



## TVS-EC1680U-SAS-RP-8GE-R2 (Legacy)

CPU	Intel® Xeon® E3-1245 v3 4-core 3.4 GHz processor, E3-1246 v3 4-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 UDIMM  When upgrading RAM to more than 28GB, the original 4GB RAM modules must be removed. For the information of RAM module installation and compatible NAS models, please refer to the QNAP RAM Module Installation Guide
Flash Memory	512MB (DOM for dual OS)
Drive Bay	16 x 3.5-inch SAS 12Gb/s, 6Gb/s  The standard system is shipped without hard drives. For the HDD compatibility list, please visit <a href="https://www.qnap.com/compatibility/">https://www.qnap.com/compatibility/</a>
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)  For the optional mSATA flash, please visit <a href="http://shop.qnap.com/">http://shop.qnap.com/</a>
SSD Cache Acceleration Support	Yes
Gigabit Ethernet Port (RJ45)	4  For a list of compatible network adapters, please visit the <a href="#">Compatibility List</a> . For instructions on how to install network adapters, please refer to Chapter 6 of the <a href="#">QNAP NAS Hardware Manual</a> .

10 Gigabit Ethernet Port	2 x 10GbE SFP+
Wake on LAN (WOL)	Yes
Jumbo Frame	Yes
PCIe Slot	2 Slot 1: PCIe Gen 3 x8 Slot 2: PCIe Gen 3 x4  The PCIe Gen3 x8 slot is occupied by a 10GbE network adapter.
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)
Storage Temperature	-20 - 70°C (-4°F - 158°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  Tested fully populated with HITACHI HUS724020ALA640 hard drives.
Fan	4 x 80mm smart cooling fan
System Warning	Buzzer
Standard Warranty	5

Max. Number of Concurrent Connections (CIFS) - with Max. Memory	10000
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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 and refer to the hardware user manual to install compatible QNAP memory modules.

Warning: Using unsupported modules may degrade performance, cause errors, or prevent the operating system from starting. QNAP reserves the right to replace partial parts or accessories if the original is no longer available from its manufacturer/supplier. Any replacement would be fully tested and verified to meet strict compatibility and stability guidelines and will deliver identical performance to the original.

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