# QNAP

# TS-x31P

Featuring a Cortex-A15 Annapurna Labs Alpine AL-212 dual-core 1.7 GHz processor with hardware encryption



- LXC + Docker Dual Virtualization Technology on ARM-based NAS
- Full backup to external devices, remote servers, or cloud storage
- Stream to multiple media devices simultaneously and enjoy high-quality streaming with DLNA, Apple TV, and Chromecast











# Introducing TS-x31P – an Easy to Use and Affordable NAS for Homes and SMBs

Equipped with ARM® Cortex®-A15 core architecture dual-core 1.7 GHz processor. TS-x31P's simple yet practical hardware design and intuitive QTS operating system makes it possible for you to enjoy the convenience of NAS at no extra cost. With QNAP's exclusive mail agent, contact manager and other Introducing applications, TS-x31P can easily help you connect your home, life and work with a single device, whether you are at home as a beginner or in a small studio.



#### **Dual-core processor delivers high performance**

Equipped with an AnnapurnaLabs, an Amazon company Alpine AL-212 dual-core 1.7 GHz Cortex-A15 processor and 1GB DDR3 RAM, TS-x31P series are high-performance NAS for home, workgroups and SOHO users providing outstanding performance of up to 223 MB/s read & 172 MB/s write throughput. TS-x31P's enhanced hardware-based encryption and decryption engine provides transfer speeds of over 190 MB/s with AES 256-bit full NAS volume encryption.

Tested in QNAP laboratories. Results may vary due to different usage environments. Test environment:

NIAC .

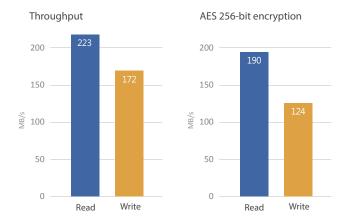
Model: TS-431P with QTS 4.2.2

Volume type: RAID5 ( $4 \times 1TB \text{ HDDs}$ ); Direct connected

Client PCs:

Microsoft Windows 10 64bit; Intel (R) Core (TM) i7-4790 CPU; DDR3 1600Hz 16GB;

10GB file Windows Upload/Download, 2 LAN





- · External storage
- Printer
- · SD card reader
- UPS
- · Wi-Fi adapter
- And more USB applications



- Port Trunking
- Link Aggregation
- · increase total data transmission potential
- · Dual IP



Port trunking is not supported by TS-x31P.

#### **QmailAgent 1.0**

QmailAgent is an online email client that helps you manage multiple email accounts, allowing you to access all of your emails and to easily switch between different accounts. It provides excellent functionality for composing, reading and organizing emails. You can even attach files, photos and documents from the TS-x31P when composing emails.

#### **Ocontactz 1.0**

Qcontactz helps you centrally store and manage contact information for colleagues, business partners, family, and friends. Other features include: importing from Google® accounts, importing/exporting CSV or vCARD 3.0 files, automatic identification of frequently-used contacts, encryption for sensitive/confidential contact information, smart searching, and more.

#### **Notes Station 3.0**

The revamped Notes Station allows users to collectively write documents and helps users to track changes by retaining the revision history of documents. You can also create sharing links to share documents in real time. Documents can also be encrypted to prevent unauthorized access, and snapshot backup is provided to retain different versions of documents from different time periods.

#### **Qsync Central Station 2.0**

Qsync turns your TS-x31P into a safe, high-capacity data center for file synchronization. Any file uploaded to the TS-x31P will be made available for all linked devices, such as computers, laptops or mobile devices. Qsync is especially useful for frequent travelers to manage files and always have the most up-to-date files on different devices.

## **Rapidly deploy IoT apps with Container Station**

Container Station exclusively integrates LXC and Docker® lightweight virtualization technologies, allowing you to operate multiple isolated Linux® systems on TS-x31P and download apps from the built-in Docker Hub® Registry. It can easily build a secure private cloud to store IoT data and to quickly create diverse IoT applications.



### Centralize backup, restoration and synchronization with Hybrid Backup Sync

Hybrid Backup Sync consolidates backup, restoration and synchronization functions (using RTRR, rsync, FTP, CIFS/SMB) into a single app for easily transferring data to local, remote and cloud storage spaces as a comprehensive data storage and disaster recovery plan. Hybrid Backup Sync supports multi-version backup, flexible job scheduling, file compression to save storage space, and more.



#### **Surveillance Station 5.1**

Surveillance Station is a professional network surveillance Video Management System (VMS) that offers a user-friendly management interface, over 3,000 compatible IP camera models, and expandable IP camera channel licenses. It supports real-time monitoring, video & audio recording and playback with a wide range of customizable settings.



