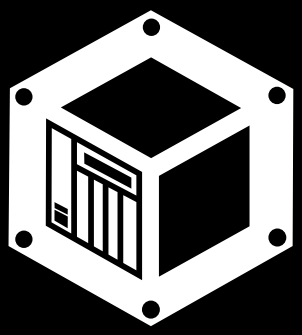
QNAP



PRODUCT SELECTION GUIDE

The comprehensive storage solution

QNAP Product Lineup

Thunderbolt NAS

TVS-1282T

TVS-882T

TVS-682T

TVS-1582TU

TVS-882BRT3

TVS-882ST3

TS-453BT3

SMB

TS-1685

TS-1677X

TS-1635AX

TVS-1282

TVS-882

TVS-682

TVS-882BR

TS-1277

TS-877

TS-677

TVS-951X

TS-963X

TS-932X

TS-832X

TS-431X2

TS-431X

TS-332X

TVS-873e

TVS-673e

TVS-473e

TS-873

TS-673

TS-473

TS-653B

TS-453B

TS-253B

TS-453Be

TS-253Be

TS-453Bmini

TS-351

Workgroup/ SOHO/ Home

TS-251B

TS-328

TS-431P2

TS-231P2

Home

TS-431P

TS-231P

TS-131P

TS-228A

TS-128A

Expansion Units

TX-800P

TX-500P

REXP-1000 Pro

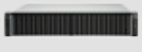
Primary Storage NAS | Dual Controller

ES1640dc v2

Dual Processor NAS | Single Controller

TDS-16489U

Enterprise


TES-3085U

TES-1885U

TVS-EC2480U-SAS-RP R2

TVS-EC1680U-SAS-RP R2

TVS-EC1580MU-SAS-RP R2

TVS-EC1280U-SAS-RP R2

TS-EC2480U R2

TS-EC1680U R2

TS-EC1280U R2

TS-EC880U R2

SMB

TS-1677XU-RP

TS-1277XU-RP

TS-877XU-RP

TS-877XU

TS-1673U / TS-1673U-RP

TS-1273U / TS-1273U-RP

TS-873U / TS-873U-RP

TS-1263XU / TS-1263XU-RP

TS-863XU / TS-863XU-RP

TS-463XU / TS-463XU -RP

TS-1253BU / TS-1253BU-RP

TS-853BU / TS-853BU-RP

TS-453BU / TS-453BU-RP

TS-1232XU / TS-1232XU-RP

TS-832XU / TS-832XU-RP

TS-432XU / TS-432XU-RP

Workgroup/ SOHO/Home

TS-431XeU

Expansion Units

UX-800U-RP

UX-1200U-RP

REXP-1220U-RP

REXP-1620U-RP

EJ1600 v2

REXP-1210U-RP

REXP-1610U-RP

ENTERPRISE

High-performance, unified and tiered storage solutions that offer ideal capacity for big data, 10GbE compatibility for next-generation networks, and a range of virtualization solutions to empower large-scale enterprises.

Utilize efficiency with unified tiered storage

QNAP's SAS-enabled Turbo NAS models feature class-leading hardware specifications, and allow tiered storage architecture to optimize storage utilization. You can flexibly arrange the storage system with SAS HDDs/SSDs for performance-intensive applications and SATA HDDs for bulk data storage. Configuring different tiers to hard drives on a single NAS according to different data usage delivers the best unified tiered storage solutions for businesses.

Optimize resources with maximized IT performance

QNAP provides powerful, reliable and scalable NAS solutions to fulfill data backup, cross-platform file sharing, virtualization applications, and more. SSD caching improves I/O performance and workflows of IOPS-demanding applications such as virtualization. With the IT Management Station, IT managers can easily manage multi-OS & multi-site IT assets, resources and applications.

Ensure uninterrupted business operations

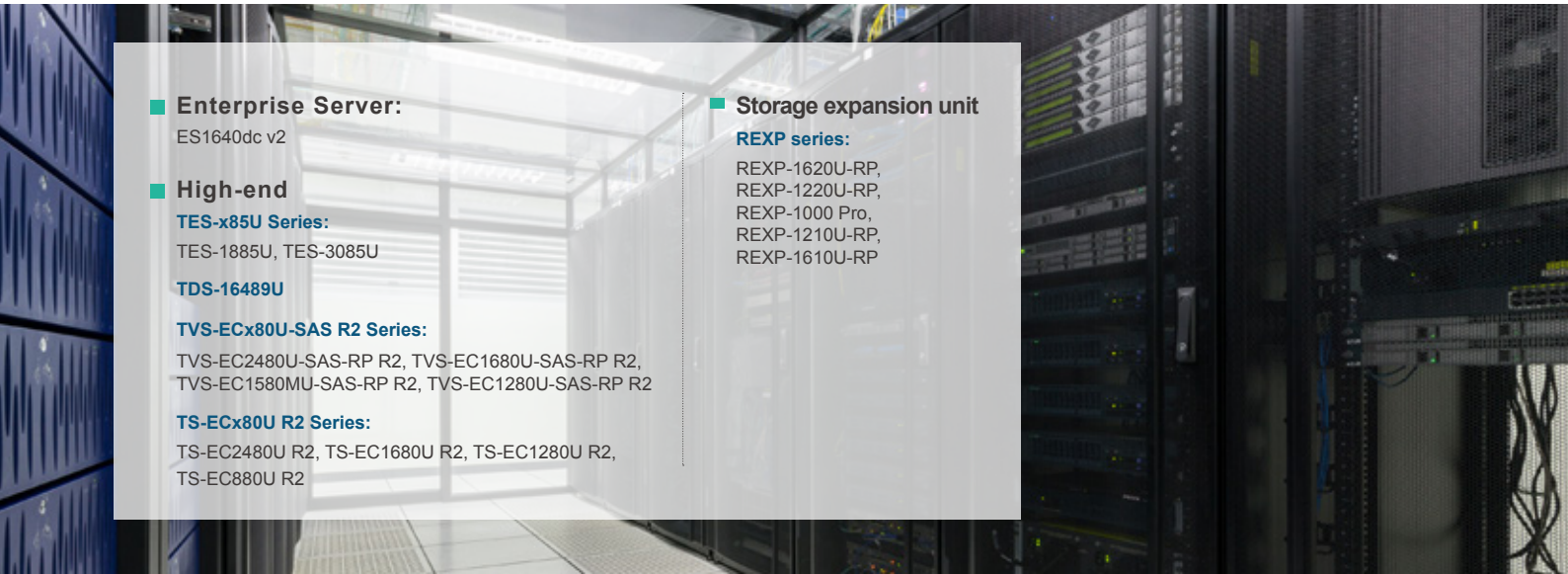
QNAP's enterprise storage supports 10GbE/40GbE network, VMware®, Citrix® and Microsoft® virtualization solutions, flexible storage expansion, and high-level data protection features such as AES-256 volume-based encryption and access encryption.

Virtual JBOD

VJBOD (Virtual JBOD) is a capacity expansion technology that allows surplus storage resources of a QNAP NAS to be used to expand the storage space of another QNAP NAS, enabling you not only to create virtual storage pools and volumes on your local NAS, but also to achieve the highest storage utilization of the multiple QNAP NAS in your environment.

Scale-up solution

QNAP expansion enclosures feature highly efficient and scalable solutions for expanding the total capacity of a NAS. Businesses can optimize their investment by purchasing the storage capacity needed at initial setup and expand its storage as needed to fit future requirements.



Enterprise Server:
ES1640dc v2

High-end

TES-x85U Series:
TES-1885U, TES-3085U

TDS-16489U

TVS-ECx80U-SAS R2 Series:
TVS-EC2480U-SAS-RP R2, TVS-EC1680U-SAS-RP R2, TVS-EC1580MU-SAS-RP R2, TVS-EC1280U-SAS-RP R2

TS-ECx80U R2 Series:
TS-EC2480U R2, TS-EC1680U R2, TS-EC1280U R2, TS-EC880U R2

Storage expansion unit

REXP series:
REXP-1620U-RP, REXP-1220U-RP, REXP-1000 Pro, REXP-1210U-RP, REXP-1610U-RP

SMB

Increase business efficiency with simplified management, cross-platform file share, comprehensive backup solutions, centralized account management, and RAID protection.

Encourage collaboration

A successful business relies heavily on smooth information sharing and effective knowledge management. The Turbo NAS is designed for high performance cross-platform file sharing and to achieve efficient client-to-client and device-to-device file sharing. Supporting SMB/CIFS, AFP, and NFS, the NAS enables seamless file sharing between computers with different operating systems without the worry of compatibility issues arising.

Secure business data and simplify account management

With RAID protection and a range of security settings, the NAS offers a secure location to store mission-critical business data. The NAS supports folder access controls, user home folders, Windows ACL, Windows AD and LDAP directory services for centralized account management and authentication for network access.

Backup and retrieve data on demand

The NAS comes with a large storage capacity and excellent transfer speeds that make it ideal as an inclusive backup center. The data stored on the NAS can be backed up to external storage devices, remote servers, and various third-party cloud backup services for extra data protection.

Flexibly expand storage

Seamlessly expand the total storage space of your Turbo NAS on demand with QNAP expansion enclosures, or alternatively use the expansion enclosure as a budget-friendly external storage to backup the entire connected NAS.

