	Ok
[HBS (Hybrid Backup Sync)] NAS to NAS backup	Note: At least 1 GB RAM is required.
[HBS (Hybrid Backup Sync)] Cloud Backup	Ok
[HBS (Hybrid Backup Sync)] Cloud Sync	Ok
[HBS (Hybrid Backup Sync)] 2-way and Active Sync	Ok
[HBS (Hybrid Backup Sync)] Backup Deduplication	Ok
[HBS (Hybrid Backup Sync)] Apple Time Machine Backup	Ok
[HBS (Hybrid Backup Sync)] External drive backup	Ok
[HBS (Hybrid Backup Sync)] Maximum number of backup job	400
Hyper Data Protector	Ok
Boxafe	Ok

[Boxafe] Office 365 Backup	Ok	Note: At least 4 GB RAM is required.
[Boxafe] Google Workspace Backup	Ok	
[Boxafe] Full-text search	Ok	
Qsirch	Ok	
[Qsirch] Previews		Note: This feature is supported by all QNAP NAS devices with at least 2 GB of memory
[Qsirch] Integrate Mac Finder	Ok	Photos, music, videos, PDFs, Gmail, and others
[Qsirch] Advanced picture search	Ok	
[Qsirch] Search filters	Ok	
QuMagie	Ok	
[QuMagie] Browse photos	Ok	Note: At least 1 GB RAM is required.
[QuMagie] Virtual and smart albums	Ok	
[QuMagie] AI-assisted photo management	People, things, places, and others	
Antivirus (free)	Ok	
McAfee (License)	Ok	
QVPN Service	Ok	
[QVPN Service] Remote Access		Note: At least 1 GB RAM is required.
[QVPN Service] Supported utility and mobile app		PPTP, L2TP/IPSec, OpenVPN, WireGuard, QBelt (QNAP proprietary)
[QVPN Service] Supported maximum clients	100	Windows, macOS, iOS, and Android
LDAP Server	Ok	
RADIUS	Ok	
SQL server	Ok	
License Center	Ok	
Multimedia Console	Ok	
Photo Station	Ok	
Music Station	Ok	
Video Station	Ok	
Download Station	Ok	
Notes Station	Ok	
Qfiling	Ok	
Media Streaming add-on	Ok	
QmailAgent	Ok	
QuWAN	Ok	
DA Driver Analyzer	Ok	
Q'center	Ok	
Q'center Server	Ok	Note: The application is available in the App Center and in virtual appliance marketplaces (VMware vSphere ESXi and Microsoft Hyper-V).
Q'center Agent	Ok	
Connect to Q'center	Ok	
Virtualization Station	Ok	
[Virtualization Station] Supports Virtual machine instances		Note: At least 4 GB RAM is required.
[Virtualization Station] VM importing, exporting, cloning, snapshot capturing, backup, and restoration		Windows, Linux, Unix, and Android
[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	32	
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.
	Ok	
		Note: At least 1 GB RAM is required.

[Container Station] Supported type	LXC/LXD and Docker
[Container Station] Docker Hub Registry	Ok
[Container Station] Container importing and exporting	Ok
[Container Station] Console mode	Ok
Linux Station	Ok
[Linux Station] Supports Ubuntu versions	Notification: At least 4 GB RAM is required. 18.04, and 20.04
Linux Station Center	Ok
QVR Pro	Ok
[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	Ok
[QVR Pro] QVR Pro Client (Desktop)	Ok
[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
	Ok
[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 https://www.qnap.com/go/qvr-nas-selector .
[QVR Elite] License Type	Standard MP4 file based
[QVR Elite] User-defined trigger events	Subscription-based
[QVR Elite] QVR Pro Client (Desktop)	Ok
[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	
[QVR Pro Client] Windows	
[QVR Pro Client] Mac	
[QVR Pro Client] HybridDesktop	
[QVR Pro Client] iOS	
[QVR Pro Client] Android	
QVR Center	
[QVR Center] Log management	Note: At least 4 GB RAM is required.
[QVR Center] Central monitoring across multiple servers	
QVR Guard	
[QVR Guard] Failover design	Note: At least 4 GB RAM is required.
[QVR Guard] Viewing task details	
[QVR Guard] Automatic switch between Standby and Takeover modes	
QVR Human	
QVR Face	
QVR DoorAccess	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/
Operating System	QuTS hero h5.1.0

