## QNAP

## QNAP TVS-672XT NAS Tower Intel® Core™ i3 i3-8100T 8 GB DDR4 60 TB HDD QNAP Turbo System Black

**Brand :** QNAP **Product code:** TVS-672XT-I3-8G/60TB-IW

**Product name:** TVS-672XT

Intel Core i3-8100T 3.1 GHz, DDR4 SODIMM, 4 GB Flash, Intel UHD Graphics 630, 6  $\times$  3.5" SATA, 2  $\times$  M.2, 1  $\times$  10GBASE-T RJ45, 1  $\times$  USB 3.0, 2  $\times$  Type-C USB 3.1 Gen2, 2  $\times$  Type-A USB 3.1 Gen2, 1  $\times$  HDMI 2.0, 250W

QNAP TVS-672XT. Type: NAS. Chassis type: Tower. Device class: Home & Home Office. Processor family: Intel® Core™ i3, Processor model: i3-8100T, Processor frequency: 3.1 GHz. Internal memory: 8 GB, Internal memory type: DDR4. Total installed storage capacity: 60 TB, Installed storage drive type: HDD. Operating system installed: QNAP Turbo System









Storage		Design	
Supported storage drive interfaces Storage drive sizes supported Number of M.2 (M & B) slots RAID support * RAID levels Online RAID migration	M.2, Serial ATA III 2.5,3.5,M.2 2 ✓ 0, 1, 5, 6, 10, 50, JBOD ✓	LED indicators Built-in display Cable lock slot Cable lock slot type Built-in speaker(s) Number of built-in speakers	HDD, LAN, Status, USB
Online RAID expansion	✓	Performance	
Hot-swap drive bays Supported file systems	FAT32, HFS+, NTFS, exFAT, ext3, ext4	Type * Device class *	NAS Home & Home Office
Storage drives installed * Total installed storage capacity * Number of storage drives supported *	<b>√</b> 60 TB 6	Backup function *  Backup features  Buzzer  Multilingual support	iscsi lun
Installed storage drive type * Supported storage drive types * Auto-rebuild Bad block scan	HDD HDD & SSD ✓	Noise level Snapshot Management protocols Web-based management Share folder access right	23.8 dB  SNMP 2/3
Disk roaming  Processor	•	management	1
Processor manufacturer * Processor generation Processor family * Processor model * Processor frequency * Processor cores Processor threads Processor cache Bus type Configurable TDP-down frequency CPU configuration (max) PCI Express configurations	Intel 8th gen Intel® Core™ i3 Intel® Core™ i3 i3-8100T 3.1 GHz 4 4 6 MB DMI3 2.4 GHz 1 1x16, 1x8+2x4, 2x8	Security algorithms Access Control List (ACL) Reset button On/off switch Built-in iTunes server Built-in FTP server  Browser supported  System log Hot spare S.M.A.R.T. support Share folder Universal Plug and Play (UPnP)	256-bit AES, FIPS 140-2, HTTPS, SSI   Apple Safari 7, Google Chrome, Microsoft Internet Explorer 10, Mozilla Firefox  CIFS/SMB
PCI Express slots version Processor cache type	3.0 Smart Cache	Software	•
Processor code Processor codename Processor lithography	SR3Y8 Coffee Lake 14 nm	Operating system installed * Operating system version	QNAP Turbo System 4.4.0

Software	Dunanan		Coffunanc	
Processor package 422   7.5 x 3.7 5 m   Security   Processor social   Collision   Colli	Processor	CA Lit	Software	Minday 10 Minday 10
Memory Internal memory by B B B B B B B B B B B B B B B B B B	Processor package size Processor socket Scalability Stepping System bus rate Tjunction Thermal Design Power (TDP) On-board graphics card model Maximum internal memory supported by processor Memory bandwidth supported by	37.5 x 37.5 mm LGA 1151 (Socket H4) 1S B0 8 GT/s 82 °C 35 W Intel® UHD Graphics 630 64 GB	. 3,	Education, Windows 10 Education x64, Windows 10 Enterprise, Windows 10 Enterprise x64, Windows 10 Home, Windows 10 Home x64, Windows 10 IOT Core, Windows 10 Pro, Windows 10 Pro x64, Windows 7, Windows 7 Enterprise, Windows 7 Home Basic, Windows 7 Home Basic x64, Windows 7 Home Premium, Windows 7 Home Premium x64, Windows 7 Professional, Windows 7 Professional x64, Windows 7
Internal memory "         8 GB         Windows & Enterprise, Windows & Enterprise, Windows Internal memory type         DDR4         8 Pro, Windows & Pro, x64, Windows & Pro, x64, Windows & Row, Windows	Memory			