High-end

TVS-x82 Series:
TVS-682 , TVS-882 , TVS-1282

Thunderbolt 3 NAS:
TVS-1282T3, TVS-882ST3, TVS-882BRT3, TVS-1582TU, TS-453BT3

Thunderbolt 2 NAS:
TVS-682T, TVS-882T

TS-x77 Series:
TS-1277, TS-877, TS-677

TS-x77XU Series:
TS-1677XU-RP, TS-1277XU-RP, TS-877XU-RP, TS-877XU

TS-x73U Series:
TS-1673U, TS-1673U-RP, TS-1273U, TS-1273U-RP, TS-873U, TS-873U-RP

TVS-x73e Series:
TVS-873e, TVS-673e, TVS-473e

TS-1685
TS-1677X
TS-1635AX
TVS-882BR
TVS-951X
TS-963X
TS-932X
TS-832X
TS-332X

Middle-end

TS-x53BU Series:
TS-453BU, TS-453BU-RP, TS-853BU, TS-853BU-RP
TS-1253BU, TS-1253BU-RP

TS-x32XU Series:
TS-1232XU, TS-1232XU-RP,
TS-832XU, TS-832XU-RP,
TS-432XU, TS-432XU-RP

TS-351

TS-x53B Series:
TS-653B, TS-453B, TS-253B

TS-453Bmini

TS-x73 Series:
TS-873, TS-673, TS-473

TBS-453A

Storage expansion unit

UX Series:
UX-1200U-RP, UX-800U-RP

TX Series (Thunderbolt 2 Expansion unit):
TX-800P, TX-500P

HOME & SOHO

QNAP NAS acts as a complete home backup and multimedia solution for home/SOHO users. Users can experience effortless file backup, synchronization, management, file-share, multimedia-transcoding capabilities, and mobile access.

Easily sync and manage files

In the modern digital home, families have tons of photos, videos, and music files stored on different devices. The QNAP offers a collective space for every member of the family to store files and allows convenient file access and synchronization across multiple computing devices. With QNAP's QTS operating system, you will quickly discover how easy it is to use the NAS and the multi-window design.

Transcode Full HD videos on-the-fly or offline

With the popularity of high-definition smartphones and cameras, video resolutions are increasing concurrently. Because the higher resolution file is larger in file size, it eventually requires more bandwidth to stream. QNAP's unique transcoding technology transcode videos with optimal resolutions for sharing and watching in order to save bandwidth whilst retaining the unaltered original video on the QNAP NAS – allowing for the best viewing experience on any device.

Maximized multimedia entertainment at home

The QNAP NAS offers rich multimedia applications and can be used as a home multimedia hub. You can browse photos or play music and videos via DLNA, AirPlay, and Chromecast compatible devices. You can also enjoy your video collection on a HDTV with HD Station via HDMI. With a QNAP NAS in your living room, it's never been easier to build a personal home theater.

Access and share files through your mobile device

Carry terabytes of photos, music, videos and documents on the go! Easily manage, access, and share files stored on your NAS with the iOS and Android mobile apps including: Qfile, Qmusic and Qvideo while conveniently managing your download tasks with Qget.

Middle-end
Work Group / SOHO / Home

TS-431XeU

TS-x31P Series:
TS-431P, TS-231P, TS-131P

TS-x53Be Series:
TS-453Be, TS-253Be

TS-x31X Series:
TS-431X, TS-431X2

TS-x31P2 Series:
TS-431P2, TS-231P2

Entry-level SOHO / Home

TS-x28A Series:
TS-228A, TS-128A

TS-328
TS-251B

	ES1640dc Series
Model	ES1640dc v2
CPU	Intel Xeon E5-2400 v2 family processor Intel Xeon 6-core Processor E5-2420 v2 (15M Cache, 2.20GHz)
Memory	DDR3 ECC RDIMM 32GB/64GB Main Memory + 16GB write cache PER CONTROLLER
Drive Bay *	16 x 3.5" / 2.5" HDD / SSD
HDD Interface	SAS 12Gbps/6Gbps hard drive, or 2.5" SAS SSD
SSD for C2F	M.2 2280 SSD dedicated to NVRAM, SATA signaling
HDD Hot Swappable	✓
10 GbE LAN Port	4 x SFP+ (Intel XL710-AM1) and 2 x RJ45 (LAN-10G2T-X550) for each controller
PCI-E Slot	PCIe Slot x8 (Gen3 x8): Pre-installed with a LAN-10G2T-X550 NIC (2 x 10GbE RJ45 ports), replacable with a 40GbE NIC PCIe Slot x4 (Gen2 x4): Pre-installed with a dual-port Mini-SAS adapter
Thunderbolt™	---
USB 3.1	---
USB 3.0 / USB 2.0	2 / 0
ODD Expansion Slot	---
HDMI	---
Dimentions (HxDxW) mm	132 x 618 x 446.2
Weight (kg)	26.75
Fan	Hot-swappable fan module (60 x 60 x 38mm; 16000RPM/12v / 2.8A x 3)
Power Supply	770 W (Redundancy for fault tolerance)
Max.# of User Accounts	4096
Max.# of User Groups	512
Max.# of Shared Folders	1024
Max.# of Concurrent Connections (CIFS)	3000
Max.# of IP Cameras (Supported QVR Pro)	Default 8 / Max 128 (based on IP CAM setting)
QNAP Expansion Enclosure	7 x EJ1600 v2

TDS-16489U	
TDS-16489U-SA1 (E5-2620 2.4GHz hexa-core CPU, 64GB DDR4 RDIMM)	TDS-16489U-SA2 (E5-2620 2.4GHz hexa-core CPU, 128GB DDR4 RDIMM)
TDS-16489U-SB2 (E5-2630 2.4GHz octa-core CPU, 128GB DDR4 RDIMM)	TDS-16489U-SB3 (E5-2630 2.4GHz octa-core CPU, 256GB DDR4 RDIMM)

Intel® Xeon® E5-2600 v3 Family processor Intel® Xeon® 4-core Processor E5-2623 v3 (10M Cache, 3.00 GHz, 4-core)* Intel® Xeon® 6-core Processor E5-2620 v3 (15M Cache, 2.40 GHz) Intel® Xeon® 8-core Processor E5-2630 v3 (20M Cache, 2.40 GHz) Intel® Xeon® 8-core Processor E5-2640 v3 (20M Cache, 2.60 GHz)* *Available with customization requirement
System memory: RDIMM / LRDIMM Total memory slots: 16 Memory expandable up to: 1 TB (64 GB x 16)
16 x 3.5" SAS (12Gbps/6Gbps) / SATA (6Gbps/3Gbps) HDDs, or 2.5" SAS/SATA SSD 4 x 2.5" SAS (12Gbps) SSD or SAS/SATA (6Gbps/3Gbps) SSD
SAS 12Gb/s backward-compatible to SAS / SATA 6Gb/s

✓
4 x SFP+, Intel XL710
4 (3 x PCIe Gen3 x 8, 1 x PCIe Gen3 x 16)

Option: PCIe USB 3.1 Expansion Card (P/N: USB-U31A2P01)
4 / 0

130.8 x 444 x 744
22.42
4 (6cm)
650W (Redundant power)
4096
512
512
1500
Default 8 / Max 128 (based on IP CAM setting)
8 x REXP-1620U-RP / REXP-1610U-RP / REXP-1600U-RP / REXP-1220U / REXP-1210U-RP / RXP-1200U-RP

	TES-x85U Series	
Model	TES-1885U	TES-3085U
CPU	TES-1885U-D1521-8GR: Intel® Xeon® Processor D-1521, 4-core 2.4 GHz TES-1885U-D1531-16GR: Intel® Xeon® Processor D-1531, 6-core 2.2 GHz	TES-3085U-D1531-16GR: Intel® Xeon® Processor D-1531, 6-core 2.2 GHz TES-30885U-D1548-32GR: Intel® Xeon® Processor D-1548, 8-core 2.0 GHz
Memory	Total DIMM slots: 4 Maximum memory: DDR4 128GB (32GB RDIMM x 4) Memory pre-installed: TES-1885U-D1521-8GR: 8GB ECC RAM (8 GB RDIMM x 1) TES-1885U-D1531-16GR: 16 GB ECC RAM (8GB RDIMM x 2)	Total DIMM slots: 4 Maximum memory: DDR4 128GB (32GB RDIMM x 4) Memory pre-installed : TES-3085U-D1531-16GR: 16 GB ECC RAM (8 GB RDIMM x 2) TES-3085U-D1548-32GR: 32 GB ECC RAM (8GB RDIMM x 4)
Drive Bay *	Front: 2.5" / 3.5" x 12 Rear: 2.5" SSD drive bay x 6	Front: 2.5" x 24 Rear: 2.5" SSD drive bay x 6
HDD Interface	Front: SAS 12Gb/s, SAS 6Gb/s, SATA 6Gb/s hard drives and SSD Rear: SATA 6Gb/s SSD	
M.2 SSD	---	
HDD Hot Swappable	✓	
10 GbE LAN Port	2 x SFP+ 10GbE ports	
Gigabit LAN	4	
PCI-E Slot	4	
Thunderbolt™	---	
USB 3.1	Option: PCIe USB 3.1 Expansion Card (P/N: USB-U31A2P01)	
USB 3.0 / USB 2.0	2 / 0	
ODD Expansion Slot	---	
HDMI	---	
Dimensions (HxWxD) mm	88 x 442.5 x 530.5	88.3 x 439 x 484.5
Weight (kg)	15.34	14.15
Fan	4 (6 cm)	
Power Supply	2 x 450W, 90-264V	
Max. # of User Accounts	4096	
Max. # of User Groups	512	
Max. # Shared Folders	512	
Max. Concurrent Connections (CIFS)	1500	
Max. # of IP Cameras (Supported QVR Pro)	Default 8 / Max 128 (based on IP CAM setting)	
QNAP Expansion Enclosure	8 x REXP-1620U-RP / REXP-1610U-RP / REXP-1600U-RP / REXP-1220U / REXP-1210U-RP / RXP-1200U-RP	

