







# Hardware specification



Model	TS-251+-2G	TS-251+-8G	TS-451+-2G	TS-451+-8G
CPU	Quad-core Intel® Celeron® 2.0GHz processor ((burst up to 2.08GHz) 2.42GHz)			
Floating Point Unit	✓			
Hardware-Acclerated Transcoding	✓			
GPU	Intel® HD Graphics			
System memory	2GB (2 x 1GB )	8GB (2 x 4GB )	2GB (2 x 1 GB )	8GB (2 x 4GB )
Memory expandable up to	8GB NOTE: 1. When installing two memory modules, please ensure that they are the same size and ideally use the same type of RAM for both memory slots. 2. For the information of RAM module installation and compatible NAS models, please refer to the QNAP RAM Module			
Total memory slots	2			
Flash Memory	512MB (DOM)			
Max. number of HDDs/SSDs	2		4	
Compatible Drive Type	3.5" or 2.5" SATA 6Gb/s, 3Gb/s HDD or SSD, hot swappable			
LAN Port	2 Gigabit RJ-45 Ethernet ports, supporting port trunking			
USB	2 x USB 3.0 (Front: 1, Rear: 1) 2 x USB 2.0 (Rear)			
LED Indicators	Power/Status, LAN, USB, HDD			
Buttons	Power, USB One-Touch-Copy, Reset			
IR	Yes (RM-IR002 & MCE)			
HDMI	1			
Alarm Buzzer	System warning			
Form Factor	Tower			
Dimensions	168.5 x 102 x 225 mm / 6.63 x 4.02 x 8.86 inch (HxWxD)		177 x 180 x 235 mm / 6.97 x 7.09 x 9.25 inch	
Weight (Net / Gross)	1.28 kg (2.82 lbs) / 2.32 kg (5.11 lbs)		3 kg (6.61 lbs) / 4.3 kg (9.48 lbs)	
Power Consumption (W)	HDD standby:10.56W / In operation (typical): 18.09W		HDD standby:15.78W / In operation (typical): 33.88W	
Operating Temperature	0 - 40 °C			
relative humidity	5~95% RH non-condensing, wet bulb: 27°C			
Power Supply	External Power Adapter, 60W, 100-240V		External Power Adapter, 90W, 100-240V	
Fan	1 x quiet cooling fan (7cm,12V DC)		1 x quiet cooling fan (12cm,12V DC)	
Windows® sequential Read / Write (64KB, 2 x GbE)	223 / 225		225 / 224	
Windows® sequential Read / Write Encryption (64KB, 2 x GbE)	205 / 178		204 / 158	

## Accessories

	Category	Order No.	Description
Expansion units		UX-500P	QNAP 5-bay Expansion unit 185.2 (H) x 210.6 (W) x 235.4 (D) mm 7.29 (H) x 8.29 (W) x 9.27 (D) inch, 5.1 kg / 11.24 lbs
		UX-800P	QNAP 8-bay Expansion unit 185.2 (H) x 298.2 (W) x 235.4 (D) mm 7.29 (H) x 11.74 (W) x 9.27 (D) inch, 7.3 kg / 16.08 lbs
RAM		RAM-2GDR3L-SO-1600	2GB DDR3 RAM, 1600 MHz, SO-DIMM
		RAM-4GDR3L-SO-1600	4GB DDR3 RAM, 1600 MHz, SO-DIMM
		RAM-8GDR3L-SO-1600	8GB DDR3 RAM, 1600 MHz, SO-DIMM
Remote control		RM-IR002	QNAP IR-002 remote conyrol (included)