Memory form factor   SO-DIMM   Add   Memory form factor   SO-DIMM   Add   Memory form factor   Memory form factor   Add   Memory form factor   Memory form factor   Add   Memory form factor   Add   Memory form factor   Add   Memory form factor   Add   Memory factor   Add   Memory factor   Add   Memory factor   Add	Internal memory * Internal memory type Maximum RAM supported	DDR4 32 GB	Linux operating systems supported	Windows 8, Windows 8 Enterprise, Windows 8 Enterprise x64, Windows 8 Pro, Windows 8 Pro x64, Windows 8 x64
Network	•		, 3,	Mac OS X 10.10 Yosemite, Mac OS X
Network         Mac OS X 10.14 Mojave, Mac OS X 10.19 Mavericks will make the supported (max)         Mac OS X 10.19 Mojave, Mac OS X 10.19 Movericks will make the supported will make the supported (max)         Mac OS X 10.14 Mojave, Mac OS X 10.1	•			
Ethernet LAN*         J.0,10,100,1200,2500,5000,1000 Mbit/s         Server operating systems supported windows Server 2013, Windows Server 2013, R2, Window	Network		Mac operating systems supported	Mac OS X 10.14 Mojave, Mac OS X
Ethernet LAN data rates		1		
Ethernet LAN data rate supported (max)  WiFi  WiFi  Power  DHCP client  V Power  DHCP client  V Power  DHCP sever  V V Ac input voltage  V Inou voltage  V Ino	Ethernet LAN data rates			
Wi-Fi         X         Power           DHCP client         ✓         Power supply unit (PSU) capacity         250 W           DHCP sever         ✓         AC input voltage         100 - 240 V           Jumbo frames support         ✓         Weight & dimensions           ISCSI support         ✓         Width *         264.3 mm           Wake-on-LAN ready         ✓         Width *         279.6 mm           Supported network protocols         TCP/IP, IPv4, IPv6         Depth *         279.6 mm           Link aggregation         ✓         Packaging content           Uparatic DNS (DDNS)         ✓         Rake included         AC, LAN (R)-45)           WLAN adapter supported         ✓         Cables included         AC, LAN (R)-45)           WLAN adapter supported         ✓         Embedded options available         ✓           USB 9.2 Cen 1 (3.1 Gen 1) Type-A ports quantity         1         Embedded options available         ✓           USB 3.2 Cen 2 (3.1 Gen 2) Type-A ports quantity         2         Execute Disable Bit         ✓           USB 3.2 Cen 2 (3.1 Gen 2) Type-A ports quantity         1         Intel 64         ✓           USB 3.2 Cen 2 (3.1 Gen 2) Type-C ports quantity         2         Intel 64         ✓           USB 3.2 C	Ethernet LAN data rate supported		Server operating systems supported	2012, Windows Server 2012 R2,
DHCP server         V         AC input voitage         100 - 240 V           Jumbo frames support         ✓         AC input voitage         100 - 240 V           ISCSI support         ✓         Weight & dimensions           ISCSI support         ✓         Width *         264.3 mm           Supported network protocols         TCP/IP, IPv4, IPv6         Depth *         279.6 mm           Link aggregation         ✓         Packaging content           Dynamic DNS (DDNS)         ✓         Cables included         AC, LAN (RJ-45)           WLAN adapter supported         ✓         Packaging content         V           Dynamic DNS (DDNS)         ✓         Cables included         AC, LAN (RJ-45)           WLAN adapter supported         ✓         Packaging content         V           DYD st & interfaces         Processor special features         V           USB 9.7 € on 1 (3.1 Gen 1) Type-A ports quantity         ✓         Processor special features           USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity         2         Execute Disable Bit         ✓           USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity         2         Execute Disable Bit         ✓           USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity         2         Intel Enamce Halt State         ✓ <td></td> <td>x</td> <td>Power</td> <td></td>		x	Power	
