



## TVS-h1688X-W1250-32G

CPU	Intel® Xeon® W-1250 6-core/12-thread processor, up to 4.7 GHz
CPU Architecture	64-bit x86
Graphic Processors	Intel® UHD Graphics P630
Floating Point Unit	Yes
Encryption Engine	Yes (AES-NI)
Hardware-accelerated Transcoding	Yes
System Memory	32GB ECC UDIMM DDR4 (2 x 16 GB)
Maximum Memory	128 GB (4 x 32 GB)
Memory Slot	4 x UDIMM DDR4  For dual-DIMM configurations, you must use a pair of identical DDR4 modules.
Flash Memory	5GB (Dual boot OS protection)
Drive Bay	12 x 3.5-inch SATA 6Gb/s, 3Gb/s + 4 x 2.5-inch SATA 6Gb/s, 3Gb/s  The system is shipped without HDD. 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 bays: 3.5-inch SATA hard disk drives 2.5-inch SATA hard disk drives 2.5-inch SATA solid state drives  2.5-inch bays: 2.5-inch SATA solid state drives
Hot-swappable	Yes
M.2 Slot	2 x M.2 22110/2280 NVMe PCIe Gen3 x4 slots  Compatible with NVMe SSD PCIe Gen 3 and above. Please refer to <a href="https://www.qnap.com/compatibility/">https://www.qnap.com/compatibility/</a> for compatibility.
SSD Cache Acceleration Support	Yes

GPU pass-through	Yes
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 an adapter
10 Gigabit Ethernet Port	2 x 10GBASE-T (10G/1G)
25 Gigabit Ethernet Port	Optional via an adapter
Wake on LAN (WOL)	Yes  Only the 2.5GbE port
Jumbo Frame	Yes
Thunderbolt Port	Optional via the QXP-T32P 2-port Thunderbolt 3 PCIe adapter  Supports only Thunderbolt connections for Windows & Mac hosts and USB storage devices. Third-party Thunderbolt external storage devices are not supported.
PCIe Slot	3 Slot 1: PCIe Gen3 x8 Slot 2: PCIe Gen3 x4 Slot 3: PCIe Gen3 x4  *Slot 1 is preinstalled with a 2-port 10GbE network adapter. Card dimensions for PCIe slot 1 : 260 x 111.15 x 37.52 mm / 10.25 x 4.38 x 1.48 inches. Card dimensions for PCIe slot 2 : 150 x 68.9 x 18.76 mm / 5.90 x 2.71 x 0.74 inches. Card dimensions for PCIe slot 3 : 150 x 68.9 x 18.76 mm / 5.90 x 2.71 x 0.74 inches. Wider cards can be installed if the next PCIe slot will not be used.
USB 3.2 Gen 2 (10Gbps) Port	2 x Type-C 4 x Type-A
HDMI™ Output	1, HDMI™ 1.4b (up to 4096 x 2160 @ 30Hz)
Audio Input	- (No longer available on units manufactured on or after 2021/1/1)
Audio Output	- (The line out jack and speaker are no longer available on units manufactured on or after 2021/1/1)
Form Factor	Tower
LED Indicators	System status, LAN, USB, Disk 1~16, M.2 SSD 1~2
LCD Display/ Button	Yes
Buttons	Power, Reset, USB Auto Copy
Dimensions (HxWxD)	294.3 × 369.89 × 319.8 mm  Dimensions do not include foot pad (foot pad may be up to 30mm / 1.18 inches high depending on model)
Weight (Net)	14.49 kg

Weight (Gross)	15.89 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	550W PSU, 100~240V
Power Consumption: HDD Sleep Mode	91.26 W
Power Consumption: Operating Mode, Typical	108.67 W Tested with drives fully populated.
Fan	System fan: 3 x 80mm, 12VDC CPU fan: 2 x 97mm, 12VDC
System Warning	Buzzer
Kensington Security Slot	Yes
Standard Warranty	3
Max. Number of Concurrent Connections (CIFS) - with Max. Memory	10000

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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