TVS-ECx80U-SAS-RP R2 Series			
TVS-EC2480U-SAS-RP R2	TVS-EC1680U-SAS-RP R2	TVS-EC1580MU-SAS-RP R2	TVS-EC1280U-SAS-RP R2
Intel® Xeon® E3-1245 v3 3.4 GHz Quad-core Processor, E3-1246 v3 3.5 GHz Quad-core Processor or a compatible E3-1200 v3 family Processor			
System memory: 16 GB DDR3 non-ECC / Memory module pre-installed: 8 GB x 2 System memory: 8 GB DDR3 ECC RAM / Memory module pre-installed: 4 GB x 2 Total memory slots: 4 / Memory expandable up to: 32 GB (8GB x 4)			
24 x 3.5″ / 2.5″	16 x 3.5″ / 2.5″	6 x 2.5″ 9 x 3.5″ / 2.5″	12 x 3.5″ / 2.5″
SATA 6Gb/s & SAS 12Gb/s HDD / SSD			

✓			
2 x 10 GbE			
4			
2			

Option: PCIe USB 3.1 Expansion Card (P/N: USB-U31A2P01)			
4 / 4			

1			
176.15 x 442.5 x 530.5	130 x 442.5 x 530.5	88 x 442.5 x 530.5	
23.08	18.3	14.18	
4 (8 cm)		4 (6 cm)	
2 x 650W, 90-264V		2 x 450W, 90-264V	
4096			
512			
512			
1500			
Default 8 / Max 128 (based on IP CAM setting)			
8 x REXP-1620U-RP / REXP-1610U-RP / REXP-1600U-RP / REXP-1220U / REXP-1210U-RP / RXP-1200U-RP			

All specifications are subject to change without notice

* The standard system is shipped without hard drives. Check www.qnap.com for HDD compatibility list.

	TS-ECx80U R2 Series			
Model	TS-EC2480U R2	TS-EC1680U R2	TS-EC1280U R2	TS-EC880U R2
CPU	Intel® Xeon® E3-1245 v3 3.4 GHz Quad-core Processor, E3-1246 v3 3.5 GHz Quad-core Processor or a compatible E3-1200 v3 family Processor			
Memory	System memory: 4 GB DDR3 ECC RAM / Memory module pre-installed: 2 GB x 2 Total memory slots: 4 / Memory expandable up to: 32 GB (8GB x 4)			
Drive Bay *	24 x 3.5" / 2.5"	16 x 3.5" / 2.5"	12 x 3.5" / 2.5"	8 x 3.5" / 2.5"
HDD Interface	SATA 6Gb/s HDD / SSD			
M.2 SSD	---			
HDD Hot Swappable	✓			
10 GbE LAN Port	2 x 10 GbE			
Gigabit LAN	4			
PCI-E Slot	2			
Thunderbolt™	---			
USB 3.1	Option: PCIe USB 3.1 Expansion Card (P/N: USB-U31A2P01)			
USB 3.0 / USB 2.0	4 / 4			
ODD Expansion Slot	---			
HDMI	1			
Dimensions (HxWxD) mm	176.15 x 442.5 x 530.5	130 x 442.5 x 530.5	88 x 442.5 x 530.5	
Weight (kg)	23.08	18.3	14.18	14.39
Fan	4 (8 cm)		4 (6 cm)	
Power Supply	650W, 100-240V		400W, 100-240V	
Max. # of User Accounts	4096			
Max. # of User Groups	512			
Max. # Shared Folders	512			
Max. Concurrent Connections (CIFS)	1500			
Max. # of IP Cameras (Supported QVR Pro)	Default 8 / Max 128 (based on IP CAM setting)			
QNAP Expansion Enclosure	8 x REXP-1620U-RP / REXP-1610U-RP / REXP-1600U-RP / REXP-1220U / REXP-1210U-RP / RXP-1200U-RP			

TS-1677XU-RP	TS-1277XU-RP	TS-877XU-RP	TS-877XU
TS-1677XU-RP-2700-16G: AMD Ryzen™ 7 2700 8-core/16-thread 3.2 GHz processor, Turbo Core 4.1 GHz TS-1677XU-RP-2600-8G: AMD Ryzen™ 5 2600 6-core/12-thread 3.4 GHz processor, Turbo Core 3.9 GHz TS-1677XU-RP-1200-4G: AMD Ryzen™ 3 1200 4-core/4-thread 3.1 GHz processor, Turbo Core 3.4 GHz	TS-1277XU-RP / TS-877XU-RP-2600-8G: AMD Ryzen™ 5 2600 6-core/12-thread 3.4 GHz processor, Turbo Core 3.9 GHz TS-1277XU-RP / TS-877XU-RP-1200-4G: AMD Ryzen™ 3 1200 4-core/4-thread 3.1 GHz processor, Turbo Core 3.4 GHz		TS-877XU-1200-4G: AMD Ryzen™ 3 1200 4-core / 4-thread 3.1 GHz processor Turbo Core 3.4 GHz
16 GB DDR4 (2 x 8 GB) 8 GB DDR4 (2 x 4 GB) 4 GB DDR4 (1 x 4 GB) (Max 64GB)	8 GB DDR4 (2 x 4 GB) 4 GB DDR4 (1 x 4 GB) (Max 64GB)		4 GB DDR4 (1 x 4 GB) (Max 64GB)
16 x 2.5"/ 3.5"	12 x 2.5"/ 3.5"	8 x 2.5"/ 3.5"	
SATA 6Gb/s HDDs/SSDs			
Optional: With PCIe expansion card			
✓			
2 x 10GBASE-T RJ45			
2			
4			

2			
4/0			

Optional: With PCIe expansion card			
130 x 481 x 573.5	88.3 x 482 x 562		
15.23	11.75	12.17	10.99
System: 4 x 9.2cm	System 2 x 7cm		
AC adapter, 2 x 500W, 100-240V	AC adapter, 2 x 300W, 100-240V		AC adapter, 350W, 100-240V
4096			
512			
512			
700			
Default 8 / Max 128 (Based on IP CAM setting status)			
8 x REXP-1210U-RP / REXP-1220U-RP / REXP-1610U-RP / REXP-1620U-RP 2 x UX-1200U-RP / UX-800U-RP			

All specifications are subject to change without notice

* The standard system is shipped without hard drives. Check www.qnap.com for HDD compatibility list.

	TS-x73U Series					
Model	TS-1673U-RP	TS-1673U	TS-1273U-RP	TS-1273U	TS-873U-RP	TS-873U
CPU	AMD R-Series RX-421ND quad-core 2.1 GHz processor, turbo core up to 3.4 GHz					
Memory	64GB (4 x 16GB), 16GB (2 x 8GB), 8GB (2 x 4GB) DDR4-2400 RAM					
Drive Bay *	16 x 3.5" / 2.5"		12 x 3.5" / 2.5"		8 x 3.5" / 2.5"	
HDD Interface	SATA 6Gb/s HDD / SSD					
M.2 SSD	2 x M.2 2280 SATA 6Gb/s SSDs					
HDD Hot Swappable	✓					
10 GbE LAN Port	2 x 10GbE SFP+ port via a preinstalled PCIe network card					
Gigabit LAN	4					
PCI-E Slot	1 (pre-installed with a dual-port 10GbE SFP+ LAN card)					
Thunderbolt™	---					
USB 3.1	Option: PCIe USB 3.1 Expansion Card (P/N: USB-U31A2P01)					
USB 3.0 / USB 2.0	2 / 4					
ODD Expansion Slot	---					
HDMI	---					
Dimensions (HxWxD) mm	130 x 481 x 536		89 x 482 x 534			
Weight (kg)	15.01	14.25	11.98	10.75	11.3	9.85
Fan	4 x 92 mm		2 x 70 mm			
Power Supply	2 x 500W 100 - 240V	350W 100 - 240V	2 x 300W 100 - 240V	350W 100 - 240V	2 x 250W 100 - 240V	250W 100 - 240V
Max. # of User Accounts	4096					
Max. # of User Groups	512					
Max. # Shared Folders	512					
Max. Concurrent Connections (CIFS)	1200					
Max. # of IP Cameras (Supported QVR Pro)	Default 8 / Max 128 (based on IP CAM setting)					
QNAP Expansion Enclosure	8 x REXP-1210U-RP / REXP-1220U-RP / REXP-1610U-RP / REXP-1620U-RP 2 x UX-1200U-RP / UX-800U-RP					

TS-x63XU Series			TS-x53BU Series					
TS-1263XU TS-1263XU-RP	TS-863XU TS-863XU-RP	TS-463XU TS-463XU-RP	TS-453BU TS-453BU-RP		TS-853BU TS-853BU-RP		TS-1253BU TS-1253BU-RP	
AMD G-Series GX-420MC quad-core 2.0 GHz			Intel Apollo Lake J3455 4-core 1.5GHz					
4 GB DDR3L (1 x 4 GB) (Max 16GB)			4GB: 2 x 2GB DDR3L 8GB: 2 x 4GB DDR3L					
12 x 2.5"/ 3.5"	8 x 2.5"/ 3.5"	4 x 2.5"/ 3.5"	4 x 3.5" / 2.5"		8 x 3.5" / 2.5"		12 x 3.5" / 2.5"	
SATA 6Gb/s HDDs/SSDs			SATA 6Gb/s, 3Gb/s HDD / SSD					
---			Optional: PCIe expansion card					
✓			✓					
1 x 10GBASE-T			Optional: PCIe expansion card					
4			4					
1			1					
---			---					
---	---	---	Option: PCIe USB 3.1 Expansion Card (P/N: USB-U31A2P01)					
2 / 2			4 / 0					
---			---					
---			1					
89 x 482 x 534		44 x 439 x 499	44 x 439 x 499		89 x 482 x 534		89 x 482 x 534	
13.1/11.84	12.64/11	7.63	7.5 / 8.16		10.02 / 11.25		10.41 / 11.64	
System : 2 x 7 cm		System : 2 x 4 cm	2 x 40mm		2 x 70mm		2 x 70mm	
AC adapter, 2 x 300W/350W,100-240V	AC adapter, 2 x 250W, 100-240V		250W 100 - 240V	2 x 250W 100 - 240V	250W 100 - 240V	2 x 250W 100 - 240V	350W 100 - 240V	2 x 250W 100 - 240V
4096			4096					
512			512					
512			512					
800			1500					
Default 8 / Max 128 (based on IP CAM setting)			Default 8 / Max 128 (based on IP CAM setting)					
1 x UX-1200U-RP / UX-800U-RP			1 x UX-1200-RP / UX-800-RP					

All specifications are subject to change without notice

* The standard system is shipped without hard drives. Check www.qnap.com for HDD compatibility list.

