



**Stay
one
step
ahead**

Product Selection Guide
2023

High-performance ZFS-based OS with greater reliability

QNAP's "QuTS hero" operating system combines the app-based QTS with a 128-bit ZFS file system to provide flexible storage management, comprehensive data protection and optimized performance to meet the needs of business-critical applications.

ZFS Efficient data reduction technology

Inline data deduplication is block-based and runs before data is written to storage. This greatly optimizes storage usage while significantly decreasing storage capacity requirements. Coupled with inline compression and inline compaction technologies, ZFS significantly reduces the overall storage footprint - especially helpful for increasing SSD storage efficiency when highly-repetitive data or massive small files are generated.

Near-limitless, instant snapshots

ZFS supports up to 65,535 snapshots for iSCSI LUN and shared folders to accomplish well-rounded snapshot versioning. If 1 snapshot is created every hour, 24 snapshots per day, then up to 7 years of snapshots can be created without needing to delete any!

Up to petabyte capacity per shared folder

The 128-bit ZFS filesystem has huge capacity potential and supports native handling of standard RAID levels and additional ZFS RAID layouts (RAID Z). ZFS-based QNAP storage solutions provide up to 1 PB capacity for individual shared folders, enabling enterprises to tackle storage-demanding applications



Real-time SnapSync

The advanced block-based real-time SnapSync ensures that the primary NAS and the secondary NAS always keep the same data, providing the strongest support for nonstop business operations and helping users remove the risk of data loss!

High-speed 25GbE networking

Enable lightning-fast throughput for bandwidth-demanding tasks such as virtualization, massive data transmission, and fast backup/restoration



25GbE-ready All-flash NAS

The TS-h3088XU-RP provides a built-in dual-port 25GbE SFP28 SmartNIC with the NVIDIA® Mellanox ConnectX-4 Lx SmartNIC controller that supports iSCSI Extensions for RDMA (iSER) to increase performance of data transfer between NAS and ESXi server and offload CPU workloads.



Affordable 25GbE managed switch

The QSW-M5216-1T is a 25GbE Layer 2 web managed switch that provides flexible network interfaces for high compatibility at an affordable price, enabling small businesses to quickly upgrade to an ultra-high-speed backbone network by integrating to existing network infrastructure.

10GbE connectivity: The future is now!

10GbE connectivity improves overall network performance and everyday tasks with ten times the bandwidth of 1GbE. By offering 10GbE-ready NAS, network adapters and switches, QNAP is a one-stop provider for everything you need to create your own 10GbE environment.



10GbE NAS solutions

QNAP provides a range of NAS with integrated hardware and software solutions that can make the most of the incredible bandwidth provided by 10GbE networks.

10GbE switches

QNAP's QSW Series 10GbE switches supports 10GBASE-T and NBASE-T standards, allowing you to take advantage of higher network speeds with existing Cat 5e and 6a cables. Both SFP+ (fiber) and RJ45 (copper) ports are available for servicing a range of network needs.

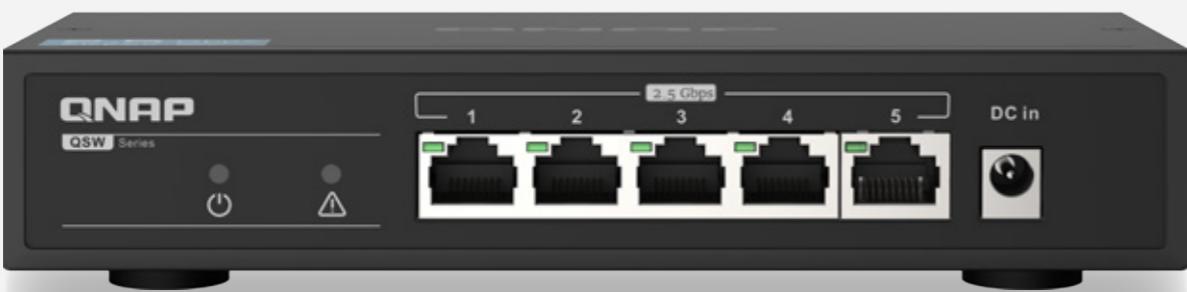


10GbE network adapters

QNAP provides 10GbE PCIe expansion card and Thunderbolt to 10GbE adapters to empower devices with 10GbE connectivity. The QM2 Expansion Card not only includes 10GbE connectivity, but also provides the ability to add M.2 SSDs to your workstation or NAS.

2.5GbE is not just for offices, but also for homes

The lack of consumer-grade switches has made it hard for home and personal users to adopt 2.5GbE/5GbE networking. QNAP now offers cost-effective multi-port switches that support 10G/5G/2.5G/1G/100M Ethernet, helping you to transform your home network at a wallet-friendly price.



2.5GbE switches

QNAP offers a 10GbE switch series supporting five speeds (10G / 5G / 2.5G / 1G / 100M) and a 2.5GbE switch series. With 2.5GbE ports, the QNAP switch can instantly upgrade your network to take advantage of 2.5GbE-enabled devices and NAS.



Works with existing cables

No special cables or connectors are required to take advantage of 2.5GbE. Simply use your existing CAT5e cables as normal with your new 2.5GbE infrastructure.



2.5 times faster

2.5GbE is 2.5 times faster than standard Ethernet (1GbE), increasing network performance to boost productivity.



More affordable

If you can't budget a 10GbE upgrade at this time, the more affordable 2.5GbE provides a notable improvement in current Ethernet speeds.



Breakthrough performance and outstanding connectivity with Thunderbolt NAS

QNAP offers the very best in connectivity with Thunderbolt™ NAS. Thunderbolt™ NAS is far superior in providing both the best in speed and versatility that non-Thunderbolt NAS cannot offer, video production professionals using QNAP Thunderbolt™ NAS enjoy efficient workflows, unprecedented speed, and incredible versatility.



Ultra-high speed transfer

Edit right off your NAS with blazing fast Thunderbolt™ 3 connectivity. With potential speeds of up to 40Gbps, connect your compatible Macs and other Thunderbolt™ 3 devices directly to the NAS and work unaffected by other network traffic.



Facilitate 10GbE workflows with Thunderbolt-to-Ethernet

The innovative T2E Converter bridges Thunderbolt and Ethernet networks, allowing Thunderbolt-enabled computers to connect to these networks via their Thunderbolt connection to the QNAP Thunderbolt NAS. This saves a 10GbE port and eliminates the need for extra adapters or network cards.



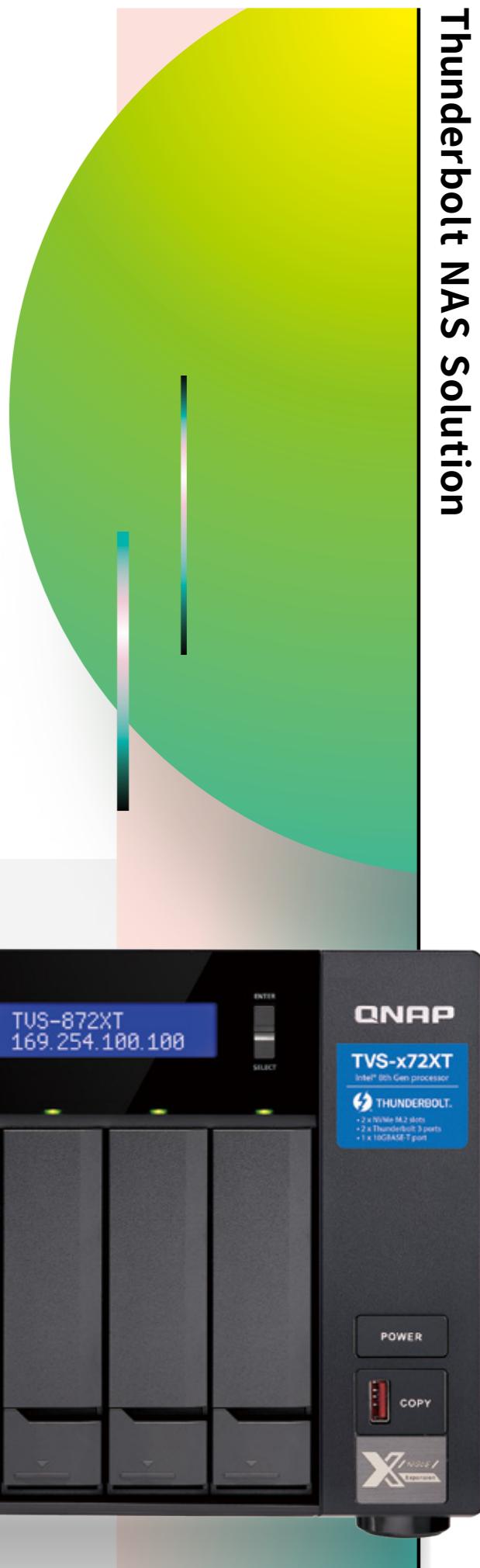
High availability with USB Type-C

The usage of USB Type-C by Thunderbolt 3 provides a universal connection from QNAP NAS to Thunderbolt devices as well as countless USB Type-C devices through a single cable, allowing file sharing and centralized data storage without the hassle of stringing multiple cables.



Collaboration station for Mac and Windows

The increased bandwidth of Thunderbolt 3 enables smooth video editing and faster file sharing for photographers, video editors and graphic designers. Up to 2 Thunderbolt™ devices can be connected to the QNAP Thunderbolt NAS to process real-time photo and audio editing simultaneously without impacting system performance.



Easily build your personal cloud and access anywhere

In contrast to the limited storage space and potential security issues with public cloud services, the QNAP NAS is advantageous for establishing a secure and large-capacity personal cloud.



An easy-to-use, all-in-one backup solution

The QNAP NAS can do many things, but at its heart is a complete backup solution to protect your files and data. By regularly backing up your files and device content, you can make data loss a thing of the past.



Greater multimedia enjoyment

The QNAP NAS comes with a wide range of media applications, including Photo Station, Video Station and Music Station, allowing you to easily manage and view your media files.



Easy and secure remote connection with myQNAPcloud

myQNAPcloud allows you to remain connected to your QNAP NAS using a unique domain name. No complex routing or configuration is required, and myQNAPcloud strengthens SSL Certificate keys to 2048-bits to enable secure remote access, management, and sharing files and check your system status from anywhere.



A secure backup center with snapshot protection

Snapshots are essential for NAS data protection, and their block-level feature makes it a dependable data protection method in the face of growing ransomware threats.



Connect to a TV or monitor with HDMI

With HDMI output, the QNAP NAS allows you to directly enjoy multimedia content, use web browsers, manage your NAS, or watch recorded surveillance footage or live feeds on your NAS.



ADRA Network Detection and Response (NDR) appliances

The QNAP ADRA series Network Detection and Response (NDR) appliances selectively screen network traffic and detect malware lateral movement, stopping hostile activities before data leakage and encryption can occur.



The rapid-screening ADRA NDR cybersecurity appliances

The ADRA NDR precisely pinpoint malware activities on your local network without impacting performance. The proprietary rapid-screening mechanism employed in the ADRA NDR detects potentially malicious activities based on a set of criteria and responds to these anomalies according to defined policies. This greatly improves the security of your network without impacting performance.



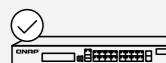
Threat detection

The ADRA NDR is equipped with deep analysis features that allow in-depth inspections for malware and vulnerability exploits. The ADRA NDR is also capable of simulating a threat trap for malware to initiate attacks. Once the malware becomes active, hostile behaviors will be detected by the cybersecurity appliance and actions will be taken.



Threat analysis

Once suspicious activities are captured by Threat Detection, network traffic packets are analyzed against a collection of rules to determine the attack type. Different detection events over time will be evaluated against each other to determine their relations as an additional criterion for evaluating associated risk levels.

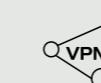


Threat response

Automatically isolate affected devices only to contain the malware attack to a smaller range, without shutting down the entire network. IT administrators can take a series of actions (such as isolating or temporarily allowing) to flexibly tackle operational needs.

QuWAN SD-WAN solution for resilient IT infrastructure

QNAP's QuWAN SD-WAN solution features Auto Mesh VPN, IPsec encryption and cloud-centric management. Compatible with a wide range of QNAP solutions, QuWAN enables SMBs to efficiently build a dependable network at a cost-effective price, and to facilitate digital transformation, multi-site expansion and remote working.



Auto mesh VPN

Automatically establishes a mesh VPN and removes the need for manual static VPN settings.



Cloud management

The QuWAN Orchestrator provides powerful and convenient central network management.



Network security

Adopts Deep Packet Inspection to analyze L7-Payloads for content information from websites and devices.



WAN optimization

QuWAN adopts load balancing technologies to combine the bandwidth of different ISPs and to prioritize bandwidth utilization.



Cost optimization

Optimizes fiber/network transmission to lower the cost of VPN equipment and bandwidth expenses.



Web GUI

Provides user-friendly functionality, including a dashboard, eMap, traffic analysis, and more.

Next-generation intelligent IP surveillance and remote backup solution

With the subscription-based QVR Elite smart surveillance solution you only pay for the channel licenses you need, allowing you to affordably safeguard your property. You can arrange a dedicated, independent storage space for surveillance data on the QNAP NAS and enjoy simplified camera management, storage space allocation, camera live viewing and playback. Recordings are saved as MP4 files for playback on nearly every device.

HDMI Direct monitoring on an HDMI display

Easily play recordings with a connected HDMI display using the QVR Smart Client. Search for event recordings within a time period and detection area specified in the user interface.



Leverage AI-based applications for value-added services

QVR Elite's surveillance footage can be processed by multiple QNAP AI-based video analytics applications (e.g. QVR Face, QVR Human, QVR DoorAccess) to empower your surveillance systems with smart door access, facial recognition, human counting capabilities and more.



QVR Pro Client: Centralized monitoring and management

QVR Pro Client enables you to monitor multiple channels simultaneously. Flexibly switch between live view and playback mode to easily fulfill centralized monitoring and management.



Records using the MP4 video format

QVR Elite records video files in the universally-supported MP4 format, allowing for smooth playback on all your devices. In addition, you can conveniently back up recordings to other QTS / QuTS hero NAS or Cloud storage space using Hybrid Backup Sync or HybridMount.



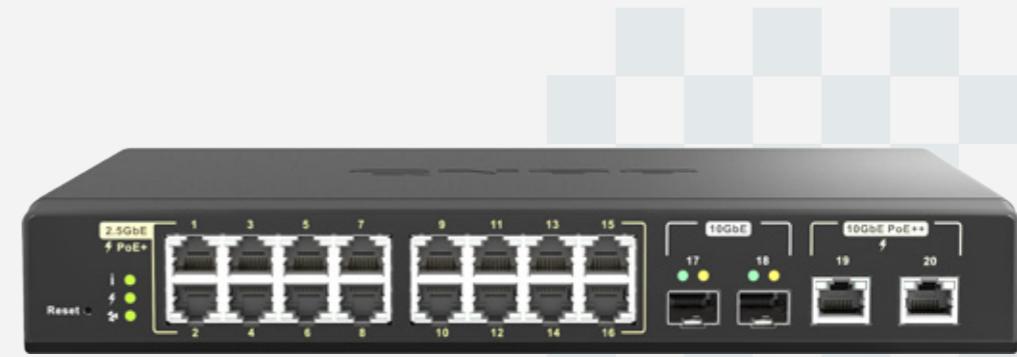
Easy capacity expansion

You can create multiple recording spaces for QVR Elite recordings. If you run out of storage space, you can easily expand your NAS storage by connecting to QNAP expansion enclosures.



Low cost: flexible subscription plan

QVR Elite is subscription-based, with monthly, yearly, and 3-year subscription plans. You can build a robust surveillance system with a low-cost monthly price of US \$1.99 per channel. You can alter the subscription based on your needs to reach higher cost efficiency.