Supported Client Operating Systems	1. Apple Mac OS 10.10 or later 2. Ubuntu 14.04, CentOS 7, RHEL 6.6, SUSE 12 or later Linux 3. IBM AIX 7, Solaris 10 or later UNIX 4. Microsoft Windows 7, 8, 10, and 11
Supported Browsers	Show more... 1. Apple Safari (latest version) 2. Google Chrome (latest version) 3. Microsoft Edge (latest version) 4. Mozilla Firefox (latest version)
Supported Languages	Chinese (Traditional & Simplified), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Romanian, Russian, Spanish, Swedish, Thai, and Turkish
Storage Pool	
SED Storage Pool	
Maximum Pool size	5 PB
Maximum number of storage pool	128
Shared Folder Type	Thick, Thin
Maximum shared folder size	5 PB
Maximum number of shared folder	128
JBOD Expansion	
VJBOD / VJBOD Cloud	
iSCSI Service	
Fibre Channel Service	
LUN Type	Thick, Thin
Block-based iSCSI LUN	
Maximum LUN size	1024 TB
Maximum number of targets LUN	128
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	Show more... 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)	
Storage Pool Expansion (by adding RAID Group)	
RAID Hot Spare	Global, Local
RAID Sync/Rebuild/Scrubbing	
End-to-End data integrity	
Silent error detection and self-healing	
Internal drive	ZFS
External drive	EXT3, EXT4, NTFS, FAT32, HFS+, and exFAT
Disk, Enclosure Locate	
Disk S.M.A.R.T. Scan	
Disk S.M.A.R.T. Data Migration	
Ironwolf Health Management	
Secure Erase	
SSD Trim	

SSD Life Estimation	
Disk Roaming	
Disk Standby	
Shared Folder Snapshot	
LUN Snapshot	
Maximum Snapshot (Per System)	Check maximum number of snapshots of your NAS
Maximum Snapshot (Per Volume / LUN)	Check maximum number of snapshots of your NAS
Minimum Snapshot Interval	1 minute
Snapshot Retention Policy	
Self-serve Snapshot Recovery	
Application Consisted Snapshot	
Snapshot Full Clone	
Snapshot Instant Clone	
Snapshot Replica / Vault	
SSD read-only Cache	
SSD read & write log cache	
SSD dedicated ZIL cache	
SSD Cache Maximum Size	Check your QNAP NAS cache capacity and RAM requirements
SSD Cache RAID	0, 1, 10 (journal)
External Device Management	
Mount Smart Phone (MTP)	
External RAID Device (QNAP so on)	
Management (External Device Mode)	
External RAID Device (QNAP so on)	
Management (NAS Mode)	
File Server	1. File sharing across Windows, Mac, and Linux/UNIX 2. Microsoft networking (CIFS/SMB) 3. Apple networking (AFP) 4. NFS version 3/4 services
FTP Server	1. FTP, SFTP and TFTP protocols 2. FTP over SSL/TLS (explicit FTPS) 3. FXP support
Maximum FTP connection	1024
Shared Folder Data Compression	
Shared Folder Data Deduplication	
Shared Folder WORM	
File Station (Web)	
Object Storage	
Local user account	16,000
Local group account	512
Domain user/group account	200,000
Domain Security	
Domain Controller	
Shared folder permission	
Windows ACL	
User quota	
Group quota	
Folder quota	
Home folder	
Resource Monitor	
SNMP	V2, V3
Network recycle bin	1. Recover files deleted using AFP, CIFS/SMB, and File Station 2. Automatic cleanup and file type filter
System Log & Notification Center	Log recording: 3,000 event per second
Smart Fan	
Schedule on/off	
Internet protocol	IPv4, IPv6
Virtual Switch	
Port trunking	, (7 modes)
VLAN	
DHCP Server	
DDNS (Dynamic Domain Name Service)	
Network access protection with auto-blocking	SSH, Telnet, HTTP(S), FTP, CIFS/SMB, and AFP
Security Counselor	
Malware Remover	
AES 256-bit Folder Encryption validated	