	TS-431XeU	TVS-1582TU
Model	TS-431XeU	TVS-1582TU
CPU	AnnapurnaLabs Alpine AL-314 quad-core 1.7 GHz processor	TVS-1582TU-i5-16G: Intel® Core™ i5-7500 quad-core 3.4 GHz processor TVS-1582TU-i7-32G: Intel® Core™ i7-7700 quad-core 3.6 GHz processor
Memory	1 x 2GB SO DIMM DDR3-1600 1 x 8GB SO DIMM DDR3-1600(Max. 8GB)	16GB DDR4 (2 x 8 GB, Max 64 GB) 32GB DDR4 (4 x 8 GB, Max 64 GB)
Drive Bay *	4 x 3.5" / 2.5"	6 x 2.5" SSD 9 x 2.5" / 3.5" HDD/ SSD
HDD Interface	SATA 6Gb/s HDDs / SSDs	SATA 6Gbps / 3Gbps
M.2 SSD	---	---
HDD Hot Swappable	✓	✓
10 GbE LAN Port	1 x SFP+	2 x SFP+
Gigabit LAN	2	4
PCI-E Slot	---	3 (pre-installed with two Thunderbolt™ 3 cards and a 10GbE network card)
Thunderbolt™	---	4 x Thunderbolt™ 3 ports
USB 3.1	---	---
USB 3.0 / USB 2.0	4 / 0	4 / 4
ODD Expansion Slot	---	---
HDMI	---	1
Dimensions (HxWxD) mm	44 x 439 x 291	88 x 442.5 x 530.5
Weight (kg)	4.15	13
Fan	3 x 40 mm	4 x 6 cm
Power Supply	100W, 100-240V	2 x 450W, 100-240V
Max. # of User Accounts	4096	4096
Max. # of User Groups	512	512
Max. # Shared Folders	512	512
Max. Concurrent Connections (CIFS)	700	1500
Max. # of IP Cameras (Supported QVR Pro)	---	Default 8 / Max 128 (based on IP CAM setting)
QNAP Expansion Enclosure	1 x UX-1200U-RP / 2 x UX-800U-RP	8 x REXP-1200U-RP/1210U-RP/1220U-RP/1600U-RP/1610U-RP/1620U-RP 6 x TX-800P/TX-500P 1 x UX-1200U-RP/UX-800U-RP

TS-x32XU Series			TVS-x82T3 Series		
TS-1232XU TS-1232XU-RP	TS-832XU TS-832XU-RP	TS-432XU TS-432XU-RP	TVS-1282T3		
AnnapurnaLabs Alpine AL-324 ARMv8 Cortex-A57 quad-core 1.7GHz			Intel® Core™ i5-7500 quad-core 3.4 GHz processor	Intel® Core™ i7-7700 quad-core 3.6 GHz processor	
4 GB DDR4 (1 x 4GB) (Max 16GB)		2 GB DDR4 (1 x 2GB) (Max 16GB)	16GB DDR4 (2 x 8GB, Max 64 GB)	32GB DDR4 (4 x 8GB, Max 64 GB)	64GB DDR4 (4 x 16GB, Max 64 GB)
12 x 2.5"/ 3.5"	8 x 2.5"/ 3.5"	4 x 2.5"/ 3.5"	4 x 2.5" SSD, 8 x 2.5" / 3.5" HDD / SSD		
SATA 6Gb/s HDDs/SSDs			SATA 6Gb/s, 3Gb/s HDD / SSD		
---			2 x M.2 2242 / 2260 / 2280 / 22110 SATA 6Gb/s		
✓			✓		
2 x 10GbE SFP+			2 x 10GBase-T		
2			4		
1			3 (pre-installed with two Thunderbolt™ 3 cards and a 10GbE card)		
---			4 x Thunderbolt™ 3		
---			---		
4 / 0			5 / 0		
---			---		
---			3		
89 x 482 x 534		44 x 439 x 499	234.6 x 369.9 x 319.8		
13	11.01	9.12	11.55		
System : 2 x 7 cm		System : 2 x 4 cm	System: 3 x 8 cm CPU: 2 x 9 cm		
2 x ATX 250 W, 100 - 240 V			250W, 100V-240V		
4096			4096		
512			512		
512			512		
700			1500		
Default 8 / Max 128 (based on IP CAM setting)			Default 8 / Max 128 (based on IP CAM setting)		
2 x UX-1200U-RP / UX-800U-RP			4 x REXP-1000 Pro 6 x TX-500P / TS-800P 2 x UX-500P / UX-800P		

All specifications are subject to change without notice

* The standard system is shipped without hard drives. Check www.qnap.com for HDD compatibility list.

	TVS-x82T Series		TVS-882ST3 Series		
Model	TVS-882T	TVS-682T	TVS-882ST3		
CPU	Intel® Core™ i5-7500 quad-core 3.4 GHz	Intel® Core™ i3-7100 dual-core 3.9 GHz	Intel® Core™ i7-6700HQ quad-core 2.6 GHz up to 3.5 GHz		Intel® Core™ i5-6442EQ quad-core 1.9 GHz up to 2.7 GHz
Memory	16 GB DDR4 (2 x 8GB, Max 64 GB)	8 GB DDR4 (2 x 4GB, Max 64 GB)	16 GB (Max 16 GB)	16 GB (Max 16 GB)	8 GB (Max 16 GB)
Drive Bay *	2 x 2.5" SSD, 6 x 2.5" / 3.5"	2 x 2.5" SSD, 4 x 2.5" / 3.5"	8 x 2.5"		
HDD Interface	SATA 6Gb/s HDD / SSD		SATA 6Gb/s HDD /SDD		
M.2 SSD	2 x 22110 / 2280 / 2260 / 2242 SATA 6Gb/s		---		
HDD Hot Swappable	✓		✓		
10GbE LAN Port	2 x 10GBASE-T		2 x 10GBase-T		
GbE LAN Port		4	2		
PCI-E Slot	2 (pre-installed with Thunderbolt and 10GbE cards)		2 (pre-installed with two Thunderbolt™ 3 cards and a 10GbE card)		
Thunderbolt™	Thunderbolt™ 2 dual port		2 x Thunderbolt™ 3		
USB 3.1	Option: PCIe USB 3.1 Expansion Card (P/N: USB-U31A2P01)		1 x Type-C USB 3.1 Gen2 10Gbps ports 1 x Type-A USB 3.1 Gen2 10Gbps ports		
USB 3.0 / USB 2.0	5 / 0		2/0		
ODD Expansion Slot	---		---		
HDMI	3		1		
Dimensions (HxWxD) mm	231.9 x 292.8 x 319.8	231.9 x 224.9 x 319.8	177 x 180 x 235		
Weight (kg)	9.05	7.7	3.97		
Fan	System: 2 x 8 cm cooling fan CPU: 2 x 9 cm fan	System: 1 x 8 cm cooling fan CPU: 2 x 9 cm fan	1 x 12cm		
Power Supply	250W, 100-240V		250W, 100V-240V		
Max. # of User Accounts	4096		4096		
Max. # of User Groups	512		512		
Max. # Shared Folders	512		512		
Max. Concurrent Connections (CIFS)	1500		1300		
Max. # of IP Cameras (Supported QVR Pro)	Default 8 / Max 128 (based on IP CAM setting)		Default 8 / Max 128 (based on IP CAM setting)		
QNAP Expansion Enclosure	6 x TX-500P / TX-800P 4 x REXP-1000 Pro 2 x UX-500P/UX-800P		4 x REXP-1000 Pro 6 x TX-500P / TS-800P 2 x UX-500P / UX-800P		