QNAP Product Lineup

Dual Controller



ES1686dc ES2486dc

All flash NAS



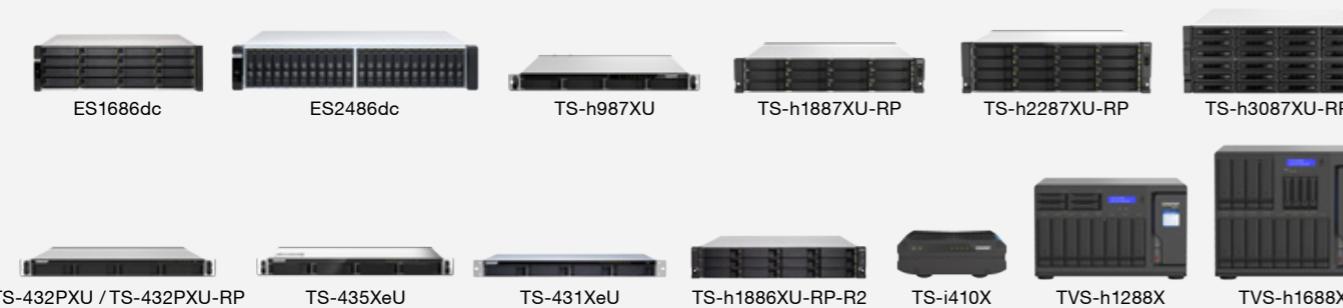
TS-h3077AFU TS-h3088XU-RP TS-h2490FU TS-h1090FU TDS-h2489FU TS-h1290FX

25GbE NAS Solution



TS-h3088XU-RP TS-h2490FU TDS-h2489FU TS-h1090FU TS-h1290FX

10GbE NAS Solution

ES1686dc ES2486dc TS-h987XU TS-h1887XU-RP TS-h2287XU-RP TS-h3087XU-RP
TS-432PXU / TS-432PXU-RP TS-435XeU TS-431XeU TS-h1886XU-RP-R2 TS-i410X TVS-h1288X TVS-h1688X

2.5GbE NAS Solution

TS-464U / TS-464U-RP TS-1264U-RP TS-873AeU TS-855eU / TS-855eU-RP TS-864eU TS-464eU
TS-410E TS-253E TS-453E TS-h686 TS-h886 TVS-h474 TVS-h674 TVS-h874 TVS-h674T TVS-h874T

Thunderbolt NAS Solution



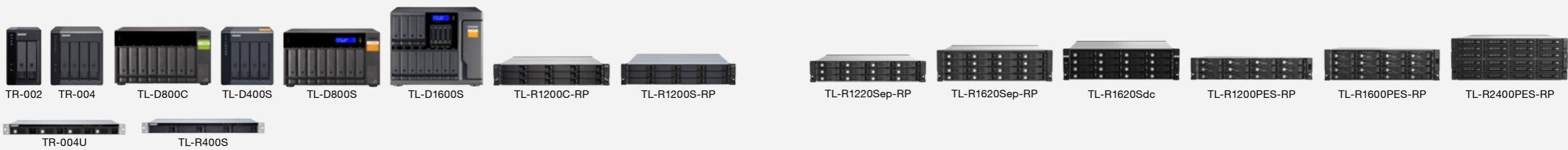
TVS-h1288X TVS-h1688X TVS-472XT TVS-672XT TVS-872XT TVS-h674T TBS-574TX

Personal Cloud



TS-431K TS-364 TS-262 TS-462 TS-133 TS-233 TS-433 HS-453DX HS-264 TBS-464

External Enclosures (DAS)



Managed & Unmanaged Switch Series



Router



Surveillance & Smart Video



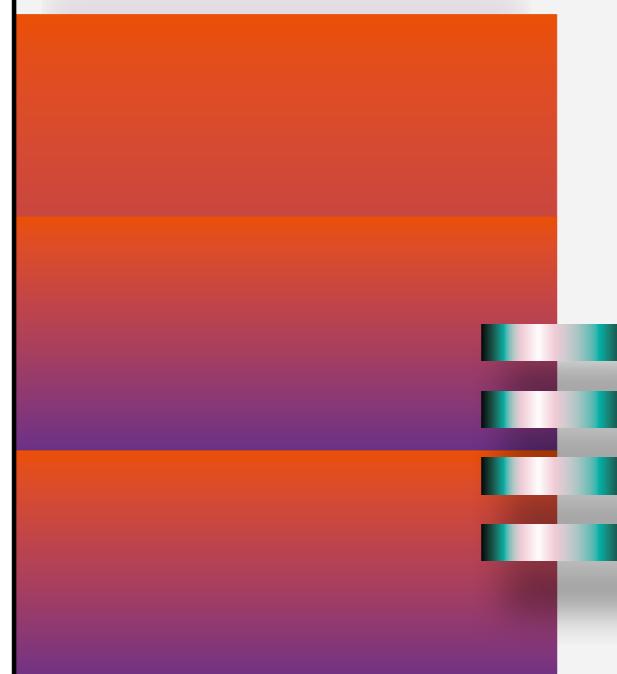
SD-WAN & ADRA Solution



Accessories



High-performance ZFS-based OS with greater reliability

**ES1686dc**

Model	ES1686dc-2142IT-128G	ES1686dc-2142IT-96G	ES1686dc-2123IT-64G
Operating System	QES		
CPU	Intel® Xeon® D-2142IT 8-core 1.90 GHz processor (burst up to 3.0 GHz) per controller	Intel® Xeon® D-2123IT 4-core 2.20 GHz processor (burst up to 3.0 GHz) per controller	
System Memory	64 GB RDIMM DDR4 ECC (4 x 16 GB) per controller max 512 GB	48 GB RDIMM DDR4 ECC (4 x 4 GB+4 x 8GB) per controller max 512 GB	32 GB RDIMM DDR4 ECC (4x 8 GB) per controller max 512 GB
Drive Bay	16 x 3.5-inch SAS 12Gb/s, backward-compatible to SAS 6Gb/s		
M.2 Slot	-		
Gigabit Ethernet Port (RJ45)	3 for each controller (one for remote management)		
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	-		
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-		
10 Gigabit Ethernet Port	4 x 10GbE SFP+ for each controller		
25 Gigabit Ethernet Port	-		
PCIe Slot	2 Slot 1: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU)		
USB 3.2 Gen 1 port	2 per each controller		
HDMI Output	-		
Dimensions (HxWxD mm)	132 x 483.05 x 630.62		

ES2486dc

Model	ES2486dc-2142IT-128G	ES2486dc-2142IT-96G
Operating System	QES	
CPU	Intel® Xeon® D-2142IT 8-core 1.90 GHz processor, up to 3.0 GHz	
System Memory	64 GB RDIMM DDR4 ECC (4 x 16 GB) per controller max 512 GB	48 GB RDIMM DDR4 ECC (4 x 4 GB+4 x 8GB) per controller max 512 GB
Drive Bay	24 x 2.5-inch SAS 12Gb/s, backward-compatible to SAS 6Gb/s	
M.2 Slot	-	
Gigabit Ethernet Port (RJ45)	3 for each controller (one for remote management)	
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	-	
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-	
10 Gigabit Ethernet Port	4 x 10GbE SFP+ for each controller	
25 Gigabit Ethernet Port	-	
PCIe Slot	2 Slot 1: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU)	
USB 3.2 Gen 1 port	2 per each controller	
HDMI Output	-	
Dimensions (HxWxD mm)	88.3 x 483 x 545.1	

All flash storage.
ultimate performance



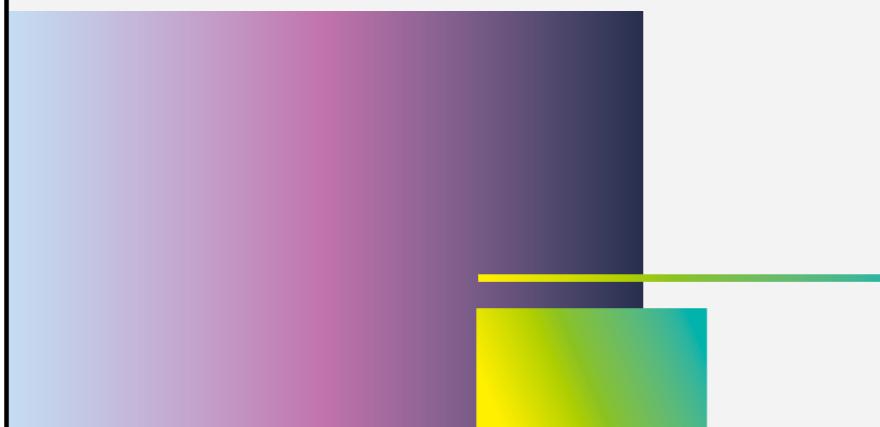
TDS-h2489FU		
		
Model	TDS-h2489FU-4314-1TB (By Request)	TDS-h2489FU-4314-512G (By Request)
Operating System	QTS / QuTS hero	
CPU	2 x Intel® Xeon® Silver 4314 16-core/32-thread processor, up to 3.4 GHz	
System Memory	1 TB RDIMM DDR4 ECC (32 x 32 GB) max 1 TB	512 GB RDIMM DDR4 ECC (16 x 32 GB) max 1 TB
Memory Slot	32 x RDIMM DDR4 ECC (16 x slots per socket)	
Drive Bay	24 x 2.5-inch	
M.2 Slot	2 Slot 1: M.2 2280 NVMe PCIe Gen 3 x4 or SATA 6Gb/s Slot 2: M.2 2280 NVMe PCIe Gen 3 x2 or SATA 6Gb/s	
Gigabit Ethernet Port (RJ45)	-	
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	4 (2.5G/1G/100M/10M)	
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	
10 Gigabit Ethernet Port	Optional via a PCIe adapter	
25 Gigabit Ethernet Port	2 x 25GbE SFP28 SmartNIC port	
PCIe Slot	2 Slot 1: PCIe Gen4 x16 Slot 2: PCIe Gen4 x8	
USB	4 x USB 3.2 Gen 1	
HDMI Output	-	
Dimensions (HxDxW mm)	88.3 x 446.2 x 713.2	

TDS-h2489FU		
		
Model	TDS-h2489FU-4314-128G	TDS-h2489FU-4309Y-64G
Operating System	QTS / QuTS hero	
CPU	2 x Intel® Xeon® Silver 4314 16-core/32-thread processor, up to 3.4 GHz	2 x Intel® Xeon® Silver 4309Y 8-core/16-thread processor, up to 3.6 GHz
System Memory	128 GB RDIMM DDR4 ECC (8 x 16 GB) max 1 TB	64 GB RDIMM DDR4 ECC (8 x 8 GB) max 1 TB
Memory Slot	32 x RDIMM DDR4 ECC (16 x slots per socket)	
Drive Bay	24 x 2.5-inch	
M.2 Slot	2 Slot 1: M.2 2280 NVMe PCIe Gen 3 x4 or SATA 6Gb/s Slot 2: M.2 2280 NVMe PCIe Gen 3 x2 or SATA 6Gb/s	
Gigabit Ethernet Port (RJ45)	-	
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	4 (2.5G/1G/100M/10M)	
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	
10 Gigabit Ethernet Port	Optional via a PCIe adapter	
25 Gigabit Ethernet Port	2 x 25GbE SFP28 SmartNIC port	
PCIe Slot	2 Slot 1: PCIe Gen4 x16 Slot 2: PCIe Gen4 x8	
USB	4 x USB 3.2 Gen 1	
HDMI Output	-	
Dimensions (HxDxW mm)	88.3 x 446.2 x 713.2	

TS-h3088XU-RP		TS-h2490FU	
			
Model	TS-h3088XU-RP-W1270-64G	TS-h3088XU-RP-W1250-32G	TS-h2490FU-7302P-128G
Operating System	QTS / QuTS hero	QTS / QuTS hero	QTS / QuTS hero
CPU	Intel® Xeon® W-1270 8-core/16-thread processor, up to 5.0 GHz	Intel® Xeon® W-1250 6-core/12-thread processor, up to 4.7 GHz	AMD EPYC™ 7302P 16-core/32-thread processor, up to 3.3 GHz
System Memory	64 GB UDIMM DDR4 ECC (4 x 16 GB) max 128 GB	32 GB UDIMM DDR4 ECC (2 x 16 GB) max 128 GB	128 GB RDIMM DDR4 ECC (8 x 16 GB) max 1 TB
Drive Bay	Front: 24 x 2.5-inch SATA 6Gb/s, 3Gb/s Rear: 6 x 2.5-inch SATA 6Gb/s, 3Gb/s		24 x 2.5-inch U.2 PCIe NVMe
M.2 Slot	-		-
Gigabit Ethernet Port (RJ45)	-		-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	4		2 (also support 10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter		-
10 Gigabit Ethernet Port	Optional via a PCIe adapter		-
25 Gigabit Ethernet Port	2 x 25GbE SFP28 SmartNIC port	4 x 25GbE SFP28 SmartNIC port	2 x 25GbE SFP28 SmartNIC port
PCIe Slot	3 Slot 1: PCIe Gen3 x8 or x4 Slot 2: PCIe Gen3 x4 Slot 3: PCIe Gen3 x4	5 Slot 1: PCIe Gen4 x4 Slot 2: PCIe Gen4 x8 or x4 Slot 3: PCIe Gen4 x4 Slot 4: PCIe Gen4 x8 Slot 5: PCIe Gen4 x16 or x8	5 Slot 1: PCIe Gen4 x4 Slot 2: PCIe Gen4 x8 or x4 Slot 3: PCIe Gen4 x4 Slot 4: PCIe Gen4 x8 Slot 5: PCIe Gen4 x16 or x8
USBt	2 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps		-
HDMI Output	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)		-
Dimensions (HxDxW mm)	88.3 x 481.07 x 515.02		88.3 x 480.97 x 510.23

TS-h1090FU		TS-h1290FX	
			
Model	TS-h1090FU-7302P-256G (By Request)	TS-h1090FU-7302P-128G	TS-h1290FX-7302P-128G
Operating System	QTS / QuTS hero		QTS / QuTS hero
CPU	AMD EPYC™ 7302P 16-core/32-thread processor, up to 3.3 GHz	AMD EPYC™ 7232P/7252 8-core/16-thread processor, up to 3.2 GHz	AMD EPYC™ 7302P 16-core/32-thread processor, up to 3.3 GHz
System Memory	256 GB RDIMM DDR4 ECC (8 x 32 GB) max 1 TB	128 GB RDIMM DDR4 ECC (8 x 16 GB) max 1 TB	64 GB RDIMM DDR4 ECC (8 x 8 GB) max 1 TB
Drive Bay	10 x 2.5-inch U.2 PCIe NVMe / SATA 6Gbps		12 x 2.5-inch
M.2 Slot	-		-
Gigabit Ethernet Port (RJ45)	-		-
2.5 Gigabit Ethernet Port (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)		2 (2.5G/1G/100M/10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter		Optional via a PCIe adapter
10 Gigabit Ethernet Port	Optional via a PCIe adapter		Optional via a PCIe adapter
25 Gigabit Ethernet Port	2 x 25GbE SFP28 SmartNIC port		2 x 25GbE SFP28 SmartNIC port
PCIe Slot	2 Slot 1: PCIe Gen4 x16 Slot 2: PCIe Gen4 x16 For low profile PCIe cards only.		4 Slot 1: PCIe Gen 4 x16 Slot 2: PCIe Gen 4 x16 Slot 3: PCIe Gen 4 x8 Slot 4: PCIe Gen 4 x16
USB	3 x USB 3.2 Gen 1		3 x USB 3.2 Gen 1
HDMI Output	-		-
Dimensions (HxDxW mm)	44 x 430 x 580		150 x 368 x 362

10GbE connectivity: The future is now!



