



TS-EC1680U-i3-8G-R2 (Legacy) CPU Intel® Core™ i3-4150 2-core 3.5 GHz processor **CPU** Architecture 64-bit x86 **Floating Point Unit** Yes Yes (AES-NI) **Encryption Engine** System Memory 8GB UDIMM DDR3 (2 x 4GB) Maximum Memory 32 GB (4 x 8GB) 4 x DDR3 UDIMM Memory Slot 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 SATA 6Gb/s, 3Gb/s The standard system is shipped without hard drives. For the HDD compatibility list, please visit https://www.qnap.com/compatibility/ 3.5-inch SATA hard disk drives **Drive Compatibility** 2.5-inch SATA hard disk drives 2.5-inch SATA solid state drives Hot-swappable Yes mSATA slot 2 (mSATA flash module is optional) For the optional mSATA flash, please visit http://shop.gnap.com/ SSD Cache Acceleration Disk 1, 2, 3, 4 Support **Gigabit Ethernet Port** 4 (RJ45) For a list of compatible network adapters, please visit the Compatibility List. For instructions on how to install network adapters, please refer to Chapter 6 of the **QNAP NAS Hardware Manual.**

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	82.84 W
Power Consumption: Operating Mode, Typical	166.58 W
	Tested fully populated with HITACHI HUS724020ALA640 hard drives.
Fan	4 x 80mm smart cooling fan
System Warning	Buzzer
Max. Number of Concurrent Connections (CIFS) - with Max. Memory	2500

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.

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

Product images are for illustrative purposes only and may differ from the actual product. Due to differences in monitors, colors of products may also appear different to those shown on the site.

Designs and specifications are subject to change without notice.