TVS-882BRT3 Series		TS-453BT3	TVS-882BR Series	
TVS-882BRT3		TS-453BT3	TVS-882BR	
Intel® Core™ i5-7500 quad-core 3.4 GHz (up to 3.8 GHz)	Intel® Core™ i7-7700 quad-core 3.6 GHz (up to 4.2 GHz)	Intel® Celeron® J3455 quad-core 1.5 GHz (up to 2.3 GHz)	Intel® Core™ i5-7500 quad-core 3.4 GHz (up to 3.8 GHz)	Intel® Core™ i7-7700 quad-core 3.6 GHz (up to 4.2 GHz)
16GB DDR4 (8GB x 2) Max 64GB	32GB DDR4 (8GB x 4) Max 64GB	8 GB RAM (2 x 4 GB DDR3L) max memory 8GB (2 x 4 GB)	16 GB DDR4 (Max 64 GB)	32 GB DDR4 (Max 64 GB)
8 x 2.5"/ 3.5"		4 x 2.5"/ 3.5" SSD/HDD	8 x 2.5" / 3.5"	
SATA 6Gb/s HDD / SSD		SATA 6Gb/s HDDs/SSDs	SATA 6Gb/s, 3Gb/s HDD / SSD	
2 x M.2 2242 / 2260 / 2280 / 22110 SATA 6Gb/s		2 x M.2 2280 SATA 6Gb/s port	2 x M.2 2242 / 2260 / 2280 / 22110 SATA 6Gb/s SSD	
✓		✓	✓	
---		1 x 10GBASE-T	---	
4		2	4	
3 (pre-installed with two dual port Thunderbolt™ 3 cards)		1 x Gen2 x2	3	
4 x Thunderbolt™ 3 ports		2 x Thunderbolt 3	---	
---		---	---	
5 / 0		5 / 0	5 / 0	
1 x 5.25" disc burner or 2 x Slim SATA disc burners * ODD skus come with preloaded Blu-ray ODD		---	1 x 5.25" 5.25" disc burner or 2 x Slim SATA disc burners * ODD skus come with preloaded Blu-ray ODD	
3		2	3	
234.6 x 369.9 x 319.8		168 x 170 x 226 mm	234.6 x 369.9 x 319.8	
11.23		2.51	11.23	
System: 3 x 8 cm CPU: 2 x 9 cm		System: 1 x 12 cm	System: 3 x 8 cm CPU: 1 x 9 cm	
250W, 100-240V		AC adapter, 120W, 100 - 240V	250W, 100 -240V	
4096		4096	4096	
512		512	512	
512		512	512	
1500		800	1500	
Default 8 / Max 128 (based on IP CAM setting)		Default 8 / Max 128 (based on IP CAM setting)	Default 8 / Max 128 (based on IP CAM setting)	
2 x UX-500P / UX-800P 4 x REXP-1000 Pro 6 x TX-500P / TS-800P		6 x TX-500P / TX-800P 1xUX-500P/ UX-800P	4 x REXP-1000 Pro 2 x UX-500P / UX-800P	

All specifications are subject to change without notice

* The standard system is shipped without hard drives. Check www.qnap.com for HDD compatibility list.

	TVS-x82 Series		
Model	TVS-1282	TVS-882	TVS-682
CPU	TVS-1282-i3-8G: Intel® Core ™ i3 7100 dual-core 3.9 GHz TVS-1282-i5-16G / TVS-1282-i5-16G-450W: Intel® Core™ i5-7500 quad-core 3.4 GHz TVS-1282-i7-32G / TVS-1282-i7-64G /TVS- 1282-i7-32G-450W / TVS-1282-i7-64G-450W: Intel® Core™ i7-7700 quad-core 3.6 GHz	TVS-882-i3-8G: Intel® Core™ i3 7100 dual-core 3.9 GHz TVS-882-i5-16G / TVS-882-i5-16G-450W: Intel® Core™ i5-7500 quad-core 3.4 GHz	TVS-682-i3-8G: Intel® Core™ i3 7100 dual-core 3.9 GHz
Memory	8 GB DDR4 (2 x 4 GB, Max 64 GB) 16 GB DDR4 (2 x 8 GB, Max 64 GB) 32 GB DDR4 (4 x 8 GB, Max 64 GB) 64 GB DDR4 (4 x 16 GB, Max 64 GB)	8 GB DDR4 (2 x 4 GB, Max 64 GB) 16 GB DDR4 (2 x 8 GB, Max 64 GB)	8 GB DDR4 (2 x 4 GB, Max 64 GB)
Drive Bay *	4 x 2.5" SSD, 8 x 2.5" / 3.5" HDD / SSD	2 x 2.5" SSD, 6 x 2.5" / 3.5" HDD / SSD	2 x 2.5" SSD, 4 x 2.5" / 3.5" HDD / SSD
HDD Interface	SATA 6Gbps HDD / SSD	SATA 6Gbps HDD / SSD	SATA 6Gbps HDD / SSD
M.2 SSD	2 x 22110 / 2280 / 2260 / 2242 SATA 6Gb/s		
HDD Hot Swappable	✓		
10 GbE LAN Port	Optional		
Gigabit LAN	4		
PCI-E Slot	3	2	2
Thunderbolt™	---		
USB 3.1	Option: PCIe USB 3.1 Expansion Card (P/N: USB-U31A2P01)		
USB 3.0 / USB 2.0	5 / 0		
ODD Expansion Slot	---		
HDMI	3		
Dimensions (HxWxD) mm	234.6 x 369.9 x 319.8	231.9 x 292.8 x 319.8	231.9 x 224.9 x 319.8
Weight (kg)	11.34	8.85	7.7
Fan	System: 3 x 8 cm cooling fan CPU: 1 x 9 cm fan	System: 2 x 8 cm cooling fan CPU: 1 x 9 cm fan	System: 1 x 8 cm cooling fan CPU: 1 x 9 cm fan
Power Supply	250W, 100 - 240V / 450W, 100 - 240V	250W, 100 - 240V / 450W, 100 - 240V	250W, 100 - 240V
Max. # of User Accounts	4096		
Max. # of User Groups	512		
Max. # Shared Folders	512		
Max. Concurrent Connections (CIFS)	1500		
Max. # of IP Cameras (Supported QVR Pro)	Default 8 / Max 128 (based on IP CAM setting)		
QNAP Expansion Enclosure	4 x REXP-1000 Pro 2 x UX-500P / UX-800P		

TS-1685	TS-1677X	TS-x77 Series		
TS-1685	TS-1677X	TS-1277	TS-877	TS-677
Intel® Xeon® Processor D-1521, 4-core 2.4 GHz Intel® Xeon® Processor D-1531, 6-core 2.2 GHz	AMD Ryzen™ 7 1700 8-core/16-thread 3.0 GHz processor, Turbo Core 3.7 GHz AMD Ryzen™ 5 1600 6-core/12-thread 3.2 GHz processor, Turbo Core 3.6 GHz AMD Ryzen™ 3 1200 4-core/4-thread 3.1 GHz processor, Turbo Core 3.4 GHz	TS-1277-1700-16G / 64G : AMD Ryzen™ 7 1700 8-core/16-thread 3.0 GHz processor, Turbo Core 3.7 GHz TS-1277-1600-8G : AMD Ryzen™ 5 1600 6-core/12-thread 3.2 GHz processor, Turbo Core 3.6 GHz	TS-877-1700-16G : AMD Ryzen™ 7 1700 8-core/16-thread 3.0 GHz processor, Turbo Core 3.7 GHz TS-877-1600-8G: AMD Ryzen™ 5 1600 6-core/12-thread 3.2 GHz processor, Turbo Core 3.6 GHz	TS-677-1600-8G : AMD Ryzen™ 5 1600 6-core/12-thread 3.2 GHz processor, Turbo Core 3.6 GHz
Total DIMM slots: 4 Memory expandable up to: DDR4 128GB (with DDR4 32GB RDIMM x 4)	64 GB DDR4 (4 x 16 GB) 16 GB DDR4 (2 x 8 GB) 8 GB DDR4 (2 x 4 GB) 4 GB DDR4 (1 x 4 GB) (Max 64GB)	64 GB DDR4 (4 x 16 GB) / 16 GB DDR4 (2 x 8 GB) / 8 GB DDR4 (2 x 4 GB)		
12 x 2.5" / 3.5" HDD / SSD, 4 x 2.5" SSD	4 x 2.5" SSD 12 x 2.5"/ 3.5 " SSD/ HDD"	4 x 2.5" SSD 8 x 2.5" / 3.5" SSD/ HDD	2 x 2.5" SSD 6 x 2.5" / 3.5" SSD/ HDD	2 x 2.5" SSD 4 x 2.5" / 3.5" SSD / HDD
SATA 6Gb/s HDD/SSD	SATA 6Gb/s HDDs/SSDs	SATA 6 Gb/s HDD/ SSD		
6 x 2242 / 2260 / 2280 / 22110 SATA 6Gb/s	---	2 x M.2 2242 / 2260 / 2280 / 22110 SATA 6 Gb/s		
✓	✓	✓		
2	2 x 10GBASE-T	Optional: With PCIe expansion card		
4	4	4		
3	3	3		
---	---	---		
Optional: With PCIe expansion card	Optional: With PCIe expansion card	1 x Type-A, 1 x Type-C		
3/0	8/0	6 / 0		
---	---	---		
---	Optional: With PCIe expansion card	Optional: PCIe expansion card		
303.84 x 369.89 x 319.8	303.84 x 369.89 x 319.8 mm	234.6 x 369.9 x 319.8	231.9 x 292.8 x 319.8	231.9 x 224.9 x 319.8
13.39	13.39	11.27	8.86	7.7
System: 3 x 9.2cm CPU: 2 x 9cm	System: 3 x 9.2cm CPU: 2 x 9cm	System: 3 x 8 cm CPU: 2 x 9 cm	System: 2 x 8 cm CPU: 2 x 9 cm	System: 1 x 8 cm CPU: 2 x 9 cm
250W, 100-240V / 550W, 100-240V	550W, 100 - 240V	550W, 100-240V	450W, 100-240V	250W, 100-240V
4096	4096	4096		
512	512	512		
512	512	512		
1500	1500	1500		
Default 8 / Max 128 (based on IP CAM setting)	Default 8 / Max 128 (based on IP CAM setting)	Default 8 / Max 128 (based on IP CAM setting)		
4 x REXP-1000 Pro 2 x UX-500P / UX-800P	4 x REXP-1000 Pro /2 x UX-800P & UX-500P	4 x REXP-1000 Pro + 2 x UX-800P / UX-500P		

All specifications are subject to change without notice

* The standard system is shipped without hard drives. Check www.qnap.com for HDD compatibility list.