	TVS-h1288X	TVS-h1688X
		
Model	TVS-h1288X-W1250-16G	TVS-h1688X-W1250-32G
Operating System	QTS / QuTS hero	QTS / QuTS hero
CPU	Intel® Xeon® W-1250 6-core/12-thread processor, up to 4.7 GHz	Intel® Xeon® W-1250 6-core/12-thread processor, up to 4.7 GHz
System Memory	16 GB ECC UDIMM DDR4 (2 x 8 GB) max 128 GB	32GB ECC UDIMM DDR4 (2 x 16 GB) max 128 GB
Drive Bay	8 x 3.5-inch SATA 6Gb/s, 3Gb/s + 4 x 2.5-inch SATA 6Gb/s, 3Gb/s	12 x 3.5-inch SATA 6Gb/s, 3Gb/s + 4 x 2.5-inch SATA 6Gb/s, 3Gb/s
M.2 slot	2 x M.2 22110/2280 NVMe PCIe Gen3 x4 slots	2 x M.2 22110/2280 NVMe PCIe Gen3 x4 slots
Gigabit Ethernet Port (RJ45)	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	4 (also support 10M)	4 (also support 10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter
10 Gigabit Ethernet Port	2 x 10GBASE-T (10G/1G)	2 x 10GBASE-T (10G/1G)
25 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter
Thunderbolt Port	Optional via the QXP-T32P 2-port Thunderbolt 3 PCIe adapter	Optional via the QXP-T32P 2-port Thunderbolt 3 PCIe adapter
PCIe Slot	3 Slot 1: PCIe Gen3 x8 Slot 2: PCIe Gen3 x4 Slot 3: PCIe Gen3 x4	3 Slot 1: PCIe Gen3 x8 Slot 2: PCIe Gen3 x4 Slot 3: PCIe Gen3 x4
USB	2 x Type-C 3 x USB 3.2 Gen 1 3 x Type-A 3 x USB 3.2 Gen 1	2 x Type-C 3 x USB 3.2 Gen 1 4 x Type-A 3 x USB 3.2 Gen 1
HDMI Output	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)
Dimensions (HxWxD mm)	234.6 x 369.9 x 319.8	303.84 x 369.89 x 319.8

	TS-855X	TS-i410X
		
Model	TS-855X-8G	TS-i410X-8G
Operating System	QTS / QuTS hero	QTS
CPU	Intel® Atom® C5125 8-core processor, 2.8GHz	Intel® Atom® x6425E 4-core/4-thread processor, burst up to 3.0 GHz
System Memory	8 GB non-ECC UDIMM DDR4 (1 x 8 GB) max 128 GB	8 GB on board (non-expandable)
Drive Bay	6 x 3.5-inch + 2 x 2.5-inch SATA 6Gb/s, 3Gb/s	4 x 2.5-inch SATA 6Gb/s, 3Gb/s
M.2 slot	2 x M.2 2280 PCIe Gen 3 x4 slots	-
Gigabit Ethernet Port (RJ45)	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	-
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-	-
10 Gigabit Ethernet Port	1 x 10GBASE-T	2 x 10GBASE-T (10G/5G/2.5G/1G)
25 Gigabit Ethernet Port	Optional via PCIe expansion card	-
Thunderbolt Port	-	-
PCIe Slot	2 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x4	-
USB	1 x USB 2.0 3 x USB 3.2 Gen 1	4 x USB 3.2 Gen 1
HDMI Output	-	-
Dimensions (HxWxD mm)	231.9 x 292.9 x 319.8	44 x 439 x 291

TS-h1277XU-RP		TS-h1677XU-RP		TS-h2477XU-RP		TS-1232PXU-RP	
							
Model	TS-h1277XU-RP-3700X-128G	TS-h1277XU-RP-3700X-32G	TS-h1677XU-RP-3700X-32G		TS-h2477XU-RP-3700X-32G		TS-1232PXU-RP-4G
Operating System	QTS / QuTS hero		QTS / QuTS hero		QTS / QuTS hero		QTS
CPU	AMD Ryzen™ 7 3700X 8-core/ 16-thread processor, burst up to 4.4 GHz	AMD Ryzen™ 7 3700X 8-core/ 16-thread processor, burst up to 4.4 GHz	AMD Ryzen™ 7 3700X 8-core/16-thread processor, burst up to 4.4 GHz		AMD Ryzen™ 7 3700X 8-core/16-thread processor, burst up to 4.4 GHz		AnnapurnaLabs Alpine AL324 64-bit ARM® Cortex-A57 quad-core 1.7GHz processor
System Memory	128 GB UDIMM DDR4 (4 x 32GB) max 128 GB	32 GB UDIMM DDR4 (2 x 16GB) max 128 GB	32 GB UDIMM DDR4 (2 x 16GB) max 128 GB		32 GB UDIMM DDR4 (2 x 16GB) max 128 GB		4 GB UDIMM DDR4 (1 x 4 GB) max 16 GB
Drive Bay	12 x 3.5-inch SATA 6Gb/s, 3Gb/s		16 x 3.5-inch SATA 6Gb/s, 3Gb/s		24 x 3.5-inch SATA 6Gb/s, 3Gb/s		12 x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 slot	-		-		-		Optional via a PCIe adapter
Gigabit Ethernet Port (RJ45)	2		2		2		-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter		2 (also support 10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter		-
10 Gigabit Ethernet Port	2 x 10GbE SFP+ SmartNIC port, 2 x 10GbBase-T port		2 x 10GbE SFP+ SmartNIC port		2 x 10GbE SFP+ SmartNIC port		2 x 10GbE SFP+
25 Gigabit Ethernet Port	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter		-
PCIe Slot	4 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x8 or PCIe Gen 3 x4 Slot 3: PCIe Gen 3 x4 Slot 4: PCIe Gen 3 x8 or PCIe Gen 3 x4		4 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x8 or PCIe Gen 3 x4 Slot 3: PCIe Gen 3 x4 Slot 4: PCIe Gen 3 x8 or PCIe Gen 3 x4		4 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x8 or PCIe Gen 3 x4 Slot 3: PCIe Gen 3 x8 or PCIe Gen 3 x4 Slot 4: PCIe Gen 3 x4		1 Slot 1: PCIe Gen 2 x2
USB port	4 x USB 3.2 Gen 1 1 x Type-C USB 3.2 Gen 2 10Gbps 1 x Type-A USB 3.2 Gen 2 10Gbps		4 x USB 3.2 Gen 1 1 x Type-C USB 3.2 Gen 2 10Gbps 1 x Type-A USB 3.2 Gen 2 10Gbps		4 x USB 3.2 Gen 1 1 x Type-C USB 3.2 Gen 2 10Gbps 1 x Type-A USB 3.2 Gen 2 10Gbps		4 x USB 3.2 Gen 1
HDMI Output	-		-		-		-
Dimensions (HxWxD mm)	88.3 x 482 x 562		130 x 481 x 573.5		176.15 x 481.04 x 672.02		89 x 482 x 534

TS-832PXU-RP		TS-832PXU		TS-432PXU-RP		TS-432PXU	
							
Model	TS-832PXU-RP-4G		TS-832PXU-4G		TS-432PXU-RP-2G		TS-432PXU-2G
Operating System	QTS		QTS		QTS		QTS
CPU	AnnapurnaLabs Alpine AL324 64-bit ARM® Cortex-A57 quad-core 1.7GHz processor		AnnapurnaLabs Alpine AL324 64-bit ARM® Cortex-A57 quad-core 1.7GHz processor		AnnapurnaLabs Alpine AL324 64-bit ARM® Cortex-A57 quad-core 1.7GHz processor		AnnapurnaLabs Alpine AL324 64-bit ARM® Cortex-A57 quad-core 1.7GHz processor
System Memory	4 GB UDIMM DDR4 (1 x 4 GB) max 16 GB		4 GB UDIMM DDR4 (1 x 4 GB) max 16 GB		2 GB UDIMM DDR4 (1 x 2 GB) max 16 GB		2 GB UDIMM DDR4 (1 x 2 GB) max 16 GB
Drive Bay	8 x 3.5-inch SATA 6Gb/s, 3Gb/s		8 x 3.5-inch SATA 6Gb/s, 3Gb/s		4 x 3.5" SATA 6Gb/s, 3Gb/s		4 x 3.5" SATA 6Gb/s, 3Gb/s
M.2 slot	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter
Gigabit Ethernet Port (RJ45)	-		-		-		-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (also support 10M)		2 (also support 10M)		2 (also support 10M)		2 (also support 10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-		-		-		-
10 Gigabit Ethernet Port	2 x 10GbE SFP+		2 x 10GbE SFP+		2 x 10GbE SFP+		2 x 10GbE SFP+
25 Gigabit Ethernet Port	-		-		-		-
PCIe Slot	1 Slot 1: PCIe Gen 2 x2		1 Slot 1: PCIe Gen 2 x2		1 Slot 1: PCIe Gen 2 x2		1 Slot 1: PCIe Gen 2 x2
USB port	4 x USB 3.2 Gen 1		4 x USB 3.2 Gen 1		4 x USB 3.2 Gen 1		4 x USB 3.2 Gen 1
HDMI Output	-		-		-		-
Dimensions (HxWxD mm)	89 x 482 x 534		89 x 482 x 534		44 x 439 x 499		44 x 439 x 499

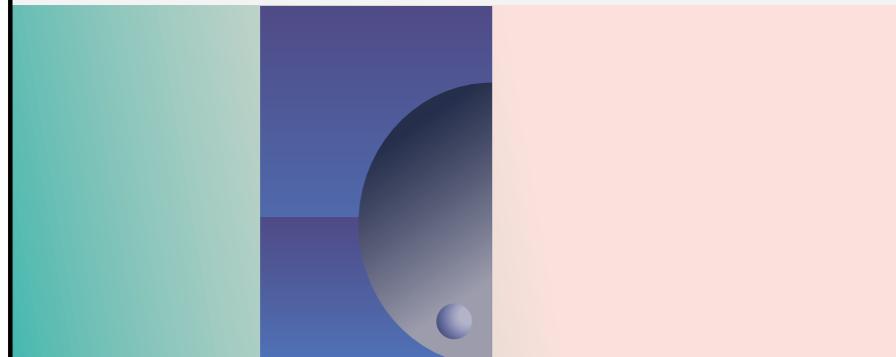
	TS-877XU-RP	TS-h1886XU-RP R2	TVS-472XT	TVS-672XT	TVS-872XT
					
Model	TS-877XU-RP-3600-8G	TS-h1886XU-RP-R2-D1622-32G	TVS-472XT-i3-4G	TVS-672XT-i3-8G	TVS-872XT-i5-16G
Operating System	QTS	QTS / QuTS hero	QTS / QuTS hero	QTS / QuTS hero	QTS / QuTS hero
CPU	AMD Ryzen™ 5 3600 6-core/12-thread processor, burst up to 4.2 GHz	Intel® Xeon® D-1622 4-core processor, burst up to 3.2 GHz	Intel® Core™ i3-8100T 4-core/4-thread 3.1 GHz Processor	Intel® Core™ i3-8100T 4-core/4-thread 3.1 GHz Processor	Intel® Core™ i5-8400T 6-core/6-thread Processor, burst up to 3.3 GHz
System Memory	8 GB UDIMM DDR4 (2 x 4GB) max 128 GB	32 GB UDIMM DDR4 ECC (2 x 16GB)	4 GB SODIMM DDR4 (1 x 4 GB) max 64 GB	8 GB SODIMM DDR4 (2 x 4 GB) max 64 GB	16 GB SODIMM DDR4 (2 x 8 GB) max 64 GB
Drive Bay	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	Front: 12 x 3.5-inch SATA 6Gb/s, 3Gb/s Rear: 6 x 2.5-inch SATA 6Gb/s, 3Gb/s	4 x 3.5-inch SATA 6Gb/s, 3Gb/s	6 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 slot	-		2 x M.2 2280 PCIe Gen3 x2 slots	2 x M.2 2280 PCIe Gen3 x2 slots	2 x M.2 2280 PCIe Gen3 x2 slots
Gigabit Ethernet Port (RJ45)	2		2	2	2
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	Optional via a PCIe adapter	4 (2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
10 Gigabit Ethernet Port	2 x 10GbE SFP+ SmartNIC port Pre-installed with a 10GbE PCIe adapter	2 x 10GbE SFP+ SmartNIC port Pre-installed with a 10GbE PCIe adapter	1 x 10GBASE-T (10G/5G/2.5G/1G/100M)	1 x 10GBASE-T (10G/5G/2.5G/1G/100M)	1 x 10GBASE-T (10G/5G/2.5G/1G/100M)
25 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
Thunderbolt Port	-	-	2 (Thunderbolt™ 3)	2 (Thunderbolt™ 3)	2 (Thunderbolt™ 3)
PCIe Slot	4 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x8 or PCIe Gen 3 x4 Slot 3: PCIe Gen 3 x4 Slot 4: PCIe Gen 3 x8 or PCIe Gen 3 x4	3 Slot 1: PCIe Gen 2 x4 (x8 Slot) Slot 2: PCIe Gen 3 x4 Slot 3: PCIe Gen 3 x8 or x4 (x8 Slot)	2 Slot 1: PCIe Gen 3 x16 (CPU) Slot 2: PCIe Gen 3 x4 (PCH) Slot 1 is preinstalled with a Thunderbolt 3 adapter	2 Slot 1: PCIe Gen 3 x16 (CPU) Slot 2: PCIe Gen 3 x4 (PCH) Slot 1 is preinstalled with a Thunderbolt 3 adapter	2 Slot 1: PCIe Gen 3 x16 (CPU) Slot 2: PCIe Gen 3 x4 (PCH) Slot 1 is preinstalled with a Thunderbolt 3 adapter
USB Port	4 x USB 3.2 Gen 1 1 x Type-C USB 3.2 Gen 2 10Gbps 1 x Type-A USB 3.2 Gen 2 10Gbps	2 x USB 3.2 Gen 1	1 x USB 3.2 Gen 1 2 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x USB 3.2 Gen 1 2 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x USB 3.2 Gen 1 2 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps
HDMI Output	Optional via a PCIe adapter	-	1, HDMI 2.0 (up to 3840 x 2160 @ 60Hz)	1, HDMI 2.0 (up to 3840 x 2160 @ 60Hz)	1, HDMI 2.0 (up to 3840 x 2160 @ 60Hz)
Dimensions (HxWxD mm)	88.3 x 482 x 562	88.3 x 482 x 549.7	188.2 x 199.3 x 279.6	188.2 x 264.3 x 279.6	188.2 x 329.3 x 279.6

	TS-431KX	TS-431X3	TS-932PX	TS-832PX
				
Model	TS-431KX-2G	TS-431X3-4G	TS-932PX-4G	TS-832PX-4G
Operating System	QTS	QTS	QTS	QTS
CPU	AnnapurnaLabs, an Amazon company Alpine AL214, 4-core, 1.7GHz	AnnapurnaLabs, an Amazon company Alpine AL314, 4-core, 1.7GHz	AnnapurnaLabs Alpine AL324 ARM® Cortex-A57 quad-core 1.7GHz processor	AnnapurnaLabs Alpine AL324 ARM® Cortex-A57 quad-core 1.7GHz processor
System Memory	2 GB SODIMM DDR3 (1 x 2 GB) max 8 GB	4 GB SODIMM DDR3 (1 x 4 GB) max 8 GB	4 GB SODIMM DDR4 (1 x 4 GB) max 16 GB	4 GB SODIMM DDR4(1 x 4 GB) max 16 GB
Drive Bay	4x 3.5-inch SATA 6Gb/s, 3Gb/s	4x 3.5-inch SATA 6Gb/s, 3Gb/s	5x 3.5-inch + 4 x 2.5-inch SATA 6Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 slot	-	-	-	Optional via a PCIe adapter
Gigabit Ethernet Port (RJ45)	2	1	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	-	1	2 (also support 10M)	2 (also support 10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-	-	-	-
10 Gigabit Ethernet Port	1 x 10GbE SFP+	1 x 10GbE SFP+	2 x 10GbE SFP+	2 x 10GbE SFP+
25 Gigabit Ethernet Port	-	-	-	-
PCIe Slot	-	-	-	1 Slot 1: PCIe Gen 2 x2
USB port	3 x USB 3.2 Gen 1	3 x USB 3.2 Gen 1	3 x USB 3.2 Gen 1	3 x USB 3.2 Gen 1
HDMI Output	-	-	-	-
Dimensions (HxWxD mm)	169 x 160 x 219	169 x 160 x 219	182.7 x 224.6 x 224.1	188.2 x 329.3 x 280.8

