



TVS-EC1680U-SAS-RP-8GE-R2	
CPU	Intel® Xeon® E3-1245 v3 quad-core 3.4 GHz processor, E3-1246 v3 quad-core 3.5 GHz processor or a compatible E3-1200 v3 family processor
CPU Architecture	64-bit x86
Floating Point Unit	Yes
Encryption Engine	Yes (AES-NI)
System Memory	8 GB UDIMM DDR3 ECC (2 x 4GB)
Maximum Memory	32 GB (4 x 8GB)
Memory Slot	4 x DDR3 Long-DIMM
Flash Memory	512MB (DOM for dual OS)
Drive Bay	16 x 3.5-inch SAS 12Gb/s, 6Gb/s
Drive Compatibility	3.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA solid state drives
Hot-swappable	Yes
mSATA slot	2 (mSATA flash module is included)
SSD Cache Acceleration Support	Yes
Gigabit Ethernet Port (RJ45)	4
10 Gigabit Ethernet Port	2 x 10GbE SFP+
Jumbo Frame	Yes
PCIe Slot	2 Slot 1: PCIe Gen 3 x8 Slot 2: PCIe Gen 3 x4
USB 2.0 port	4
USB 3.2 Gen 1 port	4

HDMI Output	1
Form Factor	3U Rackmount
LED Indicators	HDD 1-16, Status, 10 GbE, LAN, storage expansion port status
Buttons	Power, Reset
Dimensions (HxWxD)	130 × 442.5 × 530.5 mm
Weight (Net)	18.3 kg
Weight (Gross)	24.18 kg
Operating temperature	0 - 40 °C (32°F - 104°F)
Relative Humidity	5-95% RH non-condensing, wet bulb: 27°C (80.6°F)
Power Supply Unit	Redundant/ Hot Swap ATX Power Supply,Input: 50-60 Hz 100-127V~/ 8.5A 200-240V/ 4.2A Output: 650W
Power Consumption: HDD Sleep Mode	136.57 W
Power Consumption: Operating Mode, Typical	212.51 W
Fan	4 x 80mm smart cooling fan
Sound Level	35.5 db(A)
System Warning	Buzzer
Max. Number of Concurrent Connections (CIFS)	1500

Note: Use only QNAP memory modules to maintain system performance and stability. For NAS devices with more than one memory slot, use QNAP modules with identical specifications. Warning: Using unsupported modules may degrade performance, cause errors, or prevent the operating system from starting.

Designs and specifications are subject to change without notice.

^{*} Sound Level Test Environment: Refer to ISO 7779; Maximum HDD loaded; Bystander Position; Average data from 1 meter in front of operating NAS.