	TVS-x73e			TVS-951X	TS-963X
Model	TVS-873e	TVS-673e	TVS-473e	TVS-951X	TS-963X
CPU	AMD R-Series RX-421BD quad-core 2.1 GHz (up to 3.4 GHz)			Intel Celeron Dual-core 3865U 1.8 GHz	AMD G-Series GX-420MC quad-core 2.0 GHz
Memory	8GB DDR4 (2x 4GB) 4GB DDR4 (2x 2GB)			8GB DDR4 (2 x 4 GB) 2GB DDR4 (1 x 2 GB) (Max 32 GB)	8 GB DDR3L (1 x 8 GB) 2 GB DDR3L (1 x 2 GB) (Max 16GB)
Drive Bay *	8 x 3.5" / 2.5"	6 x 3.5" / 2.5"	4 x 3.5" / 2.5"	5x 3.5"/2.5" HDD/SSD 4x 2.5" SSD	5x 3.5"/2.5" HDD/SSD 4x 2.5" SSD
HDD Interface	SATA 6Gb/s HDD / SSD			SATA 6Gb/s HDDs/SSDs	SATA 6Gb/s HDDs/SSDs
M.2 SSD	2 x M.2 2280 / 2260 SATA 6Gb/s			---	---
HDD Hot Swappable	✓			✓	✓
10GbE LAN Port	Optional: PCIe expansion card			1 x 10GBASE-T	1 x 10GBASE-T
GbE LAN Port	4			1	1
PCI-E Slot	2			---	---
Thunderbolt™	___			---	---
USB 3.1	Optional: With PCIe expansion card			---	---
USB 3.0 / USB 2.0	4 / 0			3/0	2/2
ODD Expansion Slot	---			---	---
HDMI	2			1	---
Dimensions (HxWxD) mm	188.2 x 329.3 x 279.6	188.2 x 264.3 x 279.6	188.2 x 199.3 x 279.6	182 x 225 x 224	182 x 225 x 224
Weight (kg)	6.56	5.63	4.9	3.53	3.53
Fan	System: 2 x 12 cm CPU: 1 x 6 cm	System: 2 x 9 cm CPU: 1 x 6 cm	System: 1 x 12 cm CPU: 1 x 6 cm	System : 1 x 14 cm	System : 1 x 14 cm
Power Supply	250W, 100-240V			AC adapter, 120W, 100-240V	AC adapter, 120W, 100 - 240V
Max. # of User Accounts	4096			4096	4096
Max. # of User Groups	512			512	512
Max. # Shared Folders	512			512	512
Max. Concurrent Connections (CIFS)	1200			800	800
Max. # of IP Cameras (Supported QVR Pro)	Default 8 / Max 128 (based on IP CAM setting)			Default 8 / Max 128 (based on IP CAM setting)	Default 8 / Max 128 (based on IP CAM setting)
QNAP Expansion Enclosure	4 x REXP-1000 Pro + 2 x UX-800P / UX-500P			1 x UX-800P/UX-500P	1 x UX-800P/UX-500P

TS-x53B Series			TS-x53Be	
TS-653B	TS-453B	TS-253B	TS-453Be	TS-253Be
Intel® Celeron® J3455 quad-core 1.5 GHz (up to 2.3 GHz)			Intel® Celeron® J3455 quad-core 1.5 GHz (up to 2.3 GHz)	
8GB DDR3L (2 x 4GB) 4GB DDR3L (2 x 2GB)				1 x 2GB DDR3L-1866 1 x 4 GB DDR3L-1866 (max 8GB)
6 x 3.5" / 2.5"	4 x 3.5" / 2.5"	2 x 3.5" / 2.5"	4 x 2.5"/ 3.5 "	2 x 2.5"/ 3.5 "
SATA 6Gb/s HDDs / SSDs			SATA 6Gb/s HDDs/SSDs	
Option: PCIe QM2 Expansion card			Option: PCIe QM2 Expansion card	
✓			✓	
Optional 10 Gigabit LAN port via a PCIe expansion card			Option: PCIe QM2 Expansion card	
2			2	
1			1 x Gen2 x 2	
---			---	
Option: PCIe USB 3.1 Expansion (P/N:USB-U31A2P01)			Option: PCIe Expansion Card	
5 / 0			5/0	
---			---	
2			2	
168 x 235 x 226	168 x 170 x 226	168 x 105 x 226	168 x 170 x 226 mm	168 x 105 x 226
3.02	2.37	1.66	2.33	1.66
2 (9 cm)	1 (12 cm)	1 (7 cm)	1x 12 cm	1 x 7 cm
120W, 100-240V	90W, 100-240V	65W, 100-240V	90W, 100 - 240V	65W, 100 - 240V
4096			4096	
512			512	
512			512	
800			800	
Default 8 / Max 128 (based on IP CAM setting)			Default 8 / Max 128 (based on IP CAM setting)	
1x UX-800P / UX- 500P			1 x UX-800P/UX-500P	

All specifications are subject to change without notice

* The standard system is shipped without hard drives. Check www.qnap.com for HDD compatibility list.

	TS-x73			TS-453Bmini	TS-431X
Model	TS-873	TS-673	TS-473	TS-453Bmini	TS-431X
CPU	AMD R-Series RX-421ND quad-core 2.1 GHz processor, Turbo Core up to 3.4 GHz			Intel® Celeron® J3455 quad-core 1.5 GHz (up to 2.3 GHz)	AnnapurnaLabs Alpine AL-212 dual-core 1.7 GHz
Memory	8 GB DDR4 (2 x 4 GB) 4 GB DDR4 (2 x 2 GB) (Max 64GB)			4GB / 8GB (Max 8GB)	2GB / 8GB (Max 8GB)
Drive Bay *	8 x 2.5"/ 3.5"	6 x 2.5"/ 3.5"	4 x 2.5"/ 3.5"	4 x 3.5" / 2.5"	4 x 3.5" / 2.5"
HDD Interface	SATA 6Gb/s HDDs/SSDs			SATA 6Gb/s HDD / SSD	SATA 6 Gb/s HDD / SSD
M.2 SSD	2 x M.2 2260/2280 SATA 6Gb/s SSDs			---	---
HDD Hot Swappable	✓			✓	✓
10GbE LAN Port	Optional: PCIe expansion card			---	1 x SFP+
GbE LAN Port	4			2	2
PCI-E Slot	2			---	---
Thunderbolt™	---			---	---
USB 3.1	Option: PCIe Expansion Card			---	---
USB 3.0 / USB 2.0	4/0			4 / 1	3 / 0
ODD Expansion Slot	---			---	---
HDMI	---			1	---
Dimensions (HxWxD) mm	188.2 x 329.3 x 279.6	188.2 x 264.3 x 279.6	188.2 x 199.3 x 279.6	210 x 151 x 200	169 x 160 x 219
Weight (kg)	6.56	5.57	4.84	2	2.03
Fan	System: 2 x 12 cm CPU: 1 x 6 cm	System: 2 x 9 cm CPU: 1 x 6 cm	System: 1 x 12 cm CPU: 1 x 6 cm	1 (compact)	1(12 cm)
Power Supply	AC adapter, 250W, 100 - 240V			90W, 100-240V	90W, 100-240V
Max. # of User Accounts	4096			4096	4096
Max. # of User Groups	512			512	512
Max. # Shared Folders	512			512	512
Max. Concurrent Connections (CIFS)	1200			800	400
Max. # of IP Cameras (Supported QVR Pro)	Default 8 / Max 128 (based on IP CAM setting)			Default 8 / Max 128 (based on IP CAM setting)	---
QNAP Expansion Enclosure	4 x REXP-1000 Pro / 2 x UX-800P & UX-500P			1 x UX-800P / UX-500P	2 x UX-800P / UX-500P