	TS-h987XU-RP	TS-h1887XU-RP		TS-h2287XU-RP		TS-h3087XU-RP
						
Model	TS-h987XU-RP-E2334-16G	TS-h1887XU-RP-E2334-16G	TS-h1887XU-RP-E2336-32G	TS-h2287XU-RP-E2336-32G	TS-h2287XU-RP-E2378-64G	TS-h3087XU-RP-E2378-64G
Operating System	QTS / QuTS hero		QTS / QuTS hero		QTS / QuTS hero	QTS / QuTS hero
CPU	Intel® Xeon® E-2334 4C 8T 3.4GHz, up to 4.8GHz	Intel® Xeon® E-2334 4C 8T 3.4GHz, up to 4.8GHz	Intel® Xeon® E-2336 6C 12T 2.9GHz, up to 4.8GHz	Intel® Xeon® E-2336 6C 12T 2.9GHz, up to 4.8GHz	Intel® Xeon® E-2378 8C 16T 2.6GHz, up to 4.8GHz	Intel® Xeon® E-2378 8C 16T 2.6GHz, up to 4.8GHz
System Memory	16 GB ECC DDR4 (1 x 16 GB) max 128 GB	16 GB ECC DDR4 (1 x 16 GB) max 128 GB	32 GB ECC DDR4 (2 x 16 GB) max 128 GB	32 GB ECC DDR4 (2 x 16 GB) max 128 GB	64 GB ECC DDR4 (4 x 16 GB) max 128 GB	64 GB ECC DDR4 (4 x 16 GB) max 128 GB
Memory Slot	4 x Long-DIMM DDR4		4 x Long-DIMM DDR4		4 x Long-DIMM DDR4.	4 x Long-DIMM DDR4
Drive Bay	9 (4 x 3.5-inch SATA + 5 x 2.5-inch U.2 PCIe / SATA) 2.5-inch bays:		18 (12 x 3.5-inch SATA + 6 x 2.5-inch SATA)		22 (16 x 3.5-inch SATA + 6 x 2.5-inch SATA)	30 (24 x 3.5-inch SATA + 6 x 2.5-inch SATA)
M.2 Slot	Optional via a QM2 PCIe adapter	Optional via a QM2 PCIe adapter	Optional via a QM2 PCIe adapter		Optional via a QM2 PCIe adapter	Optional via a QM2 PCIe adapter
SSD Cache Acceleration Support	Yes		Yes		Yes	Yes
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M)		2 (2.5G/1G/100M)		2 (2.5G/1G/100M)	2 (2.5G/1G/100M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter	Optional via a PCIe adapter
10 Gigabit Ethernet Port	2 x 10GBASE-T (10G/5G/2.5G/1G/100M)		2 x 10GBASE-T (10G/5G/2.5G/1G/100M)		2 x 10GBASE-T (10G/5G/2.5G/1G/100M)	2 x 10GBASE-T (10G/5G/2.5G/1G/100M)
25 Gigabit Ethernet Port	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter	Optional via a PCIe adapter
PCIe Slot	1 x Gen4 x8		3 (2 x Gen4 x4 + 1 x Gen 4 x8)		3 (2 x Gen4 x4 + 1 x Gen 4 x8)	3 (2 x Gen4 x4 + 1 x Gen 4 x8)
USB	4 x Type-A USB 3.2 Gen 2 5V/1A 10Gbps		4 x Type-A USB 3.2 Gen 2 5V/1A 10Gbps		4 x Type-A USB 3.2 Gen 2 5V/1A 10Gbps	4 x Type-A USB 3.2 Gen 2 5V/1A 10Gbps
HDMI Output	-		Optional via a PCIe adapter		Optional via a PCIe adapter	Optional via a PCIe adapter
Dimensions (HxDxW mm)	43.3 x 430 x 479		88.6 x 432 x 511.2		131.3 x 482.2 x 550.8	176.2 x 441.6 x 630.2

	TS-431XeU	TS-435XeU		TS-h973AX
				
Model	TS-431XeU-2G	TS-431XeU-8G	TS-435XeU-4G	TS-h973AX-32G
Operating System	QTS		QTS	QTS / QuTS hero
CPU	AnnapurnaLabs Alpine AL314 32-bit ARM® Cortex-A15 quad-core 1.7GHz processor	Marvell OCTEON TX2™ CN9130 / CN9131 ARMv8 Cortex-A72 4-core 2.2GHz processor		AMD Ryzen™ Embedded V1500B 4-core/8-thread 2.2 GHz processor
System Memory	2 GB SODIMM DDR3 (1 x 2 GB) max 8 GB	8 GB SODIMM DDR3 (1 x 8 GB) max 8 GB	4 GB SODIMM DDR4 (1 x 4GB) max 32 GB	32 GB SO-DIMM DDR4 (2 x 16 GB) max 64 GB
Drive Bay	4 x 3.5-inch SATA 6Gb/s, 3Gb/s		4 x 3.5-inch SATA 6Gb/s, 3Gb/s	5 x 3.5-inch + 4 x 2.5-inch
M.2 slot	-		2 x M.2 2280 PCIe Gen 3 x1 slots	-
Gigabit Ethernet Port (RJ45)	2		-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	-		2 (2.5G/1G/100M)	2
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-		-	Optional via the QNA-UC5G1T USB to 5GbE network adapter
10 Gigabit Ethernet Port	1 x 10GbE SFP+		2 x 10GbE SFP+	1 x 10GBASE-T (10G/5G/2.5G/1G/100M)
25 Gigabit Ethernet Port	-		-	-
Thunderbolt Port	-		-	-
PCIe Slot	-		2	1 x Type-C USB 3.2 Gen 2 3 x Type-A USB 3.2 Gen 2
USB	4 x USB 3.2 Gen 1		2 x USB 2.0	-
HDMI Output	-		-	182.65 x 224.6 x 224.1
Dimensions (HxDxW mm)	44 x 439 x 291		43.3 x 430 x 292.12	43.3 x 430 x 292.12

2.5GbE is not just
for offices,
but also for homes



TS-1273AU-RP



TS-1673AU-RP



Model	TS-1273AU-RP-8G	TS-1673AU-RP-16G
Operating System	QTS / QuTS hero	QTS / QuTS hero
CPU	AMD Ryzen™ Embedded V1500B 4-core/8-thread 2.2 GHz processor	AMD Ryzen™ Embedded V1500B 4-core/8-thread 2.2 GHz processor
System Memory	8 GB UDIMM DDR4 (1 x 8 GB) max 64 GB	16 GB UDIMM DDR4 (1 x 16 GB)
Drive Bay	12 x 3.5-inch SATA 6Gb/s, 3Gb/s	16 x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 slot	Optional via a QNAP QM2 PCIe card	Optional via a QNAP QM2 PCIe card
Gigabit Ethernet Port (RJ45)	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter
10 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter
25 Gigabit Ethernet Port	-	-
PCIe Slot	Optional via a PCIe adapter	Optional via a PCIe adapter
USB Port	1 x USB 3.2 Gen 1 Type-A 2 x USB 3.2 Gen 2 Type-C 1 x USB 3.2 Gen 2 Type-A	1 x USB 3.2 Gen 1 Type-A 2 x USB 3.2 Gen 2 Type-C 1 x USB 3.2 Gen 2 Type-A
HDMI Output	Optional via a PCIe graphics card	Optional via a PCIe graphics card
Dimensions (HxWxD mm)	89 x 482 x 425	132 x 482 x 425

TS-873AeU



TS-873AeU-RP



Model	TS-873AeU-4G	TS-873AeU-RP-4G
Operating System	QTS / QuTS hero	QTS / QuTS hero
CPU	AMD Ryzen™ Embedded V1500B 4-core/8-thread 2.2 GHz processor	AMD Ryzen™ Embedded V1500B 4-core/8-thread 2.2 GHz processor
System Memory	4 GB SODIMM DDR4 (1 x 4 GB) max 64 GB	4 GB SODIMM DDR4 (1 x 4 GB) max 64 GB
Drive Bay	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 slot	2 x M.2 2280 (PCIe Gen3 x 1)	2 x M.2 2280 (PCIe Gen3 x 1)
Gigabit Ethernet Port (RJ45)	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter
10 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter
25 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter
PCIe Slot	1 x PCIe Gen3 x8	1 x PCIe Gen3 x8
USB Port	2 x USB 3.2 Gen 2 Type-C 2 x USB 3.2 Gen 2 Type-A	2 x USB 3.2 Gen 2 Type-C 2 x USB 3.2 Gen 2 Type-A
HDMI Output	Optional via a PCIe graphics card	Optional via a PCIe graphics card
Dimensions (HxWxD mm)	89 x 482 x 297.4	89 x 482 x 297.4

	TVS-h474	TVS-h674			TVS-h874	
						
Model	TVS-h474-PT-8G	TVS-h674-i5-32G	TVS-h674-i3-16G	TVS-h874X-i9-64G	TVS-h874-i7-32G	TVS-h874-i5-32G
Operating System	QTS / QuTS hero	QTS / QuTS hero	QTS / QuTS hero	QuTS hero / QTS	QuTS hero / QTS	QuTS hero / QTS
CPU	Intel® Pentium™ Gold G7400 2-core/4-thread 3.7 GHz Processor	Intel® Core™ i5-12400 6-core/12-thread Processor, burst up to 4.4 GHz	Intel® Core™ i3-12100 4-core/8-thread Processor, burst up to 4.3 GHz	Intel® Core™ i9 16-core (8P+8E) /24-thread Processor	Intel® Core™ i7 12-core (8P+4E) /20-thread Processor	Intel® Core™ i5-12400 6-core/12-thread Processor, burst up to 4.4 GHz
System Memory	8 GB SODIMM DDR4 (1 x 8 GB) max 64 GB	32 GB SODIMM DDR4 (2 x 16 GB) max 64 GB	16 GB SODIMM DDR4 (1 x 16 GB) max 64 GB	64 GB SODIMM DDR4 (2 x 32 GB) max 64 GB	32 GB SODIMM DDR4 (2 x 16 GB) max 64 GB	32 GB SODIMM DDR4 (2 x 16 GB) max 64 GB
Drive Bay	4 x 3.5-inch SATA 6Gb/s, 3Gb/s	6 x 3.5-inch SATA 6Gb/s, 3Gb/s	6 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 Slot	2 x M.2 2280 PCIe Gen3 x2 slots		2 x M.2 2280 PCIe Gen4 x4 slots	2 x M.2 2280 PCIe Gen4 x4 slots	2 x M.2 2280 PCIe Gen4 x4 slots	2 x M.2 2280 PCIe Gen4 x4 slots
Gigabit Ethernet Port (RJ45)	-	-	-	-	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
10 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	2 x 10GBASE-T	Optional via a PCIe adapter	Optional via a PCIe adapter
25 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
PCIe Slot	2 Slot 1: PCIe Gen 4 x16 (CPU) Slot 2: PCIe Gen 3 x2 (PCH)	2 Slot 1: PCIe Gen 4 x16 (CPU) Slot 2: PCIe Gen 4 x4 (PCH)	2 Slot 1: PCIe Gen 4 x16 Slot 2: PCIe Gen 4 x4	2 Slot 1: PCIe Gen 4 x16 Slot 2: PCIe Gen 4 x4	2 Slot 1: PCIe Gen 4 x16 Slot 2: PCIe Gen 4 x4	2 Slot 1: PCIe Gen 4 x16 Slot 2: PCIe Gen 4 x4
USB port	1 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps
HDMI Output	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)
Dimensions (HxWxD mm)	188.2 x 199.3 x 279.6		188.2 x 264.3 x 279.6		188.2 x 329.3 x 280.8	188.2 x 329.3 x 280.8

	TS-253E	TS-453E		TS-364	HS-264
					
Model	TS-253E-8G	TS-453E-8G		TS-364-8G	HS-264-8G
Operating System	QTS	QTS	QTS	QTS	QTS
CPU	Intel® Celeron® J6412 4-core/4-thread processor, burst up to 2.6 GHz	Intel® Celeron® J6412 4-core/4-thread processor, burst up to 2.6 GHz	Intel® Celeron® N5095 4-core/4-thread processor, burst up to 2.9 GHz	Intel® Celeron® N5105 4 core 2.0GHz, burst up to 2.9GHz	
System Memory	8 GB RAM	8 GB RAM	8 GB RAM	8 GB RAM	8 GB DDR4, not expandable
Drive Bay	2 x 3.5-inch SATA 6Gb/s	4 x 3.5-inch SATA 6Gb/s	3 x 3.5-inch SATA 6Gb/s, 3Gb/s		2 x 3.5-inch SATA 6Gb/s, 3Gb/s
Hot-swappable	Yes	Yes	Yes		Yes
M.2 slot	2 x M.2 2280 PCIe Gen 3 x2	2 x M.2 2280 PCIe Gen 3 x2	2 x M.2 2280 PCIe Gen 3 x2 slots		-
Gigabit Ethernet Port (RJ45)	-	-	-		-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	1 (2.5G/1G/100M/10M)		2 (2.5G/1G/100M/10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-	-	-		-
10 Gigabit Ethernet Port	-	-	-		-
25 Gigabit Ethernet Port	-	-	-		-
PCIe Slot	-	-	-		-
USB port	2 x USB 2.0 2 x USB 3.2 Gen 2 Type A	2 x USB 2.0 2 x USB 3.2 Gen 2 Type A	1 x USB 3.2 Gen 1 2 x USB 3.2 Gen 2 Type A		2 x USB 3.2 Gen 2 Type A
HDMI Output	2 x HDMI 1.4b (up to 3840 x 2160 @ 30Hz)	2 x HDMI 1.4b (up to 3840 x 2160 @ 30Hz)	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)		2 x HDMI 2.0 (up to resolution 3840 x 2160 @ 60Hz)
Dimensions (HxWxD mm)	168.5 x 102 x 225	177 x 180 x 235	142 x 150 x 260		41.3 x 302 x 220

TBS-464		TS-264		TS-464		TS-664	
							
Model	TBS-464-8G	TS-264-8G		TS-464-8G	TS-464-4G	TS-664-8G	TS-664-4G
Operating System	QTS	QTS		QTS		QTS	
CPU	Intel® Celeron® N5105 4-core/4-thread processor, burst up to 2.9GHz	Intel® Celeron® N5095 4-core/4-thread processor, burst up to 2.9 GHz		Intel® Celeron® N5095 4-core/4-thread processor, burst up to 2.9 GHz		Intel® Celeron® N5095 4-core/4-thread processor, burst up to 2.9 GHz	
System Memory	8 GB DDR4, not expandable	8 GB RAM		8 GB RAM	4 GB RAM	8 GB RAM	4 GB RAM
Drive Bay	-	2 x 3.5-inch SATA 6Gb/s		4 x 3.5-inch SATA 6Gb/s		6 x 3.5-inch SATA 6Gb/s	
Hot-swappable	-	Yes		Yes		Yes	
M.2 slot	4 x M.2 2280 NVMe Gen3 x2 slots	2 x M.2 2280 PCIe Gen 3 x1		2 x M.2 2280 PCIe Gen 3 x1		2 x M.2 2280 PCIe Gen 3 x1	
Gigabit Ethernet Port (RJ45)	-	-		-		-	
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)		2 (2.5G/1G/100M/10M)		2 (2.5G/1G/100M/10M)	
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter	
10 Gigabit Ethernet Port	-	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter	
25 Gigabit Ethernet Port	-	-		-		-	
PCIe Slot	-	1 Slot 1: PCIe Gen 3 x2		1 Slot 1: PCIe Gen 3 x2		1 Slot 1: PCIe Gen 3 x2	
USB port	3 x USB 2.0 2 x USB 3.2 Gen 1	2 x USB 2.0 2 x USB 3.2 Gen 2 Type-A		2 x USB 2.0 2 x USB 3.2 Gen 2 Type-A		2 x USB 2.0 2 x USB 3.2 Gen 2 Type-A	
HDMI Output	2, HDMI 2.0 (up to resolution 3840 x 2160 @ 60Hz)	1, HDMI 2.0		1, HDMI 2.0	1, HDMI 2.1	1, HDMI 2.0	1, HDMI 2.1
Dimensions (HxWxD mm)	30 x 230 x 165	168 x 105 x 226		168 x 170 x 226		168 x 235 x 226	

TS-262		TS-462		TS-873A		TS-673A		TS-473A	
									
Model	TS-262-4G	TS-462-2G	TS-462-4G	TS-873A-8G		TS-673A-8G		TS-473A-8G	
Operating System	QTS	QTS	QTS	QTS / QuTS hero		QTS / QuTS hero		QTS / QuTS hero	
CPU	Intel® Celeron® N4505 2-core/2-thread processor, burst up to 2.9 GHz	Intel® Celeron® N4505 2-core/2-thread processor, burst up to 2.9 GHz	AMD Ryzen™ Embedded V1500B 4-core/8-thread 2.2 GHz processor	AMD Ryzen™ Embedded V1500B 4-core/8-thread 2.2 GHz processor		AMD Ryzen™ Embedded V1500B 4-core/8-thread 2.2 GHz processor		AMD Ryzen™ Embedded V1500B 4-core/8-thread 2.2 GHz processor	
System Memory	4 GB RAM	2 GB RAM	4 GB RAM	8 GB SO-DIMM DDR4 (1 x 8 GB) max 64 GB		8 GB SO-DIMM DDR4 (1 x 8 GB) max 64 GB		8 GB SO-DIMM DDR4 (1 x 8 GB) max 64 GB	
Drive Bay	2 x 3.5-inch SATA 6Gb/s	4 x 3.5-inch SATA 6Gb/s	4 x 3.5-inch SATA 6Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s		6 x 3.5-inch SATA 6Gb/s, 3Gb/s		4 x 3.5-inch SATA 6Gb/s, 3Gb/s	
M.2 Slot	2 x M.2 2280 PCIe Gen 3 x1	2 x M.2 2280 PCIe Gen 3 x1	2 x M.2 2280 PCIe Gen 3 x1	2 x M.2 2280 PCIe Gen3 x1 slots		2 x M.2 2280 PCIe Gen3 x1 slots		2 x M.2 2280 PCIe Gen3 x1 slots	
Gigabit Ethernet Port (RJ45)	-	-	-	-		-		-	
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	1 (2.5G/1G/100M/10M)	1 (2.5G/1G/100M/10M)	1 (2.5G/1G/100M/10M)	2		2		2	
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter	
10 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter	
25 Gigabit Ethernet Port	-	-	-	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter	
PCIe Slot	1 Slot 1: PCIe Gen 3 x2	1 Slot 1: PCIe Gen 3 x2	1 Slot 1: PCIe Gen 3 x2	2 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x4		2 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x4		2 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x4	
USB port	2 x USB 2.0 2 x Type-A USB 3.2 Gen 2 (10Gbps)	2 x USB 2.0 2 x Type-A USB 3.2 Gen 2 (10Gbps)	2 x USB 2.0	3 x Type-A USB 3.2 Gen 2 10Gbps 1 x Type-C USB 3.2 Gen 1 5Gbps		3 x Type-A USB 3.2 Gen 2 10Gbps 1 x Type-C USB 3.2 Gen 1 5Gbps		3 x Type-A USB 3.2 Gen 2 5V/1A 10Gbps 1 x Type-C USB 3.2 Gen 1 5V/1A 5Gbps	
HDMI Output	1, HDMI 2.0	1, HDMI 2.0	1, HDMI 2.0	Optional via a PCIe adapter		Optional via a PCIe adapter		Optional via a PCIe adapter	
Dimensions (HxWxD mm)	168 x 105 x 226	168 x 170 x 226	168 x 170 x 226	188.2 x 329.3 x 280.8		188.2 x 264.3 x 280.8		188.2 x 199.3 x 280.8	