Jumbo frames support  ISCSI support  Weight & dimensions  Weight & dimensions  Wake-on-LAN ready  Vake-on-LAN ready  Supported network protocols  Ink aggregation  Load balancing system  Valuation DNS (DDNS)  WLAN adapter supported  Valuation and	DHCP client	✓	Power supply unit (PSU) capacity	250 W
SCSI support   Wake-on-LAN ready		•	AC input voltage	100 - 240 V
Wake-on-LAN ready     V     Width *     264.3 mm       Supported network protocols     TCP/IP, IPv4, IPv6     Depth *     279.6 mm       Link aggregation     V     Height *     188.2 mm       Load balancing system     V     Cables included     AC, LAN (RJ-45)       WLAN adapter supported     V     Quick installation guide     AC, LAN (RJ-45)       Ports & interfaces       USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity     V     Embedded options available     V       USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity     2     Enhanced Intel SpeedStep Technology     V       USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity     2     Execute Disable Bit     V       USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity     2     Intel 64     V       USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity     2     Intel Clear Video Technology     V       USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity     1     Intel Clear Video Technology     V       USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity     1     Intel Enhanced Halt State     V       HDMI ports quantity     1     Intel Enhanced Halt State     V       HDMI ports quantity     2     Intel Enhanced Halt State     V       Ethernet LAN (RJ-45) ports *     3     Intel Stable Image Platform Program ports quantity     V </td <td>•</td> <td>•</td> <td>Weight &amp; dimensions</td> <td></td>	•	•	Weight & dimensions	
Supported network protocols     TCP/IP, IPv4, IPv6     Depth *     279.6 mm       Link aggregation     4     Height *     188.2 mm       Load balancing system     4     Packaging content       WLAN adapter supported     4     Cables included     AC, LAN (RJ-45)       WLAN adapter supported     4     Quick installation guide     *       Protes with protects of protocology       USB 9.7 **     *     Embedded options available     4       USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity     1     Enhanced Intel SpeedStep Technology     *       ports Quantity     2     Idle States     4       USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity     2     Intel 64     *       HDMI ports quantity     1     Intel Clear Video Technology     *       HDMI ports quantity     1     Intel Identity Protection Technology     *       HDMI version     2     Intel Identity Protection Technology version     1.00       Thunderbot 3 ports quantity     2     Intel Stable Image Platform Program (SIPP)     *       Microphone in     4     Intel Stable Image Platform Program (SIPP)     *       PCI Express x4 (Gen 3.x) slots     1     Intel Stable Image Platform Program (SIPP) version     *       On-board graphics card base frequency     100 MHz     Intel Txs-NI v		1	Width *	264.3 mm
Dynamic DNS (DDNS)  Variable Sincluded  Variab	•	TCP/IP, IPv4, IPv6	•	
Dynamic DNS (DDNS) WLAN adapter supported V Quick installation guide V Ports & interfaces V Embedded options available V USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity V Enhanced Intell SpeedStep Technology VSB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity VSB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity VSB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity VS		✓	Height *	188.2 mm
WLAN adapter supported  Vouck installation guide  Vouck installation g		<b>√</b>	Packaging content	
Ports & interfaces  USB port *  USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  HDMI ports quantity  1	-	1		
USB port *		•		<b>✓</b>