#### **App Center**

The built-in App Center provides various install-on-demand apps developed by QNAP and third-party developers, including tools for backup/sync, business, content management, communications, download, entertainment, and much more.



#### **Access your NAS from mobile devices**



**Qfile** 

Use Qfile to remotely manage the files on your NAS, upload and download files, stream videos/music, share documents and synchronize files with mobile devices.



Find web resources, set new download tasks to the NAS, and manage your download tasks.



Create and share your beautifully illustrated digital notes.



Remotely manage the cameras connected to Surveillance Station, and play recorded videos.

Onc

Vmobile

Qnotes





#### **Hardware Specifications**

Ordering SKU	TS-131P	TS-231P	TS-431P
CPU	Annapurna Labs Alpine AL-212 dual-core 1.7GHz processor		
Memory	1GB DDR3 RAM		
Flash Memory	512MB NAND flash		
Hard Drive	1	2	4
Hard disk interface	SATA 6Gb/s, 3Gb/s HDD or SSD; Hot-swappable		
USB	3 x USB 3.0 ports (front x1; back x 2)		
LAN ports	1 x GbE RJ45 2 x GbE RJ45		
LED Indicators	System Status, HDD, USB, LAN		
Button	Power, system reset button, USB One Touch Copy		
Alarm Buzzer	System warning		
Form Factor	Desktop model		
Dimensions (H) x (W) x (D)	169 x 73 x 219 mm 6.65 x 2.87 x 8.62 inch	169 x 102 x 219 mm 6.65 x 4.02 x 8.62 inch	169 x 160 x 219 mm 6.65 x 6.3 x 8.62 inch
Weight	Net Weight:1.04 kg (2.29 lbs) Gross Weight:1.8 kg (3.97 lbs)	Net Weight:1.28kg (2.82 lbs) Gross Weight:2.32kg (5.11 lbs)	Net Weight:3 kg (6.61 lbs) Gross Weight:4.3 kg (9.48 lbs)
Temperature	0 - 40°C / 32~104°F		
Relative humidity	5 ~ 95% RH non-condensing; wet bulb:27°C		
Power	AC adapter, 36W, 100 - 240V	AC adapter, 65W, 100 - 240V	AC adapter, 90W, 100 - 240V
Power con- sumption (W)	Hard drive sleep mode:7.29W In operation:11.62W (with 1 x 1TB hard drive installed)	Hard drive sleep mode:8.46W In operation:15.6W (with 2 x 1TB hard drive installed)	Hard drive sleep mode:11.65W In operation:26.7W (with 4 x 1TB hard drive installed)
Sound Level	In operation:15.8 dB (A)	In operation:19.2 dB (A)	In operation:19.5 dB (A)
Security" design	K-Lock Security Slot		
Fan	1 x 5 cm Silent fan (12V DC)	1 x 7 cm Silent fan (12V DC)	1 x 12 cm Silent fan (12V DC)

#### All specifications are subject to change without notice. For more information, please go to www.qnap.com

#### Software Specifications

Supported RAID types	Single disk, RAID 0/1/5/6/10/5 + spare / 6 + spare	
Storage Manager	Flexible Volume/LUN; online RAID capacity expansion and configuration migration	
Supported client systems	Windows 7/8/8.1/10, Windows Server 2012 R2, Apple Mac OS X 10.7+, Linux & UNIX	
Internal file system	EXT4	
External file system	EXT4, EXT3, NTFS, HFS+, FAT32	
Supported protocols	CIFS/SMB, AFP (v3.3), NFS(v3), FTP, FTPS, SFTP, TFTP, HTTP(S), Telnet, SSH, iSCSI, SNMP, SMTP, and SMSC	
File sharing	Maximum number of users:4096; Maximum number of user groups:512; Maximum shared folders:512; Maximum simultaneous connections:700	
Video surveillance	Including 2 free camera support, You can purchase additional license to expand to a maximum of 25 channels (Http://license.qnap.com)	
Other Features	File Station, Photo Station, Music Station, Video Station, Download Station, Qsync, Notes Station, FTP Server, Print Server, VPN Server, VPN Client, Antivirus Protection,	
Streaming server	DLNA Server, Airplay, Chromecast, iTunes Server	
Remote access	myQNAPcloud	

## Package contents

- \* NAS
- \* Ethernet cable
- \* Quick installation guide
- \* Flat-head screw (for 3.5-inch hard drive)
- \* Flat-head screw (for 2.5-inch hard drive)
- \* AC adapter
- \* Power cord

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