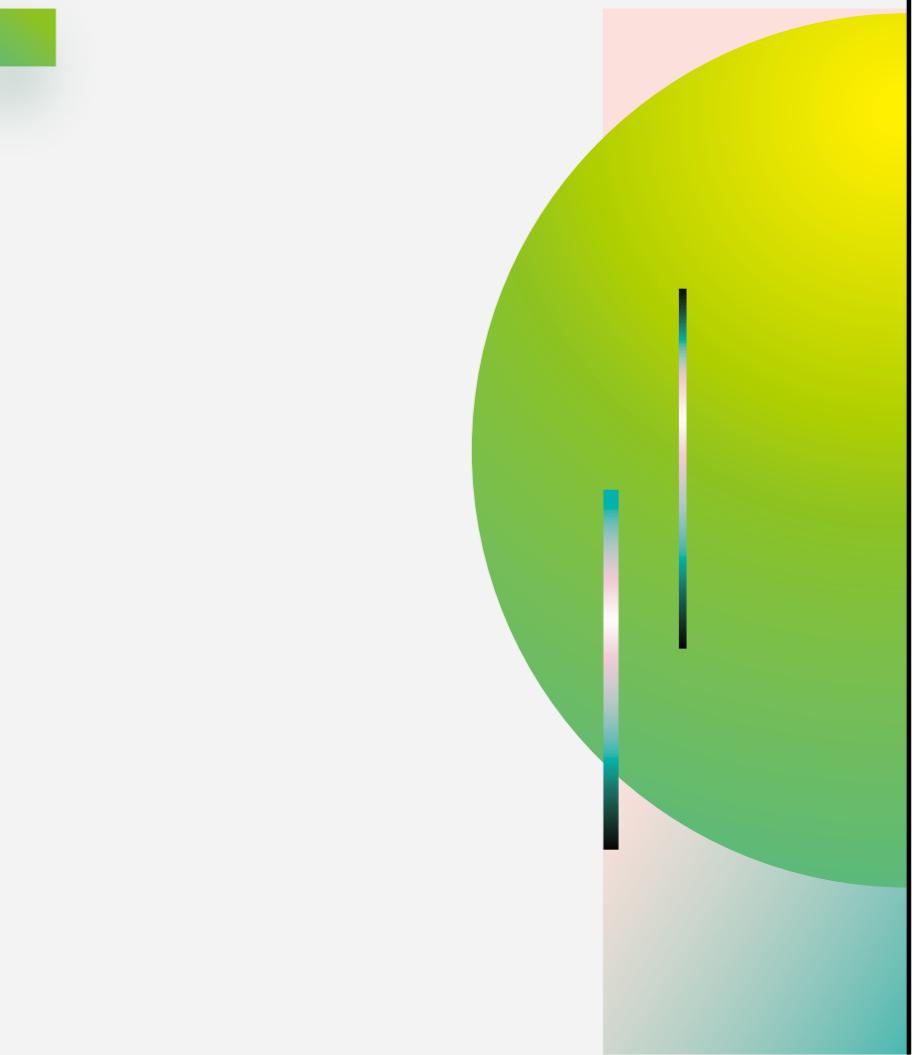
	TS-855eU	TS-855eU-RP	TS-410E	TVS-675
				
Model	TS-855eU-8G	TS-855eU-RP-8G	TS-410E-8G	TVS-675-8G
Operating System	QTS	QTS	QTS	QTS / QuTS hero
CPU	Intel® Atom® C5125 8-core processor, up to 2.8GHz	Intel® Atom® C5125 8-core processor, up to 2.8GHz	Intel® Celeron® J6412 4-core/4-thread processor, burst up to 2.6 GHz	ZhaoXin KX-U6580 8-core 2.5GHz processor
System Memory	8 GB SODIMM DDR4 (1 x 8 GB) max 64 GB	8 GB SODIMM DDR4 (1 x 8 GB) max 64 GB	8 GB on board (non-expandable)	8 GB SODIMM DDR4 (1 x 8 GB) max 64 GB
Drive Bay	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	4 x 2.5-inch SATA 6Gb/s, 3Gb/s	6 x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 Slot	2 x M.2 2280 (PCIe Gen3 x4)	2 x M.2 2280 (PCIe Gen3 x 4)	-	2 x M.2 2280 PCIe Gen 3 x1 or SATA 6Gb/s slots
Gigabit Ethernet Port (RJ45)	-	-	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter	-	Optional via a PCIe adapter
10 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	-	Optional via a PCIe adapter
25 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	-	-
PCIe Slot	2 x PCIe Gen3 (x4) Slot 1: PCIe Gen 3 (x4) Slot 2: PCIe Gen 3 (x4)	2 x PCIe Gen3 (x4) Slot 1: PCIe Gen 3 (x4) Slot 2: PCIe Gen 3 (x4)	-	2 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x4
USB port	4 x USB 3.2 Gen 1	4 x USB 3.2 Gen 1	4 x USB 3.2 Gen 2	2 x USB 3.2 Gen 1 2 x USB 3.2 Gen 2 Type-A
HDMI Output	Optional via a PCIe graphics card	Optional via a PCIe graphics card	1, HDMI 1.4b (up to 3840 x 2160 @ 30Hz)	1, HDMI 2.0 (up to 3840 x 2160 @ 60Hz)
Dimensions (HxWxD mm)	89 x 482 x 297.4	89 x 482 x 297.4	60 x 180 x 254	188.2 x 263.9 x 280.8

	TS-1655	TS-AI642	TS-h686	TS-h886
				
Model	TS-1655-8G	TS-AI642-8G	TS-h686-D1602-8G	TS-h886-D1622-16G
Operating System	QTS	QTS	QTS / QuTS hero	QuTS hero / QTS
CPU	Intel® Atom® C5125 8-core processor, 2.8 GHz	8-core ARM Cortex 64-bit Processor (4-core Cortex-A76 2.2 GHz + 4-core Cortex-A55 1.8 GHz)	Intel® Xeon® D-1602 2-core/4-thread processor, up to 3.2 GHz	Intel® Xeon® D-1622 4-core/8-thread processor, up to 3.2 GHz
System Memory	8 GB UDIMM DDR4 (1 x 8 GB) max 128 GB	8 GB on board (non-expandable)	8 GB UDIMM DDR4 ECC (2 x 4 GB) max 128 GB	16 GB UDIMM DDR4 ECC (2 x 8 GB) max 128 GB
Drive Bay	12 x 3.5-inch + 4 x 2.5-inch SATA 6Gb/s, 3Gb/s	6 x 3.5-inch SATA 6Gb/s	4 x 3.5-inch SATA 6Gb/s, 3Gb/s + 2 x 2.5-inch SATA 6Gb/s, 3Gb/s	6 x 3.5-inch SATA 6Gb/s, 3Gb/s + 2 x 2.5-inch SATA 6Gb/s, 3Gb/s
M.2 Slot	2 x M.2 2280 PCIe Gen3 x2 slots	-	2 x M.2 22110/2280 NVMe PCIe Gen3 x4 slots	2 x M.2 22110/2280 NVMe PCIe Gen3 x4 slots
Gigabit Ethernet Port (RJ45)	-	2	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M/10M)	1 (2.5G/1G/100M/10M)	4 (also support 10M)	4 (2.5G/1G/100M/10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
10 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
25 Gigabit Ethernet Port	Optional via a PCIe adapter	-	Optional via a PCIe adapter	Optional via a PCIe adapter
PCIe Slot	3 Slot 1: PCIe Gen 3 x4 Slot 2: PCIe Gen 3 x4 Slot 3: PCIe Gen 3 x4	1 Slot 1: PCIe Gen 3 x2	2 Slot 1: PCIe Gen3 x8 Slot 2: PCIe Gen3 x8	2 Slot 1: PCIe Gen3 x8 Slot 2: PCIe Gen3 x8
USB port	4 x USB 3.2 Gen 1	2 x USB 2.0	3 x USB 3.2 Gen 1	3 x USB 3.2 Gen 1
HDMI Output	-	1, HDMI 1.4b	-	-
Dimensions (HxWxD mm)	303.84 x 369.89 x 319.8	168 x 235 x 226	231.9 x 224.9 x 319.8	231.9 x 292.9 x 319.8

	TS-464U	TS-464U-RP	TS-864eU	TS-864eU-RP
				
Model	TS-464U-8G	TS-464U-4G	TS-864eU-4G	TS-864eU-8G
Operating System	QTS	QTS	QTS	QTS
CPU	Intel® Celeron® N5095 4-core/ 4-thread processor, burst up to 2.9 GHz	Intel® Celeron® N5095 4-core/ 4-thread processor, burst up to 2.9 GHz	Intel® Celeron® N5095 4-core/ 4-thread processor, burst up to 2.9 GHz	Intel® Celeron® N5095 4-core/ 4-thread processor, burst up to 2.9 GHz
System Memory	8 GB RAM	4 GB RAM	4 GB RAM	8 GB RAM
Drive Bay	4 x 3.5-inch SATA 6Gb/s, 3Gb/s	4 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 Slot	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
Gigabit Ethernet Port (RJ45)	-	-	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
10 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
25 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter
PCIe Slot	1 Slot 1: PCIe Gen 3 x2	1 Slot 1: PCIe Gen 3 x2	1 Slot 1: PCIe Gen 3 x2	1 Slot 1: PCIe Gen 3 x2
USB port	2 x USB 2.0 2 x Type A USB3.2 Gen2	2 x USB 2.0 2 x Type A USB3.2 Gen2	2 x USB 2.0 2 x Type A USB3.2 Gen2	2 x USB 2.0 2 x Type A USB3.2 Gen2
HDMI Output	1, HDMI 1.4b	1, HDMI 1.4b	1, HDMI 1.4b	1, HDMI 1.4b
Dimensions (HxWxD mm)	43.3 x 482.6 x 483.9	43.3 x 430 x 479	88.6 x 482.14 x 318.13	88.6 x 482.14 x 318.13

	TS-464eU	TS-1264U-RP
		
Model	TS-464eU-4G	TS-464eU-8G
Operating System	QTS	QTS
CPU	Intel® Celeron® N5095 4-core/ 4-thread processor, burst up to 2.9 GHz	Intel® Celeron® N5095 4-core/ 4-thread processor, burst up to 2.9 GHz
System Memory	4 GB RAM	8 GB RAM
Drive Bay	4 x 3.5-inch SATA 6Gb/s, 3Gb/s	12 x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 Slot	2 x M.2 2280 PCIe Gen 3 x1	Optional via a PCIe adapter
Gigabit Ethernet Port (RJ45)	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-	Optional via a PCIe adapter
10 Gigabit Ethernet Port	-	Optional via a PCIe adapter
25 Gigabit Ethernet Port	-	Optional via a PCIe adapter
PCIe Slot	-	1 Slot 1: PCIe Gen 3 x2
USB port	2 x USB 2.0 2 x Type A USB3.2 Gen2	2 x USB 2.0 2 x Type A USB3.2 Gen2
HDMI Output	1, HDMI 1.4b	1, HDMI 1.4b
Dimensions (HxWxD mm)	43.3 x 482.6 x 321.33	88.7 x 482.2 x 423.8

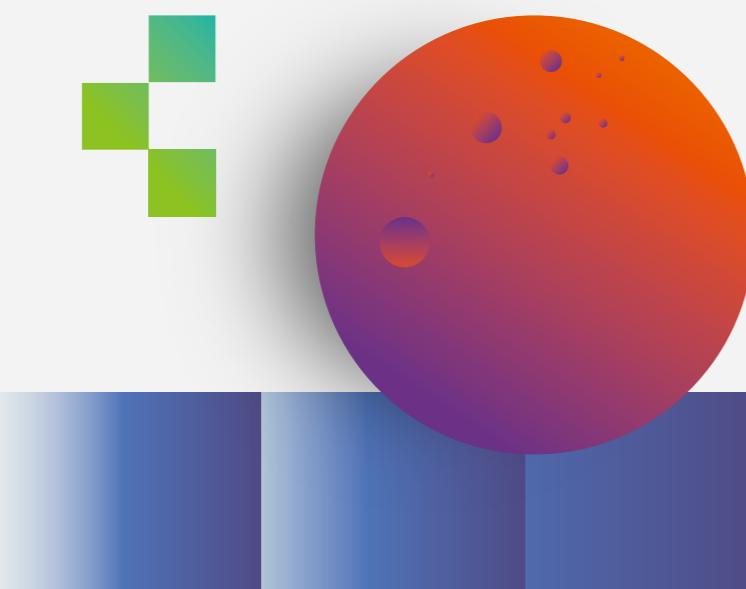
Breakthrough
performance
and outstanding
connectivity
with Thunderbolt NAS



	TVS-472XT	TVS-672XT	TVS-872XT	TBS-h574TX	
					
Model	TVS-472XT-i3-4G	TVS-672XT-i3-8G	TVS-872XT-i5-16G	TBS-574TX-i5-16G	TBS-574TX-i3-12G
Operating System	QTS / QuTS hero	QTS / QuTS hero			
CPU	Intel® Core™ i3 Processor	Intel® Core™ i3 Processor	Intel® Core™ i5 Processor	Intel® Core™ i5-1340PE 12C(4P+8E)/16T up to 4.5GHz	Intel® Core™ i3-1320PE 8C(4P+4E)/12T up to 4.5GHz
System Memory	4 GB SODIMM DDR4 (1 x 4 GB) max 64 GB	8 GB SODIMM DDR4 (2 x 4 GB) max 64 GB	16 GB SODIMM DDR4 (2 x 8 GB) max 64 GB	16 GB on board (non-expandable)	12 GB on board (non-expandable)
Drive Bay	4 x 3.5-inch SATA 6Gb/s, 3Gb/s	6 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	5 x E1.S up to 15mm (5x PCIe Gen3 x2) Pre-install QDA support M.2 2280 for each slots	-
M.2 Slot	2 x M.2 2280 PCIe Gen3 x2 slots	2 x M.2 2280 PCIe Gen3 x2 slots	2 x M.2 2280 PCIe Gen3 x2 slots	-	-
Gigabit Ethernet Port (RJ45)	2	2	2	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	1	-
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	-	-
10 Gigabit Ethernet Port	1 x 10GBASE-T (10G/5G/2.5G/1G/100M)	1 x 10GBASE-T (10G/5G/2.5G/1G/100M)			
25 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	Optional via a PCIe adapter	-	-
Thunderbolt Port	2 (Thunderbolt™ 3)	2 (Thunderbolt™ 3)	2 (Thunderbolt™ 3)	2 (Thunderbolt™ 4)	2 (Thunderbolt™ 4)
PCIe Slot	2 Slot 1: PCIe Gen 3 x16 (CPU) Slot 2: PCIe Gen 3 x4 (PCH)	2 Slot 1: PCIe Gen 3 x16 (CPU) Slot 2: PCIe Gen 3 x4 (PCH)	2 Slot 1: PCIe Gen 3 x16 (CPU) Slot 2: PCIe Gen 3 x4 (PCH)	-	-
USB port	1 x USB 3.2 Gen 1 2 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x USB 3.2 Gen 1 2 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x USB 3.2 Gen 1 2 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x USB 2.0 2 x USB 3.2 Gen 2	1 x USB 2.0 2 x USB 3.2 Gen 2
HDMI Output	1, HDMI 2.0 (up to 3840 x 2160 @ 60Hz)	1, HDMI 2.0 (up to 3840 x 2160 @ 60Hz)	1, HDMI 2.0 (up to 3840 x 2160 @ 60Hz)	1, HDMI 1.4b	1, HDMI 1.4b
Dimensions (HxWxD mm)	188.2 x 199.3 x 279.6	188.2 x 264.3 x 279.6	188.2 x 329.3 x 279.6	215 x 199 x 60	215 x 199 x 60