TS-1635AX	TS-932X	TS-832X	TS-251B	TS-351
TS-1635AX	TS-932X	TS-832X	TS-251B	TS-351
Marvell® ARMADA® 8040 ARMv8 Cortex-A72 quad-core 1.6 GHz	AnnapurnaLabs Alpine AL-324 Quad-core 1.7GHz	AnnapurnaLabs, Alpine AL-324 Quad-core 1.7GHz	Intel® Celeron® J3355 dual-core 2.0 GHz processor	Intel® Celeron® J1800 dual core 2.41 GHz processor
8 GB DDR4 (1 x 8 GB) 4 GB DDR4 (1 x 4 GB) (Max 16GB)	8GB DDR4 2400 (1 x 8 GB) 2GB DDR4 2400 (1 x 2 GB) (Max 16GB)	8GB DDR4 2400 (1 x 8 GB) 2GB DDR4 2400 (1 x 2 GB) (Max 16GB)	4 GB DDR4 (1 x 4 GB) 2 GB DDR4 (1 x 2 GB) (Max 8GB)	4 GB DDR3 (1 x 4 GB) 2 GB DDR3 (1 x 2 GB) (Max 8GB)
4x2.5"SSD 12x2.5"/ 3.5"HDD/SSD	4 x 2.5" SSD 5 x 2.5"/ 3.5 " SSD/ HDD	8 x 2.5"/ 3.5"	2 x 2.5"/ 3.5"	3 x 2.5"/ 3.5"
SATA 6Gb/s HDDs/SSDs	SATA 6Gb/s HDDs/SSDs	SATA 6Gb/s HDDs/SSDs	SATA 6Gb/s HDDs/SSDs	SATA 6Gb/s HDDs/SSDs
2 x M.2 2280 SATA 6Gb/s SSDs	---	Option: PCIe QM2 Expansion card	Optional: With PCIe expansion card	2 x 2280 NVMe M.2 SSD
✓	✓	✓	✓	✓
2 x 10GbE SFP+	2 x 10GbE SFP+	2 x 10GbE SFP+	Optional: With PCIe expansion card	---
2	2	2	1	1
2	---	2	1	---
---	---	---	---	---
Option: PCIe Expansion Card	---	Option: PCIe QM2 Expansion card	Optional: With PCIe expansion card	---
3/0	3/0	3/0	2/3	1/2
---	---	---	---	---
---	---	---	1	1
303.84 x 369.89 x 319.8	182 x 225 x 224	188.2 x 329.3 x 279.6	168 x 105 x 226	142 x 150 x 260.1
12.06	3.53	6.52	1.53	1.64
System: 3 x 9.2 cm CPU: 1 x 6 cm	1 x 14cm	System: 2 x 12 cm CPU: 1 x 6 cm	System 1 x 7cm	System 1 x 9 cm
AC adapter, 250W, 100-240V	AC adapter, 120W, 100 - 240V	AC adapter, 250W, 100-240V	AC adapter, 65W, 100-240V	AC adapter, 65W, 100-240V
4096	4096	4096	4096	4096
512	512	512	512	512
512	512	512	512	512
700	1500	1500	700	700
Default 8 / Max 16 (based on IP CAM setting)	Default 8 / Max 16 (based on IP CAM setting)	Default 8 / Max 16 (based on IP CAM setting)	Default 8 / Max 128 (based on IP CAM setting status)	Default 8 / Max 128 (based on IP CAM setting status)
1 x UX-800P/UX-500P	2 x UX-800P/UX-500P	2 x UX-800P/UX-500P	1 x UX-500P/UX-800P	2 x UX-500P/UX-800P

All specifications are subject to change without notice

* The standard system is shipped without hard drives. Check www.qnap.com for HDD compatibility list.

	TS-431X2		TS-x31P Series		
Model	TS-431X2		TS-431P	TS-231P	TS-131P
CPU	AnnapurnaLabs, Alpine AL-314 Quad-core 1.7 GHz		Annapurna Labs Alpine AL-212 dual-core 1.7 GHz		
Memory	2 GB DDR3 (Max 8 GB)	8 GB DDR3 (Max 8 GB)	1GB / 2GB DDR3		
Drive Bay *	4 x 3.5" / 2.5"		4 x 3.5" / 2.5"	2 x 3.5" / 2.5"	1 x 3.5" / 2.5"
HDD Interface	SATA 6Gb/s HDDs / SSDs		SATA 6Gb/s HDD / SSD		
M.2 SSD	---		---		
HDD Hot Swappable	✓		✓		
10GbE LAN Port	1 x 10GbE SFP+		---		
GbE LAN Port	2		2	2	1
PCI-E Slot	---		---		
Thunderbolt™	---		---		
USB 3.1	---		---		
USB 3.0 / USB 2.0	3 / 0		3 / 0		
ODD Expansion Slot	---		---		
HDMI	---		---		
Dimensions (HxWxD) mm	169 x 160 x 219		169 x 160 x 219	169 x 102 x 219	169 x 73 x 219
Weight (kg)	2.03		3	1.28	1.04
Fan	1 x 12 cm		1 (12 cm)	1 (7 cm)	1 (5 cm)
Power Supply	AC adapter, 90W, 100 - 240V		90W, 100-240V	65W, 100-240V	36W, 100-240V
Max. # of User Accounts	4096		4096		
Max. # of User Groups	512		512		
Max. # Shared Folders	512		512		
Max. Concurrent Connections (CIFS)	1500		400		
Max. # of IP Cameras (Supported QVR Pro)	---		---		
QNAP Expansion Enclosure	2 x UX-800P / UX-500P		---		

TS-x31P2 Series		TS-332X	TS-328	TS-x28A	
TS-431P2	TS-231P2	TS-332X	TS-328	TS-228A	TS-128A
Annapurna Labs Alpine AL-314 quad-core 1.7 GHz		AnnapurnaLabs, an Amazon company Alpine AL-324 4-core 1.7GHz	Realtek RTD1296 quad-core 1.4 GHz processor	Realtek RTD1295 quad-core 1.4 GHz processor	
1GB / 4GB DDR3 RAM		4 GB DDR4 2400 (1 x 4 GB) 2 GB DDR4 2400 (1 x 2 GB) (Max 16GB)	2GB DDR4 on-board	1GB DDR4 on-board	
4 x 3.5" / 2.5"	2 x 3.5" / 2.5"	3 x 2.5"/ 3.5"	3 x 3.5" / 2.5"	2 x 3.5"	1 x 3.5"
SATA 6Gb/s HDDs / SSDs		SATA 6Gb/s HDDs/SSDs	SATA 6Gb/s HDDs/SSDs	SATA 6Gb/s HDDs	
---		3 x 2280 SATA 6Gb/s	---	---	
✓		✓	✓	---	
---		1	---	---	
2		2	2	1	
---		---	---	---	
---		---	---	---	
---		---	---	---	
3 / 0		3/0	2 / 1	1 / 2	
---		---	---	---	
---		---	---	---	
169 x 160 x 219	169 x 102 x 219	142 x 150 x 260.1	142 x 150 x 260.1	187.7 x 90 x 125	187.7 x 60 x 125
3	1.28	1.64	1.64	0.7	0.56
1 x 12 cm	1 x 7 cm	System 1 x 14 cm	1 x 9 cm	7612 blower	
AC adapter, 90W, 100 - 240V	AC adapter, 65W, 100 - 240V	AC adapter, 90W, 100-240V	AC adapter, 65W, 100 - 240V	AC adapter, 65W, 100 - 240V	AC adapter, 36W, 100-240V
4096		4096	600	600	
512		512	128	128	
512		512	256	256	
1500		700	128	128	
---		Default 8 / Max 16 (based on IP CAM setting status)	Default 8 / Max 16 (based on IP CAM setting)	Default 8 / Max 16 (based on IP CAM setting)	
2 x UX-500P / UX-800P		2 x UX-500P/UX-800P	---	---	

All specifications are subject to change without notice

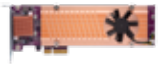
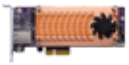
* The standard system is shipped without hard drives. Check www.qnap.com for HDD compatibility list.

Expansion Units: REXP Series

Model	REXP-1620U-RP	REXP-1220U-RP	REXP-1610U-RP	REXP-1210U-RP	REXP-1000 Pro
Host Interface	Three SAS 12Gbps 4 x wide port (IN port, OUT port)	Three SAS 12Gbps 4 x wide port (IN port, OUT port)	Three SAS 6Gbps 4x wide port (SFF-8644)		Two SAS 6Gbps 4 x wide port (IN port, OUT port)
HDD Size & Interface(2)	16 x 3.5"/2.5" SAS/SATA 6Gb/s	12 x 3.5"/2.5" SAS/SATA 6Gb/s	16 x 3.5" / 2.5" SATA 6Gb/s	12 x 3.5" / 2.5" SATA 6Gb/s	10 x 3.5"/2.5" SAS/SATA 6Gb/s
Dimensions (HxWxD) mm	130 x 442.4 x 528.3	88 x 439 x 520	130 x 442.4 x 528.3	88 x 439 x 520	217.5 x 327 x 321.2
Weight (kg)	18.14	14.8	18.14	14.88	9.24
Supported NAS models	TDS-16489U TES-3085U TES-1885U TVS-EC2480U-SAS-RP R2 TVS-EC1680U-SAS-RP R2 TVS-EC1580MU-SAS-RP R2 TVS-EC1280U-SAS-RP R2 TS-EC2480U R2 TS-EC1680UR2 TS-EC1280U R2 TVS-1582TU TS-1677XU-RP TS-1277XU-RP TS-877XU-RP TS-877XU TS-1673U-RP TS-1673U TS-1273U-RP TS-1273U TS-873U-RP TS-873U	TDS-16489U TES-3085U TES-1885U TVS-EC2480U-SAS-RP R2 TVS-EC1680U-SAS-RP R2 TVS-EC1580MU-SAS-RP R2 TVS-EC1280U-SAS-RP R2 TS-EC2480U R2 TS-EC1680UR2 TS-EC1280U R2 TVS-1582TU TS-1677XU-RP TS-1277XU-RP TS-877XU-RP TS-877XU TS-1673U-RP TS-1673U TS-1273U-RP TS-1273U TS-873U-RP TS-873U	TDS-16489U TES-3085U TES-1885U TVS-EC2480U-SAS-RP R2 TVS-EC1680U-SAS-RP R2 TVS-EC1580MU-SAS-RP R2 TVS-EC1280U-SAS-RP R2 TS-EC2480U R2 TS-EC1680UR2 TS-EC1280U R2 TVS-1582TU TS-1677XU-RP TS-1277XU-RP TS-877XU-RP TS-877XU TS-1673U-RP TS-1673U TS-1273U-RP TS-1273U TS-873U-RP TS-873U	TDS-16489U TES-3085U TES-1885U TVS-EC2480U-SAS-RP R2 TVS-EC1680U-SAS-RP R2 TVS-EC1580MU-SAS-RP R2 TVS-EC1280U-SAS-RP R2 TS-EC2480U R2 TS-EC1680UR2 TS-EC1280U R2 TVS-1582TU TS-1677XU-RP TS-1277XU-RP TS-877XU-RP TS-877XU TS-1673U-RP TS-1673U TS-1273U-RP TS-1273U TS-873U-RP TS-873U	TS-1685 TS-1677X TS-1277 TS-877 TS-677 TVS-1282T3 TVS-1282T TVS-882T TVS-682T TVS-1282 TVS-882 TVS-682 TVS-882BRT3 TVS-882BR TVS-882ST3 TS-873 TS-673 TS-473 TVS-873e TVS-673e TVS-473e