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  HDMI ports quantity  1		/	Processor special features	
ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  HDMI ports quantity  HDMI version  Ethernet LAN (RJ-45) ports * 3  Ethernet LAN (RJ-45) ports * 3  Thunderbolt 3 ports quantity  Microphone in  VCI Express x4 (Gen 3.x) slots  CGraphics  On-board graphics card base frequency  On-board graphics card DirectX  On-board graphics card DirectX  VSB 3.2 Gen 2 (3.1 Gen 2) Type-C  2  Little Stable Image Platform Program (SIPP) version  Intel Stable Image Platform Program (SIPP) version  Intel Stable Image Platform Program (SIPP) version  Intel Trusted Execution Technology  X  Non-board graphics card base frequency  On-board graphics card DirectX  On-board graphics card DirectX  Von-board graphics card DirectX  Von-board graphics card OpenGL  Version  On-board graphics card OpenGL  Vaniel Virtualization Technology for Directed I/O (VT-d)  Version  Intel Virtualization Technology for Directed I/O (VT-d)  Intel VT-x with Extended Page	•		•	✓
ports quantity  USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  LDMI ports quantity  LDMI ports quantity  LDMI version  LDMI ve	ports quantity	1	·	✓
USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity  HDMI ports quantity  1 Intel Clear Video Technology  HDMI version  2.0 Intel Enhanced Halt State  Ethernet LAN (RJ-45) ports*  3 Intel Identity Protection Technology  Thunderbolt 3 ports quantity  2 Intel Secure Key Technology version  Intel Stable Image Platform Program (SIPP)  PCI Express x4 (Gen 3.x) slots  1 Intel Stable Image Platform Program (SIPP)  PCI Express x4 (Gen 3.x) slots  1 Intel Stable Image Platform Program (SIPP)  Intel Stable Image Platform Program (SIPP)  Intel Trusted Execution Technology  X Intel Virtualization Technology  X Intel Virtualization Technology (VT-X)  N On-board graphics card OpenGL version  Intel Virtualization Technology for Directed I/O (VT-d)  Intel VIrtualization Technology  Intel V		2	Execute Disable Bit	✓
HDMI ports quantity  HDMI version  2.0  Intel Clear Video Technology  Intel Enhanced Halt State  Intel Identity Protection Technology  Intel Secure Key Technology version  Intel Stable Image Platform Program (SIPP)  PCI Express x4 (Gen 3.x) slots  Intel Trusted Execution Technology  Intel Trusted Execution Technology  Intel Stable Image Platform Program (SIPP)  Intel Stable Image Platform Program (SIPP)  Intel Trusted Execution Technology  Intel Trusted Execution Technology  Intel TSX-NI  On-board graphics card base frequency  On-board graphics card dynamic frequency (max)  Intel TSX-NI version  Intel TSX-NI version  Intel Virtualization Technology (VT-x)  X  Intel Virtualization Technology for Directed I/O (VT-d)  Intel VT-x with Extended Page  Intel VT-x with Extended Page		2		<b>√</b>
HDMI version 2.0 Intel Enhanced Halt State   Ethernet LAN (RJ-45) ports * 3 Intel Identity Protection Technology version   Thunderbolt 3 ports quantity 2 Intel Secure Key Technology version   Microphone in   PCI Express x4 (Gen 3.x) slots 1 Intel Stable Image Platform Program (SIPP) version   Intel Stable Image Platform Program (SIPP) version   Intel Trusted Execution Technology   Intel Trusted Execution Technology   Intel Trusted Execution Technology   Intel TSX-NI   Intel TSX-NI version   Intel TSX-NI version   Intel TSX-NI version   Intel Virtualization Technology (VT- x)   Intel Virtualization Technology (VT- x)   Intel Virtualization Technology (VT- x)   Intel Virtualization Technology for Directed I/O (VT-d)   Intel VT-x with Extended Page    **The Amal Stable Image Platform Program (SIPP) version   Intel Trusted Execution Technology (VT- x)   Intel Virtualization Technology (VT- x)   Intel Virtualization Technology (VT- x)   Intel Virtualization Technology for Directed I/O (VT-d)   Intel VT-x with Extended Page   **The Amal Stable Image Platform Program (SIPP)   Intel Virtualization Technology (VT- x)   Intel Virtualization Technology (VT-				1