	TVS-h674T	TVS-h874T	
			
Model	TVS-h674T-i5-32G	TVS-h874T-i9-64G	
Operating System	QuTS hero	QuTS hero	
CPU	Intel® Core™ i5-12400 6-core/12-thread Processor, burst up to 4.4 GHz	Intel® Core™ i9 16-core (8P+8E) / 24-thread Processor	Intel® Core™ i7 12-core (8P+4E) / 20-thread Processor
System Memory	32 GB SODIMM DDR4 (2 x 16 GB) max 64 GB	64 GB SODIMM DDR4 (2 x 32 GB) max 64 GB	32 GB SODIMM DDR4 (2 x 16 GB) max 64 GB
Drive Bay	6 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	
M.2 Slot	2 x M.2 2280 PCIe Gen 4 x4 slots	2 x M.2 2280 PCIe Gen 4 x4 slots	
Gigabit Ethernet Port (RJ45)	-	-	-
2.5 Gigabit Ethernet Port (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	2 (2.5G/1G/100M/10M)	
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	Optional via a PCIe adapter	Optional via a PCIe adapter	
10 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	
25 Gigabit Ethernet Port	Optional via a PCIe adapter	Optional via a PCIe adapter	
Thunderbolt Port	2 (Thunderbolt™ 4)	2 (Thunderbolt™ 4)	
PCIe Slot	2 Slot 1: PCIe Gen 4 x16 Slot 2: PCIe Gen 4 x4	2 Slot 1: PCIe Gen 4 x16 Slot 2: PCIe Gen 4 x4	
USB port	1 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	
HDMI Output	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	
Dimensions (HxWxD mm)	188.2 x 264.3 x 280.8	188.2 x 329.3 x 280.8	

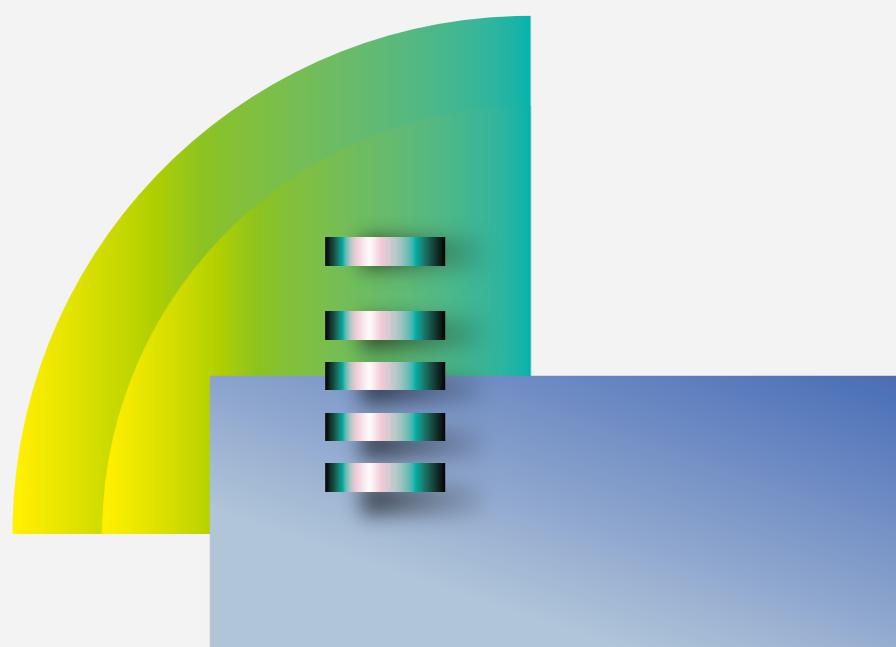
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	HS-453DX	TS-431K
Model	HS-453DX-8G	TS-431K
Operating System	QTS	QTS
CPU	Intel® Celeron® J4115 4-core/4-thread processor, burst up to 2.5 GHz	AnnapurnaLabs, an Amazon company Alpine AL214, 4-core, 1.7GHz
System Memory	8 GB SO-DIMM DDR4 (2 x 4 GB)	1GB DDR3
Drive Bay	2 x 3.5-inch SATA 6Gb/s, 3Gb/s	4x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 Slot	2 x M.2 2280 SATA 6Gb/s slots	-
Gigabit Ethernet Port (RJ45)	1	2
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	-	-
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-	-
10 Gigabit Ethernet Port	1 x 10GBASE-T (10G/5G/2.5G/1G/100M)	-
25 Gigabit Ethernet Port	-	-
PCIe Slot	-	-
USB port	2 x USB 2.0 1 x USB 3.2 Gen 1 USB-C 2 x USB 3.2 Gen 1 USB-A	2 x USB 3.2 Gen 1
HDMI Output	2, HDMI 2.0 (up to resolution 3840 x 2160 @ 60Hz) + HDMI 1.4b (up to 3840 x 2160 @ 30Hz)	-
Dimensions (HxWxD mm)	43.8 x 404 x 220	169 x 160 x 219

	TS-133	TS-233	TS-433
Model	TS-133	TS-233	TS-433-4G
Operating System	QTS	QTS	QTS
CPU	ARM 4-core Cortex-A55 1.8GHz processor	ARM 4-core Cortex-A55 2.0GHz processor	ARM 4-core Cortex-A55 2.0GHz processor
System Memory	2 GB on board (non-expandable)	2 GB on board (non-expandable)	4 GB on board (non-expandable)
Drive Bay	1 x 3.5-inch SATA 6Gb/s, 3Gb/s	2 x 3.5-inch SATA 6Gb/s, 3Gb/s	4x 3.5-inch SATA 6Gb/s, 3Gb/s
M.2 Slot	-	-	-
Gigabit Ethernet Port (RJ45)	1	1	1
2.5 Gigabit Ethernet Port (2.5G/1G/100M)	-	-	1 (2.5G/1G/100M)
5 Gigabit Ethernet Port (5G/2.5G/1G/100M)	-	-	-
10 Gigabit Ethernet Port	-	-	-
25 Gigabit Ethernet Port	-	-	-
PCIe Slot	-	-	-
USB port	1 x USB 2.0 1 x USB 3.2 Gen 1	2 x USB 2.0 1 x USB 3.2 Gen 1	2 x USB 2.0 1 x USB 3.2 Gen 1
HDMI Output	-	-	-
Dimensions (HxWxD mm)	187.5 x 66.1 x 157.6	188.64 x 90.18 x 156.26	169 x 160 x 219

Flexible and economical storage expansion



	TR-002	TR-004	TR-004U
Model	TR-002	TR-004	TR-004U
Supported O.S.	QNAP QTS / QuTS hero, Windows, Mac, Linux	QNAP QTS / QuTS hero, Windows, Mac, Linux	QNAP QTS / QuTS hero, Windows, Mac, Linux
CPU	Micro processor with hardware RAID	Micro processor with hardware RAID	Micro processor with hardware RAID
Drive Bay	2 x 3.5-inch SATA 6Gb/s, 3Gb/s	4 x 3.5-inch SATA 3Gb/s	4 x 3.5-inch SATA 3Gb/s
Gigabit Ethernet Port (RJ45)	-	-	-
USB port	1 x Type-C USB 3.2 Gen 2 10Gbps	1 x Type-C USB 3.0 (USB 3.2 Gen 1)	1 x Type-C USB 3.0 (USB 3.2 Gen 1)
Host Interface	-	-	-
Dimensions (HxWxD mm)	168.5 x 102 x 219	168.5 x 160.2 x 219	44 x 439 x 291
Max. number of HDDs/ SSDs supported	2	4	4
Hard Drive Type	2 x 2.5-inch or 3.5-inch SATA 6Gb/s	4 x 2.5-inch or 3.5-inch SATA 3Gb/s	4 x 2.5-inch or 3.5-inch SATA 3Gb/s

	TL-R1200S-RP	TL-R1220Sep-RP
Model	TL-R1200S-RP	TL-R1220Sep-RP
Supported O.S.	QNAP QTS / QuTS hero, Windows, Mac, Linux	QNAP QTS / QuTS hero, Windows, Mac, Linux
Drive Bay	12 x 3.5-inch SATA 6Gb/s, 3Gb/s	12 x 3.5-inch SAS 12Gb/s, SAS/SATA 6Gb/s
Gigabit Ethernet Port (RJ45)	-	-
Host Interface	3 x SFF-8088	4 x 12Gb/s SAS 3.0 wide ports (4-wide port) Mini-SAS HD (SFF-8644)
Dimensions (HxWxD mm)	88.6 x 482 x 562.5	88.65 x 482.2 x 423.8
Max. number of HDDs/ SSDs supported	12	12
Hard Drive Type	3.5-inch SATA hard disk drives 2.5-inch SATA hard disk drives 2.5-inch SATA solid state drives	3.5" or 2.5" SAS 12Gb/s, SAS/SATA 6Gb/s and 3Gb/s drives

	TL-R1620Sep-RP	TL-R1620Sdc
Model	TL-R1620Sep-RP	TL-R1620Sdc
Supported O.S.	QNAP QTS / QuTS hero, Windows, Mac, Linux	QNAP QTS / QuTS hero, Windows, Mac, Linux
CPU	-	-
Drive Bay	16 x 3.5-inch SAS 12Gb/s, SAS/SATA 6Gb/s	16 x 3.5-inch SAS 12Gb/s, SAS/SATA 6Gb/s
Gigabit Ethernet Port (RJ45)	-	1 For console access and CLI.
USB port	-	-
Host Interface	4 x 12Gb/s SAS 3.0 wide ports (4-wide port) Mini-SAS HD (SFF-8644)	3 x 12Gb/s SAS 3.0 wide ports (4-wide port) Mini-SAS HD (SFF-8644) for each controller
Dimensions (HxWxD mm)	131.3 x 482.2 x 425.3	131.3 x 482.2 x 425.3
Max. number of HDDs/ SSDs supported	16	16
Hard Drive Type	3.5" or 2.5" SAS 12Gb/s, SAS/SATA 6Gb/s and 3Gb/s drives	3.5" or 2.5" SAS 12Gb/s 6Gb/s drives

**TL-R1200C-RP****TL-R400S**

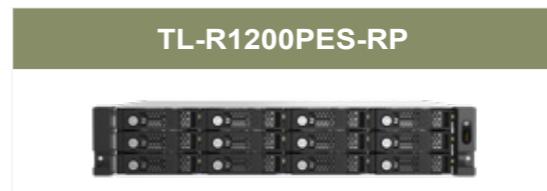
Model	TL-R1200C-RP	TL-R400S
Supported O.S.	QNAP QTS / QuTS hero, Windows, Mac, Linux	QNAP QTS / QuTS hero, Windows, Mac, Linux
Drive Bay	12 x 3.5-inch SATA 6Gb/s, 3Gb/s	4 x 3.5-inch SATA 6Gb/s, 3Gb/s
Gigabit Ethernet Port (RJ45)	-	-
Host Interface	1 x USB 3.2 Gen 2 Type-C	1 x SFF-8088
Dimensions (HxWxD mm)	88.6 x 482 x 562.5	43.9 x 438.9 x 291.1
Max. number of HDDs/SSDs supported	12	4
Hard Drive Type	3.5-inch SATA hard disk drives 2.5-inch SATA hard disk drives 2.5-inch SATA solid state drives	3.5-inch SATA hard disk drives 2.5-inch SATA hard disk drives 2.5-inch SATA solid state drives

**TL-D800C****TL-D400S**

Model	TL-D800C	TL-D400S
Supported O.S.	QNAP QTS / QuTS hero, Windows, Mac, Linux	QNAP QTS / QuTS hero, Windows, Mac, Linux
Drive Bay	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	4 x 3.5-inch SATA 6Gb/s, 3Gb/s
Gigabit Ethernet Port (RJ45)	-	-
Host Interface	1 x USB 3.2 Gen 2 Type-C	1 x SFF-8088
Dimensions (HxWxD mm)	188.2 x 329.3 x 281.4	168.5 x 160.2 x 219
Max. number of HDDs/SSDs supported	8	4
Hard Drive Type	3.5-inch SATA hard disk drives 2.5-inch SATA hard disk drives 2.5-inch SATA solid state drives	3.5-inch SATA hard disk drives 2.5-inch SATA hard disk drives 2.5-inch SATA solid state drives

**TL-D800S****TL-D1600S**

Model	TL-D800S	TL-D1600S
Supported O.S.	QNAP QTS / QuTS hero, Windows, Mac, Linux	QNAP QTS / QuTS hero, Windows, Mac, Linux
Drive Bay	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	12 x 3.5-inch SATA 6Gb/s, 3Gb/s + 4 x 2.5-inch SATA 6Gb/s, 3Gb/s
Gigabit Ethernet Port (RJ45)	-	-
Host Interface	2 x SFF-8088	4 x SFF-8088
Dimensions (HxWxD mm)	188.2 x 329.3 x 279.6	303.84 x 369.89 x 319.8
Max. number of HDDs/SSDs supported	8	16
Hard Drive Type	3.5-inch SATA hard disk drives 2.5-inch SATA hard disk drives 2.5-inch SATA solid state drives	3.5-inch SATA hard disk drives 2.5-inch SATA hard disk drives (for 3.5-inch tray slots only) 2.5-inch SATA solid state drives

**TL-R1200PES-RP****TL-R1600PES-RP**

Model	TL-R1200PES-RP	TL-R1600PES-RP
Supported O.S.	QNAP QTS / QuTS hero, Windows, Mac, Linux	QNAP QTS / QuTS hero, Windows, Mac, Linux
Drive Bay	12 x 3.5-inch SATA 6Gb/s	16 x 3.5-inch SATA 6Gb/s
Host Interface	Mini-SAS HD (SFF-8644) 1 x 2 (in, out)	Mini-SAS HD (SFF-8644) 1 x 2 (in, out)
Dimensions (HxWxD mm)	88.65x482.2x423.8	131.3x482.2x425.3
Max. number of HDDs/SSDs supported	12	16
Hard Drive Type	3.5" or 2.5" SATA 6Gb/s and 3Gb/s drives	3.5" or 2.5" SATA 6Gb/s and 3Gb/s drives

TL-R2400PES-RP

Model	TL-R2400PES-RP
Supported O.S.	QNAP QTS / QuTS hero, Windows, Mac, Linux
Drive Bay	24 x 3.5-inch SATA 6Gb/s
Host Interface	Mini-SAS HD (SFF-8644) 1 x 2 (in, out)
Dimensions (HxWxD mm)	176.15 x 480.74 x 672.05
Max. number of HDDs/SSDs supported	24
Hard Drive Type	3.5" or 2.5" SATA 6Gb/s and 3Gb/s drives

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	QSW-M2106-4C	QSW-M2106-4S	QSW-M2106R-2S2T	QSW-M2106PR-2S2T
				
Model	QSW-M2106-4C	QSW-M2106-4S	QSW-M2106R-2S2T	QSW-M2106PR-2S2T
Management Type	Web Managed	Web Managed	Web Managed	Web Managed
Number of Ports	10	10	10	10
Gigabit Ethernet Port	4 x 10GbE SFP+/RJ45 Combo Ports 6 x 2.5GbE (RJ45)	4 x 10GbE SFP+ 6 x 2.5GbE (RJ45)	2 x 10GbE SFP+ 2 x 10GbE BASE-T (RJ45) 6 x 2.5GbE (RJ45)	2 x 10GbE SFP+ 2 x 10GbE BASE-T (RJ45) 6 x 2.5GbE (RJ45)
Total PoE Ports	-	-	-	8
PoE Power Output	-	-	-	Port 1-8 (90W)
Total PoE Power Budget	-	-	-	310W
Dimensions (HxWxD mm)	42.5 x 290 x 127	42.5 x 290 x 127	43.3 x 207 x 248.8	43.3 x 207 x 248.8