Model	QM2-2S	QM2-2S-220A	QM2-2P	QM2-2P-244A	QM2-2P-344	QM2-2P-384
Connector	2 x M.2 22110 or 2280 SATA SSD		2 x M.2 22110 or 2280 PCIe (Gen2 x 4) NVMe SSD		2 x M.2 22110 or 2280 PCIe (Gen3x 4) NVMe SSD slot	
PCIe and Lanes	PCIe Gen2 x 2		PCIe Gen2 x 4		PCIe Gen3 x 4	PCIe Gen3 x 8
Bracket						
Recommended models (requires QTS 4.3.4 or later)	---	---	The system BIOS and Operating System (OS) must be capable of supporting a PCIe NVMe SSD. Please refer to the technical manual of your system or consult with the vendor.	The system BIOS and Operating System (OS) must be capable of supporting a PCIe NVMe SSD. Please refer to the technical manual of your system or consult with the vendor.	The system BIOS and Operating System (OS) must be capable of supporting a PCIe NVMe SSD. Please refer to the technical manual of your system or consult with the vendor.	The system BIOS and Operating System (OS) must be capable of supporting a PCIe NVMe SSD. Please refer to the technical manual of your system or consult with the vendor.

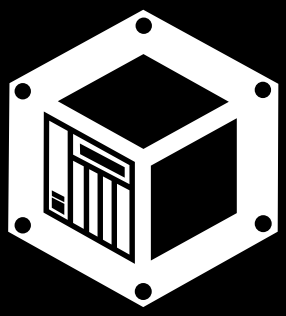
Expansion Units: UX Series		TX Series		EJ Series
UX-1200U-RP	UX-800U-RP	TX-800P	TX-500P	EJ1600 v2
USB 3.0 (type B)	USB 3.0 (type B)	Two Thunderbolt™ 2 high-speed ports (daisy-chain up to 6)	Two Thunderbolt™ 2 high-speed ports (daisy-chain up to 6)	Two SAS 12/6Gb/s 4 x wide port (SFF-8644)
12 x 3.5"/2.5" SATA 6Gb/s	8 x 3.5"/2.5" SATA 6Gb/s	8 x 3.5" or 2.5" SATA 6Gb/s, SATA 3Gb/s	5 x 3.5" or 2.5" SATA 6Gb/s, SATA 3Gb/s	16 x 3.5" or 2.5" SAS (12/6Gbps)
89 x 482 x 534	89 x 482 x 534	185.2 x 298.2 x 235.4	185.2 x 210.6 x 235.4	132 x 446.2 x 618
16.14	11.02	7.3	5.1	24.11
TVS-1582TU TS-1677XU-RP TS-1277XU-RP TS-877XU-RP TS-877XU TS-1673U-RP TS-1673U TS-1273U-RP TS-1273U TS-873U-RP TS-873U TS-1263XU-RP TS-863XU-RP TS-863XU TS-463XU-RP TS-463XU TS-1253BU-RP TS-1253BU TS-853BU-RP TS-853BU TS-453BU-RP TS-453BU TS-1232XU TS-1232XU-RP TS-832XU TS-832XU-RP TS-432XU TS-432XU-RP TS-431XeU	TVS-1582TU TS-1677XU-RP TS-1277XU-RP TS-877XU-RP TS-877XU TS-1673U-RP TS-1673U TS-1273U-RP TS-1273U TS-873U-RP TS-873U TS-1263XU-RP TS-863XU-RP TS-863XU TS-463XU-RP TS-463XU TS-1253BU-RP TS-1253BU TS-853BU-RP TS-853BU TS-453BU-RP TS-453BU TS-1232XU TS-1232XU-RP TS-832XU TS-832XU-RP TS-432XU TS-432XU-RP TS-431XeU	TVS-1582TU TVS-1282T3 TVS-1282T TVS-882T TVS-682T TVS-882BRT3 TVS-882ST3 TS-453BT3	TVS-1582TU TVS-1282T3 TVS-1282T TVS-882T TVS-682T TVS-882BRT3 TVS-882ST3 TS-453BT3	ZFS NAS Series: ES1640dc v2

QM2					
QM2-4S-240	QM2-4P-284	QM2-4P-342	QM2-4P-384	QM2-2S10G1T	QM2-2P10G1T
					
4 x M.2 2280 SATA SSD	4 x M.2 2280 PCIe (Gen2 x 4) NVMe SSD	4 x M.2 2280 PCIe (Gen3 x 2) NVMe SSD slots	4 x M.2 2280 PCIe (Gen3 x 4) NVMe SSD slots (M Key)	2 x M.2 2280 SATA SSD slots	2 x M.2 2280 PCIe (Gen2 x 2) NVMe SSD slots
PCIe Gen2 x 4	PCIe Gen2 x 8	PCIe Gen3 x 4	PCIe Gen3 x 8	PCIe Gen2 x 4	
Low-profile (default)					
---	The system BIOS and Operating System (OS) must be capable of supporting a PCIe NVMe SSD. Please refer to the technical manual of your system or consult with the vendor.	The system BIOS and Operating System (OS) must be capable of supporting a PCIe NVMe SSD. Please refer to the technical manual of your system or consult with the vendor.	The system BIOS and Operating System (OS) must be capable of supporting a PCIe NVMe SSD. Please refer to the technical manual of your system or consult with the vendor	The system BIOS and Operating System (OS) must be capable of supporting a PCIe NVMe SSD. Please refer to the technical manual of your system or consult with the vendor	The system BIOS and Operating System (OS) must be capable of supporting a PCIe NVMe SSD. Please refer to the technical manual of your system or consult with the vendor

	10GbE Switch	
Model	QSW-1208-8C	QSW-804-4C
10G SFP+ (fiber) ports	4	
10G SFP+ (fiber) and RJ-45 (copper) ports (combo)	8	4
Switching capacity	240 Gbps	160 Gbps
MAC address caching capacity	27K	
Power Supply Unit	100 - 240 V AC, 50 -60 Hz	
Fan	2	
Dimensions (H x W x D) mm	43 x 285 x 233 mm	
Weight (KG)	2.15	2.1
Supported standards	IEEE 802.3 Ethernet IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T IEEE 802.3x Full-Duplex Flow Control IEEE 802.1p Class of Service IEEE 802.3az Energy Efficient Ethernet (EEE) IEEE 802.3an 10GBASE-T IEEE 802.3bz 5Gbps and 2.5Gbps Ethernet Over Copper Twisted Pair Cable IEEE 802.3ae 10-Gigabit Ethernet Over Fiber IEEE 802.3aq 10-Gigabit over Fiber (10GBASE-LRM) IEEE 802.3z Gigabit Ethernet 1000BASE-SX/LX	

	Wireless Adapter
Model	QWA-AC2600
Interface	PCI Express 2.0 x1
Network Standard	IEEE 802.11b/g/n 2.4 GHz IEEE 802.11a/n/ac 5 GHz
bandwidth	802.11a: up to 54 Mbps 802.11b: up to 11 Mbps 802.11g: up to 54 Mbps 802.11n: up to 800 Mbps 802.11ac: up to 1733 Mbps
Antenna	4 x Dual-band RP-SMA antennas
Operating Frequency	2.4 GHz / 5 GHz Dual-band dual-concurrent
Dimensions (H x W x D) mm	160 x 90.3 x 20.6 mm
OS Support	QTS 4.3.4 and WirelessAP Station 1.0

	10 GbE Network Expansion Cards
Model	QXG-10G1T (PC)
Transmission rates	10GBASE-T/5GBASE-T/2.5GBASE-T/1000BASE-T/100BASE-TX
Interface	PCIe 3.0 x 4
Supported operating systems	QTS 4.3.4 (or later), Windows, Linux
Supported QNAP NAS	models with PCIe expansion slot
Bracket	Low-profile bracket pre-installed; full-height and specialized (for selected QNAP NAS) brackets are included
Port and cable	RJ-45; Cat 6a cable recommended



QNAP SYSTEMS, INC.

TEL : +886-2-2641-2000 FAX: +886-2-2641-0555
Email: qnapsales@qnap.com
Address : 3F, No.22, Zhongxing Rd., Xizhi Dist., New Taipei City, 221, Taiwan

www.qnap.com

Netherlands (Warehouse Services)
Email: nlsales@qnap.com
TEL: +31(0)107600830

China
Email: cnsales@qnap.com
TEL: +86-400-028-0079

Thailand
Email: thsales@qnap.com
TEL: +66-2-5415988

Japan
Email: jpsales@qnap.com
FAX: 03-6435-9686

US
Email: usasales@qnap.com
TEL: +1-909-595-2782

India
Email: indiasales@qnap.com

Germany
Email: desales@qnap.com

France
Email: Frsales@qnap.com

P/N: 51000-024347-RS
201809 (EN)F

QNAP may make changes to specification and product descriptions at any time, without notice. Copyright © 2018 QNAP Systems, Inc. All rights reserved.

QNAP® and other names of QNAP Products are proprietary marks or registered trademarks of QNAP Systems, Inc. Other products and company names mentioned herein are trademarks of their respective holders.