by FIPS 140-2 CAVP	
2-step verification	
Allow/Deny List	
Access Protection	
Service binding	
Firewall	
VMware vSphere Ready	
Windows Server certificated	
Citrix Ready	
vSphere Web Client Plug-in	
VMware vSphere VAAI for iSCSI	
VMware vSphere VAAI for NAS	
Windows ODX	
Windows/VMware Snapshot Agent	
HTTP/HTTPS Connections	TLS 1.0/1.1/1.2/1.3
Supports WebDAV Connection	
Supports Virtual Hosts	32
Qsync	
	Note: At least 1 GB RAM is required.
[Qsync] Management Mode	User customization, Central
[Qsync] Qsync client supported platforms	Windows, macOS, Ubuntu, Android, and iOS
[Qsync] Maximum number of version control	64
HybridMount	
	Note: At least 1 GB RAM is required.
[HybridMount] File Cloud Gateway	Concurrent Connections = 80 Upload & 80 Download
[HybridMount] Network Drive Mount	
[HybridMount] Free cloud gateway sessions	2
HBS (Hybrid Backup Sync)	
	Note: At least 1 GB RAM is required.
[HBS (Hybrid Backup Sync)] NAS to NAS backup	
[HBS (Hybrid Backup Sync)] Cloud Backup	
[HBS (Hybrid Backup Sync)] Cloud Sync	
[HBS (Hybrid Backup Sync)] 2-way and Active Sync	
[HBS (Hybrid Backup Sync)] Backup Deduplication	
[HBS (Hybrid Backup Sync)] Apple Time Machine Backup	
[HBS (Hybrid Backup Sync)] External drive backup	
[HBS (Hybrid Backup Sync)] Maximum number of backup job	400
Hyper Data Protector	
Boxafe	
	Note: At least 4 GB RAM is required.
[Boxafe] Office 365 Backup	
[Boxafe] Google Workspace Backup	
[Boxafe] Full-text search	
Qsirch	
	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	
[Qsirch] Advanced picture search	
[Qsirch] Search filters	
QuMagie	
	Note: At least 1 GB RAM is required.
[QuMagie] Browse photos	
[QuMagie] Virtual and smart albums	

[QuMagie] AI-assisted photo management Antivirus (free) McAfee (License) QVPN Service	People, things, places, and others
[QVPN Service] Remote Access [QVPN Service] Supported utility and mobile app [QVPN Service] Supported maximum clients	Note: At least 1 GB RAM is required. PPTP, L2TP/IPSec, OpenVPN, QBelt (QNAP proprietary) Windows, macOS, iOS, and Android 100
LDAP Server RADIUS SQL server License Center Multimedia Console Photo Station Music Station Video Station Download Station Notes Station Qfiling Media Streaming add-on QmailAgent QuWAN DA Driver Analyzer Q'center	
Q'center Server Q'center Agent Connect to Q'center Virtualization Station	Note: The application is available in the App Center and in virtual appliance marketplaces (VMware vSphere ESXi and Microsoft Hyper-V).
[Virtualization Station] Supports Virtual machine instances [Virtualization Station] VM importing, exporting, cloning, snapshot capturing, backup, and restoration [Virtualization Station] Virtual switches [Virtualization Station] GPU pass-through [Virtualization Station] Suggested number of virtual machine instances	Note: At least 4 GB RAM is required. Windows, Linux, Unix, and Android All function is Fine. Can create a virtual switch GPU function is fine 32
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.
[Container Station] Supported type	Note: At least 1 GB RAM is required. LXC/LXD and Docker
[Container Station] Docker Hub Registry [Container Station] Container importing and exporting [Container Station] Console mode Linux Station	Note: LXD has been supported after Container Station 2.4
[Linux Station] Supports Ubuntu versions Linux Station Center QVR Elite	Notification: At least 4 GB RAM is required. 16.04, 18.04, and 20.04
	Note: At least 1 GB RAM is required. The maximum number of channels supported varies by NAS model, network

	configuration, and camera settings. For more information, visit https://www.qnap.com/go/qvr-nas-selector .
[QVR Elite] Recording Technique	Standard MP4 file based
[QVR Elite] License Type	Subscription-based
[QVR Elite] User-defined trigger events	
[QVR Elite] QVR Pro Client (Desktop)	Windows, macOS, and QNAP HybridDesk Station
[QVR Elite] QVR Pro Client (Mobile)	Android and iOS
[QVR Elite] Recording camera streams	H.264
[QVR Elite] Free built-in camera channels	2
[QVR Elite] Expandable camera channels	Developing
QVR Center	

Note: At least 4 GB RAM is required.

[QVR Center] Log management
[QVR Center] Central monitoring across multiple servers

Zawartość opakowania

TS-h3077AFU
Kabel Ethernet 10Gbase-T x 1
Przewód zasilający x 2
Śruba z łbem płaskim x 144 (dla dysku twardego 2,5 cala)
Skrócona instrukcja instalacji (QIG)