	QSW-M1208-8C	QSW-M1204-4C	QSW-M804-4C	QSW-2104-2T
				
Model	QSW-M1208-8C	QSW-M1204-4C	QSW-M804-4C	QSW-2104-2T
Management Type	Web Managed	Web Managed	Web Managed	Unmanaged
Number of Ports	12	12	8	6
Gigabit Ethernet Port	4 x 10GbE SFP+ 8 x 10GbE SFP+/RJ45 Combo Ports	8 x 10GbE SFP+ 4 x 10GbE SFP+/RJ45 Combo Ports	4 x 10GbE SFP+ 4 x 10GbE SFP+/RJ45 Combo Ports	2 x 10GbE BASE-T (RJ45)
Total PoE Ports	-	-	-	-
PoE Power Output	-	-	-	-
Total PoE Power Budget	-	-	-	-
Dimensions (HxWxD mm)	46.65 x 285 x 236.6	46.65 x 285 x 236.6	46.65 x 285 x 236.6	34 x 180 x 145

	QSW-2104-2S	QSW-M408-4C	QSW-M408-2C	QSW-M408-2S
				
Model	QSW-2104-2S	QSW-M408-4C	QSW-M408-2C	QSW-M408-2S
Management Type	Unmanaged	Web Managed	Web Managed	Web Managed
Number of Ports	6	12	12	12
Gigabit Ethernet Port	2 x 10GbE SFP+ 4 x 2.5GbE (RJ45)	4 x 10GbE SFP+/RJ45 Combo Ports 8 x 1GbE (RJ45)	2 x 10GbE SFP+ 2 x 10GbE SFP+/RJ45 Combo Ports 8 x 1GbE (RJ45)	4 x 10GbE SFP+ 8 x 1GbE (RJ45)
Total PoE Ports	-	-	-	-
PoE Power Output	-	-	-	-
Total PoE Power Budget	-	-	-	-
Dimensions (HxWxD mm)	34 x 180 x 145	42.5 x 290 x 127	42.5 x 290 x 127	42.5 x 290 x 127

QSW-M2108-2C		QSW-M2108-2S	
			

Model	QSW-M2108-2C	QSW-M2108-2S
Management Type	Web Managed	Web Managed
Number of Ports	10	10
Gigabit Ethernet Port	2 x 10GbE SFP+/RJ45 Combo Ports 8 x 2.5GbE (RJ45)	2 x 10GbE SFP+ 8 x 2.5GbE (RJ45)
Total PoE Ports	-	-
PoE Power Output	-	-
Total PoE Power Budget	-	-
Dimensions (HxD mm)	42.5 x 290 x 127	42.5 x 290 x 127

QSW-M5216-1T		QSW-M3216R-8S8T	
Model	QSW-M5216-1T	QSW-M3216R-8S8T	
Management Type	Web Managed	Web Managed	
Number of Ports	17	16	
Gigabit Ethernet Port	16 x 25GbE SFP28 1 x 10GbE BASE-T (RJ45)	8 x 10GbE BASE-T (RJ45) 8 x 10GbE SFP+/RJ45 Combo Ports	
Total PoE Ports	-	-	
PoE Power Output	-	-	
Total PoE Power Budget	-	-	
Dimensions (HxD mm)	43.5 x 285 x 237.7	207 x 199.5 x 43.3	

QSW-M2108R-2C		QSW-308S	
			

Model	QSW-M2108R-2C	QSW-308S
Management Type	Web Managed	Unmanaged
Number of Ports	10	11
Gigabit Ethernet Port	2 x 10GbE SFP+/RJ45 Combo Ports 8 x 2.5GbE (RJ45)	3 x 10GbE SFP+ 8 x 1GbE (RJ45)
Total PoE Ports	-	-
PoE Power Output	-	-
Total PoE Power Budget	-	-
Dimensions (HxD mm)	43.3 x 207 x 199.5	42.5 x 290 x 127

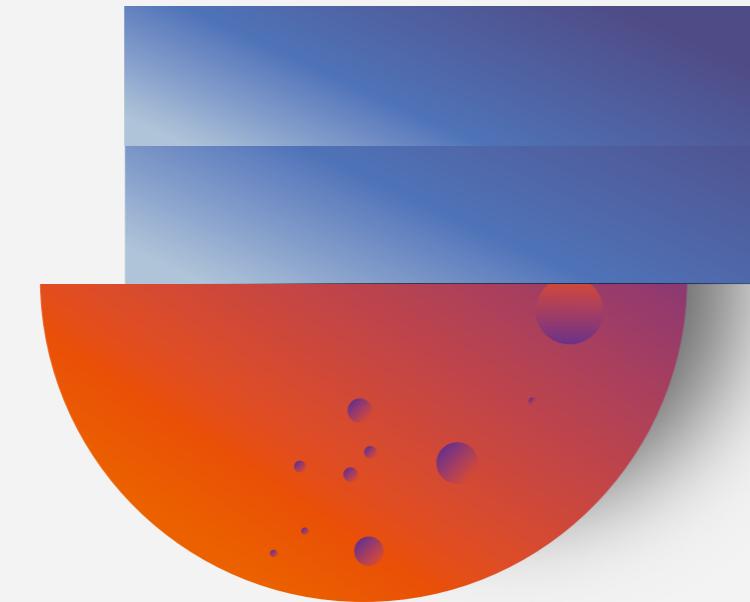
QSW-3216R-8S8T		QSW-M3212R-8S4T	
Model	QSW-3216R-8S8T	QSW-M3212R-8S4T	
Management Type	Unmanaged	Web Managed	
Number of Ports	16	12	
Gigabit Ethernet Port	8 x 10GbE BASE-T (RJ45) 8 x 10GbE SFP+/RJ45 Combo Ports	8 x 10GbE BASE-T (RJ45) 4 x 10GbE SFP+/RJ45 Combo Ports	
Total PoE Ports	-	-	
PoE Power Output	-	-	
Total PoE Power Budget	-	-	
Dimensions (HxD mm)	207 x 199.5 x 43.3	43.3 x 207 x 199.5	

QSW-308-1C		QSW-IM1200-8C	
			

Model	QSW-308-1C	QSW-IM1200-8C
Management Type	Unmanaged	Web Managed
Number of Ports	11	12
Gigabit Ethernet Port	2 x 10GbE SFP+ 1 x 10GbE SFP+/RJ45 Combo Ports 8 x 1GbE (RJ45)	4 x 10GbE SFP+ 8 x 10GbE SFP+/RJ45 Combo Ports
Total PoE Ports	-	-
PoE Power Output	-	-
Total PoE Power Budget	-	-
Dimensions (HxD mm)	42.5 x 290 x 127	43.5 x 285 x 238

QSW-M2116P-2T2S		QSW-1105-5T	
Model	QSW-M2116P-2T2S	QSW-1105-5T	
Management Type	Web Managed	Unmanaged	
Number of Ports	20	5	
Gigabit Ethernet Port	2 x 10GbE SFP+ 2 x 10GbE BASE-T (RJ45) 16 x 1GbE (RJ45)	5 x 2.5GbE (RJ45)	
Total PoE Ports	18	-	
PoE Power Output	Port 1-16 (30W), Port 19-20 (90W)	-	
Total PoE Power Budget	280W	-	
Dimensions (HxD mm)	43.5 x 285 x 234.8	34 x 180 x 145	

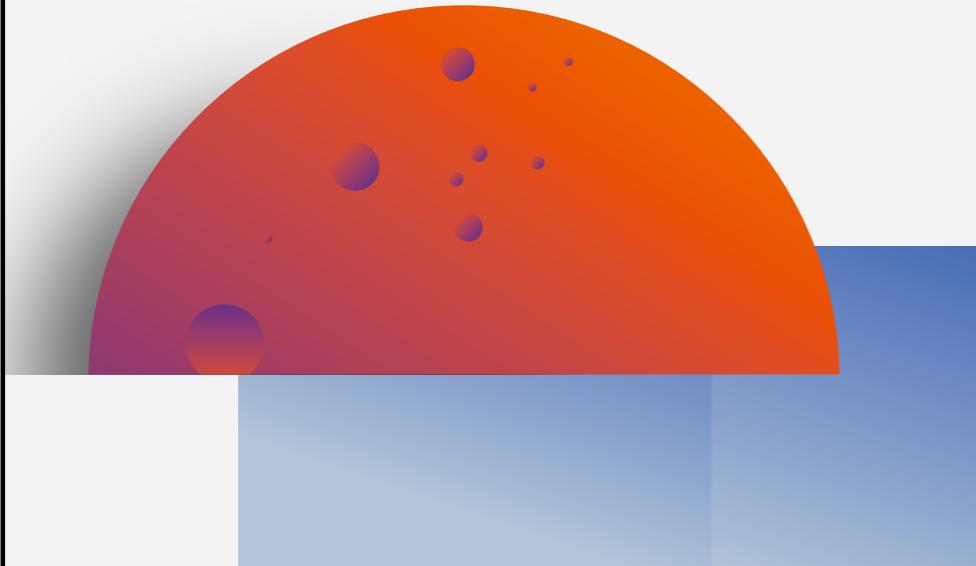
Secure remote multi-site VPN,
providing a high-speed
on-premises solution covering
wired and wireless connections



	QHora-321	QHora-322	QHora-301W
			
Model	QHora-321	QHora-322	QHora-301W
Number of Ethernet Ports	6	9	6
10GbE BASE-T (RJ45)	-	3 x 10GbE-T (10G/5G/2.5G/1G/100M)	2 x 10GbE-T (10G/5G/2.5G/1G/100M)
2.5GbE (RJ45)	6	6	-
1GbE (RJ45)	-	-	4
Wireless Antenna	-	-	8 Internal Antennas
Wi-Fi 6 (802.11ax)	-	-	Yes
Wi-Fi 5 (802.11ac)	-	-	Yes
USB 3.2 Gen 1 port	-	1	2
Wireless Standard	-	-	802.11a/b/g/n/ac/ax
Wireless Speed Rating	-	-	AX3600
Wireless Bandwidth	-	-	20/40/80/160 MHz
Transmit Output Power	-	-	Depends on country code
Dimensions (HxWxD mm)	166.4 x 145.7 x 29.85	226 x 140 x 44.4	250x180x48
QNAP SD-WAN solution, QuWAN	Yes	Yes	Yes

	QMiroPlus-201W	QMiro-201W
		
Model	QMiroPlus-201W	QMiro-201W
Number of Ethernet Ports	5	2
10GbE BASE-T (RJ45)	-	-
2.5GbE Host Port(RJ45)	1	-
1GbE (RJ45)	4	2
Wireless Antenna	4 Internal Antennas	4 Internal Antennas
Wi-Fi 5 (802.11ac)	Yes	Yes
USB 3.2 Gen 1 port	2	1
Bluetooth	Version 5	Version 5
Wireless Standard	802.11a/b/g/n/ac	802.11a/b/g/n/ac
Wireless Speed Rating	AC2200	AC2200
Wireless Bandwidth	20/40/80MHz	20/40/80MHz
Dimensions	183.5 x 105 x 143.5	68 x 100 x 175.5
Wi-Fi Mesh	Yes (with Tri-Band)	Yes (with Tri-Band)
QNAP SD-WAN solution, QuWAN	Yes	Yes
Drive Bay	2 x 2.5-inch SATA 3Gb/s(Compatible with 6Gb/s SSD/HDD)	-

Highly Efficient, Economic and Secure

**QGD-1602**

QGD-1602		
Model	QGD-1602-C3558-8G	QGD-1602-C3758-16G
Management Type	Web Managed	Web Managed
PCIe Slot	Slot 1: PCIe Gen3 (x4 slot, x2 speed) Slot 2: PCIe Gen3 (x4 slot, x2 speed)	Slot 1: PCIe Gen3 (x4 slot, x2 speed) Slot 2: PCIe Gen3 (x4 slot, x2 speed)
USB port	2 x USB 3.2 Gen 1	2 x USB 3.2 Gen 1
Management Port	2 x 5GbE ; 2 x 1GbE	2 x 5GbE ; 2 x 1GbE
HDMI Output	-	-
Number of Ports	18	18
10GbE SFP+	2	2
2.5GbE (RJ45)	8	8
1GbE (RJ45)	8	8
1GbE SFP/RJ45 Combo Ports	-	-
Total PoE Ports	-	-
PoE PSE (802.3af, 15.4W)	-	-
PoE+ PSE (802.3at, 30W)	-	-
PoE++ PSE (802.3bt, 60W)	-	-
PoE++ PSE (802.3bt, 90W)	-	-
PoE Power Output	-	-
Total PoE Power Budget	-	-
Dimensions (HxWxD mm)	44.2 x 435.2 x 327.7	44.2 x 435.2 x 327.7

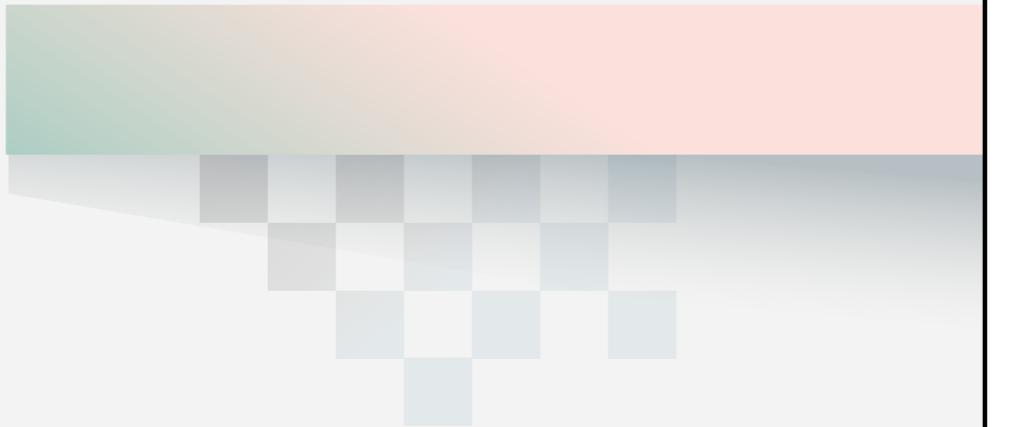
QGD-1600

QGD-1600		
Model	QGD-1600-4G	QGD-1600-8G
Management Type	Web Managed	Web Managed
PCIe Slot	Slot 1: PCIe Gen2 (x2) Slot 2: PCIe Gen2 (x2)	Slot 1: PCIe Gen2 (x2) Slot 2: PCIe Gen2 (x2)
USB port	1 x USB 3.2 Gen 1 2 x USB 2.0	1 x USB 3.2 Gen 1 2 x USB 2.0
Management Port	1 x 1GbE	1 x 1GbE
HDMI Output	1	1
Number of Ports	16	16
10GbE SFP+	-	-
2.5GbE (RJ45)	-	-
1GbE (RJ45)	14	14
1GbE SFP/RJ45 Combo Ports	2	2
Total PoE Ports	-	-
PoE PSE (802.3af, 15.4W)	-	-
PoE+ PSE (802.3at, 30W)	-	-
PoE++ PSE (802.3bt, 60W)	-	-
PoE++ PSE (802.3bt, 90W)	-	-
PoE Power Output	-	-
Total PoE Power Budget	-	-
Dimensions (HxWxD mm)	47.2 x 436.2 x 326.2	47.2 x 436.2 x 326.2

	QuCPE-3032	QuCPE-3034	QuCPE-7012			QuCPE-7030A	
							
Model	QuCPE-3032-C3558R-8G	QuCPE-3034-C3758R-16G	QuCPE-7012-D2166NT-64G		QuCPE-7012-D2146NT-32G	QuCPE-7012-D2123IT-8G	QuCPE-7030A-D1736NT-32G
System	QNE Network	QNE Network		QNE Network		QNE Network	QNE Network
CPU	Intel® Atom® C3558R 4-core 2.4 GHz processor	Intel® Atom® C3758R 8-core 2.4 GHz processor	Intel® Xeon® D-2166NT 12-core/24-thread 2.0GHz processor (16.6M Cache; up to 3.0 GHz)		Intel® Xeon® D-2146NT 8-core/16-thread 2.3GHz processor (11M Cache; burst up to 3.0GHz)	Intel® Xeon® D-2123IT 4C/8T (11M Cache, 2.20 GHz, up to 3GHz)	Intel® Xeon® D-1736NT 8C/16T 2.70Ghz (up to 3.50 GHZ)
System Memory	8GB DDR4 2400MHz Non-ECC UDIMM(1 x 8 GB)	16GB DDR4 2400MHz Non-ECC UDIMM(2 x 8 GB)	64GB DDR4 2666MHz ECC RDIMM (4 x 16GB)		32GB DDR4 2666MHz ECC RDIMM (2 x 16GB)	8GB DDR4 2666MHz ECC RDIMM (1 x 8GB)	32GB DDR4 2666MHz ECC RDIMM (2 x 16GB)
Drive Bays	-	-		2 x 2.5-inch SATA 6Gb/s, 3Gb/s		2 x 2.5-inch SATA 6Gb/s, 3Gb/s	2 x 2.5-inch SATA 6Gb/s, 3Gb/s
PCIe Slot	-	-		1 x PCIe Gen 3 x8		1 x PCIe Gen4 x 8 (FH) Or 2 x PCIe Gen4 x 4 (FH)	1 x PCIe Gen4 x 8 (FH) Or 2 x PCIe Gen4 x 4 (FH)
Console Port (RJ45)	1	1		1		1	1
M.2 SSD Slots	2 x M.2 2280 NVMe	2 x M.2 2280 NVMe		-		3	3
USB 2.0 port	1 Type-A	1 Type-A		1		-	-
USB 3.2 Gen 1 port	1 Type-A	1 Type-A		1		2	2
Dimension W x D x H (mm)	285 x 237 x 46	285 x 237 x 46		430 x 426 x 44.2		436.2 x 454.3 x 44.2	436.2 x 454.3 x 44.2
10GbE SFP+	2	4		4		5	5
2.5GbE (RJ45)	8	8		8		8	8