Ethernet LAN (RJ-45) ports * 3	• • •		• • • • • • • • • • • • • • • • • • • •	<b>*</b>
Thunderbolt 3 ports quantity  3.5 mm (1/8-inch) out  Microphone in  PCI Express x4 (Gen 3.x) slots  On-board graphics card base frequency  On-board graphics card dynamic frequency (max)  On-board graphics card DirectX version  On-board graphics card OpenGL  Version  Intel Virtualization Technology (VT-x)  Intel Virtualization Technology for On-board graphics card OpenGL  Version  Intel VT-x with Extended Page				1.00
Microphone in  Microp			version	
Comphies   Component   Com	3.5 mm (1/8-inch) out	✓		
Graphics  On-board graphics card base frequency  On-board graphics card dynamic frequency (max)  On-board graphics card DirectX version  On-board graphics card OpenGL version  Intel TSX-NI  Intel TSX-NI version  Intel TSX-NI version  Intel Virtualization Technology (VT- x)  Intel Virtualization Technology (VT- x)  Intel Virtualization Technology for Directed I/O (VT-d)  Intel VT-x with Extended Page	·	<b>√</b>	(SIPP)	^
On-board graphics card base frequency  On-board graphics card dynamic frequency (max)  On-board graphics card DirectX version  On-board graphics card OpenGL version  Intel Trusted Execution Technology  Intel TSX-NI version  On-the Intel Virtualization Technology (VT- x)  Intel Virtualization Technology for Directed I/O (VT-d)  Intel VT-x with Extended Page		1	Intel Stable Image Platform Program	0.00
On-board graphics card base frequency  On-board graphics card dynamic frequency (max)  On-board graphics card DirectX version  On-board graphics card DirectX version  On-board graphics card OpenGL version  On-board graphics card OpenGL version  On-board graphics card OpenGL version  A.5  Intel TSX-NI version  On-board graphics card DirectX vi Intel Virtualization Technology for Directed I/O (VT-d)  Intel VT-x with Extended Page	•		(SIPP) version	
On-board graphics card dynamic frequency (max)  On-board graphics card DirectX version  On-board graphics card DirectX version  On-board graphics card OpenGL version  12.0  Intel Virtualization Technology (VT- volume)  Intel Virtualization Technology for Directed I/O (VT-d)  Intel VT-x with Extended Page		350 MHz	<del></del>	
frequency (max)  On-board graphics card DirectX version  On-board graphics card OpenGL version  Intel Virtualization Technology (VT- x)  Intel Virtualization Technology for Directed I/O (VT-d)  Intel VT-x with Extended Page	• •	1100 MH-		
On-board graphics card OpenGL version  Intel Virtualization Technology for Directed I/O (VT-d)  Intel VT-x with Extended Page	frequency (max)			1
version 4.5 Intel VT-x with Extended Page				✓
		4.5	Intel VT-x with Extended Page	✓

Graphics		Processor special features	
On-board graphics card ID  Maximum on-board graphics card	0x3E91	Intel® AES New Instructions (Intel® AES-NI)	✓
memory  Number of displays supported (on-	64 GB	Intel® Clear Video HD Technology (Intel® CVT HD)	✓
board graphics)	3	Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT	<b>✓</b>
Design		for MID)	
Chassis type * Cooling type * Product colour Number of fans Fan diameter Fan diameter 2	Tower Active Black 4 fan(s) 9.2 cm 6 cm	Intel® Hyper Threading Technology (Intel® HT Technology)	×
		Intel® Identity Protection Technology (Intel® IPT)	1
		Intel® InTru™ 3D Technology	✓
		Intel® OS Guard	✓
	o em	Intel® Quick Sync Video Technology	✓
		Intel® Secure Key	✓
		Intel® Smart Cache	✓
		Intel® Turbo Boost Technology	×
		Maximum number of PCI Express lanes	16
		Thermal Monitoring Technologies	✓
		Thermal solution specification	PCG 2015A
		Memory types supported by processor	DDR4-SDRAM
		Operational conditions	
		Operating temperature (T-T)	0 - 40 °C
		Logistics data	
		Harmonized System (HS) code	84714100
		Other features	
		Digital Living Network Alliance (DLNA) certified	✓
		Processor ARK ID	129944

