

TS-451+ -2G	
CPU	Intel® Celeron® J1900 quad-core 2.0 GHz processor (burst up to 2.42 GHz)
CPU Architecture	64-bit x86
Graphic Processors	Intel® HD Graphics
Floating Point Unit	Yes
Hardware-accelerated Transcoding	Yes , up to 1080P
System Memory	2 GB SO-DIMM DDR3L (1 x 2 GB)
Maximum Memory	8 GB (2 x 4 GB)
Memory Slot	2 x SO-DIMM DDR3L For dual-DIMM configurations, you must use a pair of identical DDR3L modules.
Flash Memory	512MB (Dual boot OS protection)
Drive Bay	4 x 2.5-inch or 3.5-inch SATA 6Gb/s, 3Gb/s The system is shipped without HDD. For the HDD compatibility list, please visit https://www.qnap.com/compatibility/
Drive Compatibility	3.5-inch SATA hard disk drives 2.5-inch SATA hard disk drives 2.5-inch SATA solid state drives
Hot-swappable	Yes
SSD Cache Acceleration Support	Yes
Gigabit Ethernet Port (RJ45)	2
Jumbo Frame	Yes
USB 2.0 port	2
USB 3.0 port	2
IR Sensor	Yes (RM-IR002 & MCE)
HDMI Output	1, (up to 1080p)
Form Factor	Tower
LED Indicators	Power/Status, LAN, USB, HDD1-4
Buttons	Power, Reset, USB Auto Copy
Dimensions (HxWxD)	177 × 180 × 235 mm

Weight (Net)	3 kg
Weight (Gross)	4.3 kg
Operating temperature	0 - 40 °C (32°F - 104°F)
Relative Humidity	5~95% RH non-condensing, wet bulb: 27°C (80.6°F)
Power Supply Unit	External Power Adapter, 90W, 100-240V
Power Consumption: HDD Sleep Mode	15.78 W
Power Consumption: Operating Mode, Typical	33.88 W
Fan	1 x 12cm, 12V DC
Sound Level	16.9 db(A)
System Warning	Buzzer
Kensington Security Slot	Yes

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. Warning: Using unsupported modules may degrade performance, cause errors, or prevent the operating system from starting.

* Sound Level Test Environment: Refer to ISO 7779; Maximum HDD loaded; Bystander Position; Average data from 1 meter in front of operating NAS.

Designs and specifications are subject to change without notice.