	QGD-1602P		QGD-1600P		QGD-3014-16PT
					
Model	QGD-1602P-C3758-16G	QGD-1602P-C3558-8G	QGD-1600P-8G	QGD-1600P-4G	QGD-3014-16PT-8G
Management Type	Web Managed	Web Managed	Web Managed	Web Managed	Web Managed
PCIe Slot	Slot 1: PCIe Gen3 (x4 slot, x2 speed) Slot 2: PCIe Gen3 (x4 slot, x2 speed)	Slot 1: PCIe Gen3 (x4 slot, x2 speed) Slot 2: PCIe Gen3 (x4 slot, x2 speed)	Slot 1: PCIe Gen2 (x2) Slot 2: PCIe Gen2 (x2)	Slot 1: PCIe Gen2 (x2) Slot 2: PCIe Gen2 (x2)	-
USB port	2 x USB 3.2 Gen 1	2 x USB 3.2 Gen 1	1 x USB 3.2 Gen 1 2 x USB 2.0	1 x USB 3.2 Gen 1 2 x USB 2.0	3 x USB 3.2 Gen 1
Management Port	2 x 5GbE ; 2 x 1GbE	2 x 5GbE ; 2 x 1GbE	1 x 1GbE	1 x 1GbE	2 x 2.5GbE
HDMI Output	-	-	1	1	2
Number of Ports	18	18	16	16	16
10GbE SFP+	2	2	-	-	-
2.5GbE (RJ45)	8	8	-	-	-
1GbE (RJ45)	8	8	14	14	14
1GbE SFP/RJ45 Combo Ports	-	-	2	2	2
Total PoE Ports	16	16	16	16	16
PoE PSE (802.3af, 15.4W)	Ports 1-16	Ports 1-16	Ports 1-16	Ports 1-16	Ports 1-16
PoE+ PSE (802.3at, 30W)	Ports 1-16	Ports 1-16	Ports 1-16	Ports 1-16	Ports 1-16
PoE++ PSE (802.3bt, 60W)	-	-	Ports 1-4	Ports 1-4	-
PoE++ PSE (802.3bt, 90W)	Ports 1-4	Ports 1-4	-	-	-
PoE Power Output	Ports 1-4 (90W), Ports 5-16 (30W)	Ports 1-4 (90W), Ports 5-16 (30W)	Ports 1-4 (60W), Ports 5-16 (30W)	Ports 1-4 (60W), Ports 5-16 (30W)	Ports 1-16 (Max 30W)
Total PoE Power Budget	370W	200W	360W	360W	140W
Dimensions (HxWxD mm)	44.2 x 435.2 x 327.7	44.2 x 435.2 x 327.7	47.2 x 436.2 x 326.2	47.2 x 436.2 x 326.2	130 x 295 x 224.8

Secure surveillance
system & Smart Video
Conferencing Solution

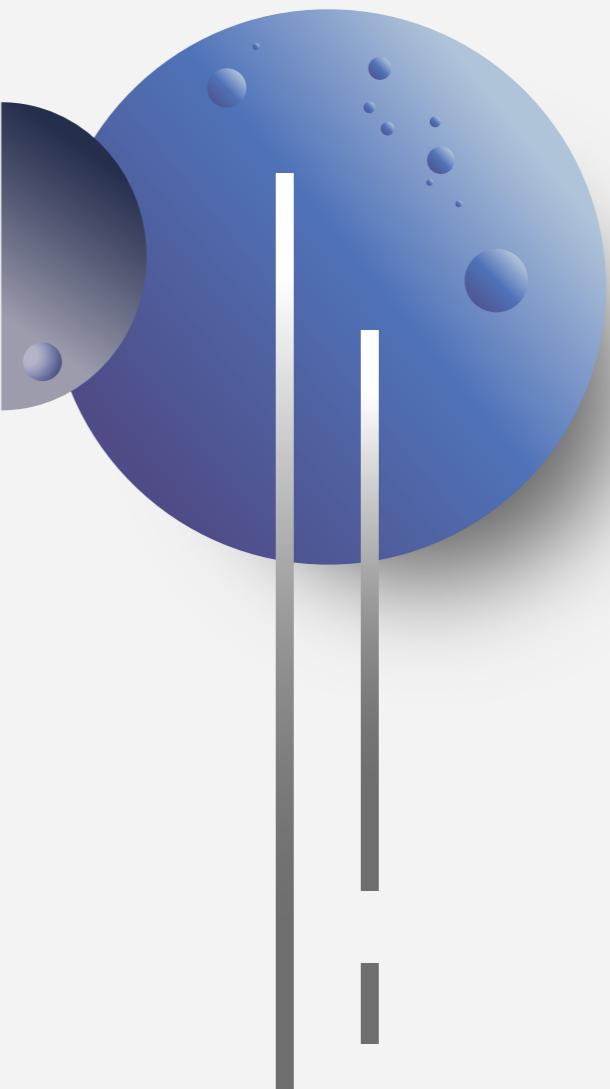


	QVP-63B	QVP-85B	QVP-41B	QVP-21C	QVP-41C
					
Model	QVP-63B	QVP-85B	QVP-41B	QVP-21C	QVP-41C
Operating System	QVR Pro OS (QVP)	QVR Pro OS (QVP)	QVR Pro OS (QVP)	QVR Pro OS (QVP)	QVR Pro OS (QVP)
CPU	Intel® Core™ i3 Processor	Intel® Core™ i5 Processor	Intel Celeron® Processor	Intel® Celeron® J6412 4-core/4-thread processor, burst up to 2.6 GHz	Intel® Celeron® J6412 4-core/4-thread processor, burst up to 2.6 GHz
System Memory	16 GB SODIMM DDR4 (1 x 16 GB)	32 GB SODIMM DDR4 (2 x 16 GB)	8 GB SODIMM DDR4 (2 x 4 GB)	8GB RAM	8GB RAM
Drive Bay	6 x 3.5-inch SATA 6Gb/s, 3Gb/s	8 x 3.5-inch SATA 6Gb/s, 3Gb/s	4 x 3.5-inch SATA 6Gb/s, 3Gb/s	2 x 3.5-inch SATA 6Gb/s	4 x 3.5-inch SATA 6Gb/s, 3Gb/s
Max Live Cameras (Local Display)	50ch @ All 720p,H.264, 30FPS 30ch @ All 1080p,H.264, 30FPS	56ch @ All 720p,H.264, 30FPS 34ch @ All 1080p,H.264, 30FPS	24ch @ All 720p,H.264, 30FPS 12ch @ All 1080p,H.264, 30FPS	12ch @ All 720p,H.264, 30FPS 6ch @ All 1080p,H.264, 30FPS	24ch @ All 720p,H.264, 30FPS 12ch @ All 1080p,H.264, 30FPS
Max Playback Cameras (Local Display)	16	16	12	12	12
Max Concurrent Connection (Client)	16 (4 live cameras / per remote client) <small>*The number of client concurrent connection varies by live cameras</small>	16 (4 live cameras / per remote client) <small>*The number of client concurrent connection varies by live cameras</small>	8 (4 live cameras / per remote client) <small>*The number of client concurrent connection varies by live cameras</small>	8 (4 live cameras / per remote client) <small>*The number of client concurrent connection varies by live cameras</small>	8 (4 live cameras / per remote client) <small>*The number of client concurrent connection varies by live cameras</small>
Embedded Channel	8	8	8	8	8
Max Channel	36 H264 / 1920x1080 / 30FPS	64 H264 / 1920x1080 / 30FPS	24 H264 / 1920x1080 / 30FPS	16 H264 / 1920x1080 / 30FPS	24 H264 / 1920x1080 / 30FPS
Gigabit Ethernet Port	2 x 2.5GbE	2 x 2.5GbE	14 x 1GbE (RJ45) 2 x 2.5 GbE 2 x 1GbE SFP/RJ45 Combo Port	2 x 2.5GbE	2 x 2.5GbE
PoE PSE (802.3af, 15.4W)	-	-	port 1-16	-	-
PoE+ PSE (802.3at, 30W)	-	-	port 1-16	-	-
PoE Power Output	-	-	port 1-16 (Max 30W per port)	-	-
Total PoE Power Budget	-	-	140W	-	-
PCI slot	2 Slot 1: PCIe Gen 4 x16 Slot 2: PCIe Gen 4 x4	2 Slot 1: PCIe Gen 4 x16 Slot 2: PCIe Gen 4 x4	-	-	-
USB port	1 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	1 x Type-C USB 3.2 Gen 2 10Gbps 2 x Type-A USB 3.2 Gen 2 10Gbps	3 x USB 3.2 Gen 1	2 x USB 3.2 Gen 2	2 x USB 3.2 Gen 2
HDMI Output	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	1, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	2, HDMI 2.0 (up to 3840 x 2160 @ 60Hz)	2, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)	2, HDMI 1.4b (up to 4096 x 2160 @ 30Hz)
Dimensions (HxWxD mm)	188.2 x 264.3 x 280.8	188.2 x 329.3 x 280.8	130 x 295 x 224.8	169.2 x 102 x 220.5	168.5 x 160.2 x 220.5



Model	koibox-100w
Operating System	KoiMeeter
CPU	Intel® Celeron® dual-core 1.8GHz
System Memory	4GB DDR4
Drive Bay	1 x 2.5-inch SATA (HDD/SSD not included)
Gigabit Ethernet Port	1 x 1GbE RJ45
Wi-Fi / Bluetooth	Intel Wi-Fi 6 AX201, 802.11ax, Bluetooth 5.2
HDMI Output	1 x HDMI 1.4b output
USB Port	4 x USB 3.2 Gen 2 Type-A
Dimensions (H x W x D)	45 x 232 x 152

Versatile feature-rich accessories to enhance the performance of your system



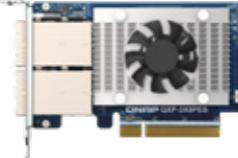
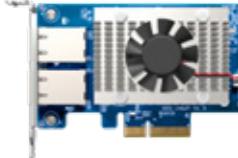
QM2-2P2G2T	QM2-2P10G1TB	QM2-2S-220A	QM2-2P-244A	
Model	QM2-2P2G2T	QM2-2P10G1TB	QM2-2S-220A	QM2-2P-244A
description	Dual M.2 2280 SATA SSD & dual-port 2.5GbE expansion card	Dual M.2 2280 PCIe NVMe SSD & single-port 10GbE expansion card	Dual M.2 22110/2280 SATA SSD expansion card	Dual M.2 22110/2280 PCIe NVMe SSD expansion card

QM2-2P-344A	QM2-2P-384A	QM2-4S-240	QDA-SA3	
Model	QM2-2P-344A	QM2-2P-384A	QM2-4S-240	QDA-SA3
description	Dual M.2 22110/2280 PCIe NVMe SSD expansion card	Dual M.2 22110/2280 PCIe NVMe SSD expansion card	Dual M.2 22110/2280 SATA SSD expansion card	2.5-inch 6Gbps SAS to SATA drive adapter

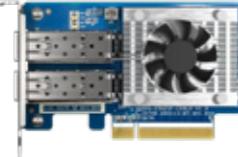
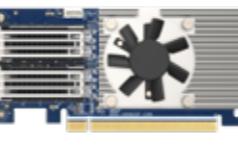
QDA-UMP4	QDA-U2MP	QDA-A2AR	QDA-A2MAR	
Model	QDA-UMP4	QDA-U2MP	QDA-A2AR	QDA-A2MAR
description	Use an M.2 PCIe NVMe SSD in a U.2 PCIe NVMe SSD drive bay for PC and NAS	Use two M.2 PCIe NVMe SSD in a U.2 PCIe NVMe SSD drive bay for PC and NAS	Use two 2.5-inch SATA drives in a single 3.5-inch SATA drive bay with RAID support for PC and NAS	Use two M.2 SATA SSDs in a single 2.5-inch SATA drive bay with RAID support for PC and NAS

QXP-1600eS-A1164	QXP-10G2U3A	QXP-400eS-A1164	QXP-800eS-A1164	
Model	QXP-1600eS-A1164	QXP-10G2U3A	QXP-400eS-A1164	QXP-800eS-A1164
description	16-port SATA expansion card	USB 3.2 Gen 2 dual-port PCIe expansion card	Quad-port SATA expansion card (1 x SFF-8088)	8-port SATA expansion card (2 x SFF-8088)

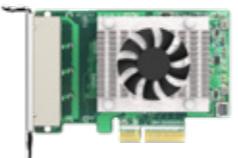
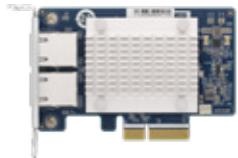
QXP-T32P	QXP-1620S-B3616W	QXP-16G2FC	QXP-32G2FC	
Model	QXP-T32P	QXP-1620S-B3616W	QXP-16G2FC	QXP-32G2FC
description	Dual-port Thunderbolt™ 3 Expansion Card	Quad-port External SAS 12Gb/s storage expansion card	Dual-port 16Gb Enhanced Gen 5 Fibre Channel expansion card with SFP+ transceivers	Dual-port 32Gb Gen 6 Fibre Channel expansion card with SFP+ transceivers

QXP-3X8PES	QXP-3X4PES	QXG-10G1T	QXG-10G2T
			

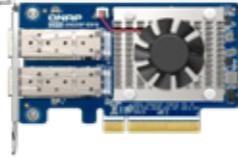
Model	QXP-3X8PES	QXP-3X4PES	QXG-10G1T	QXG-10G2T
description	Dual-port PCIe Gen 3 x8 expansion card	Dual-port PCIe Gen 3 x4 expansion card	Single-port, 5-speed 10 GbE RJ45 network expansion card	Dual-port, 5-speed 10 GbE RJ45 network expansion card

QXG-25G2SF-CX6	QXG-100G2SF-CX6	QXG-100G2SF-E810	QXG-2G1T-I225
			

Model	QXG-25G2SF-CX6	QXG-100G2SF-CX6	QXG-100G2SF-E810	QXG-2G1T-I225
description	Dual-port 25 GbE SFP28 network expansion card	Dual-port 100 GbE QSFP28 network expansion card	Dual-port 100 GbE QSFP28 network expansion card	Single-port 2.5 GbE RJ45 network expansion card

QXG-2G2T-I225	QXG-2G4T-I225	QXG-5G1T-111C	QXG-5G2T-111C
			

Model	QXG-2G2T-I225	QXG-2G4T-I225	QXG-5G1T-111C	QXG-5G2T-111C
description	Dual-port 2.5 GbE RJ45 network expansion card	Quad-port 2.5 GbE RJ45 network expansion card	Single-port, 4-speed 5 GbE RJ45 network expansion card	Dual-port, 4-speed 5 GbE RJ45 network expansion card

QXG-5G4T-111C	QXG-25G2SF-E810	QXG-10G2SF-X710	QNA-UC5G1T
			

Model	QXG-5G4T-111C	QXG-25G2SF-E810	QXG-10G2SF-X710	QNA-UC5G1T
description	Quad-port, 4-speed 5 GbE RJ45 network expansion card	Dual-port 25 GbE SFP28 network expansion card	Dual-port 10 GbE SFP+ network expansion card	USB 3.2 Gen 1 to 5GbE Adapter

QNA-T310G1T	QNA-T310G1S
	

Model	QNA-T310G1T	QNA-T310G1S
description	Single-port Thunderbolt 3 to single-port 10GbE NBASE-T RJ-45	Single-port Thunderbolt 3 to single-port 10GbE SFP+

*All specifications are subject to change without notice



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