Synology®

Synology RackStation RS810+/RS810RP+

High-performance & Scalable 4-bay All-in-1 Rackmounted NAS Server for SMB Users

Synology® RackStation RS810+/RS810RP+[1] offers a high-performance, scalable, and full-featured rackmounted network attached storage solution that meets the needs of small and medium-sized businesses that require an efficient way to centralize data protection, simplify data management, and rapidly scale up storage capacity with minimal time spent on setup and management. The Synology RS810+/RS810RP+ is backed with Synology's 5-year limited warranty.

Highlights

- 112MB/sec Reading, 107MB/sec Writing[2]
- Scalable with Synology RX410[3] to up to 8 Drives
- Power-saving with only 68W in Operation
- Wake on LAN/WAN
- Includes Feature-Rich Synology DiskStation Manager 2.3 (DSM 2.3)
- Expandable RAM Size (up to 3GB)
- Certified as Compatible with VMware® vSphere™

High Performance, High Data Availability

The Synology RS810+/RS810RP+ delivers an average 112MB/sec reading speed under RAID 5 configuration in a Windows® environment, and 107MB/sec writing. The hard drives are hot-swappable to ensure continual service uptime should the drives need replacement. Businesses need a strong foundation to face mission-critical tasks and can rely on the Synology RS810+/RS810RP+ to deliver high-performance and high data availability.

Robust & Affordable Scalability Up to 24 TB

When the storage capacity of the Synology RS810+/RS810RP+ is nearing its capacity limit, it can easily be expanded with the Synology RX410 expansion enclosure. The Synology RX410 securely connects to the Synology RS810+/RS810RP+ via an eSATA cable with specially-designed locking connectors. The Synology RX410 expands the existing storage on the Synology RS810+/RS810RP+ up to a maximum 24 TB capacity.

RS810+/RS810RP+   **RX410**

High Security with Shared Folder Encryption

The Synology RS810+/RS810RP+ provides share-level AES 256-bit encryption to block unauthorized access attempts. The smart data check feature ensures the encryption key security is complex enough for proper protection.

Block-based iSCSI Target Support for Windows/Mac/Linux Initiators

Using the block-level iSCSI target support within DiskStation Manager 2.3, the Synology RS810+/RS810RP+ provides seamless compatibility with Windows/Mac®/Linux initiators or Virtual Machine Servers and fast performance for file transfers. The Synology RS810+/RS810RP+ closes the gap for businesses with limited IT budgets but need enterprise-level features such as virtual storage capabilities.

Flexible RAID Management

Synology Hybrid RAID (SHR) is an intelligent volume type that optimizes volume size when combining hard disks of varying capacities. When set as the standard volume type in DSM 2.3, SHR provides data protection with one-disk fault tolerance and the flexibility of expanding to an optimal volume space when an additional hard disk is inserted into the array, while still offering a manual setup option for advanced users.

Complete Backup Solutions

The Synology RS810+/RS810RP+ serves as a centralized backup target to consolidate fragmented and unstructured data across the network. Integrating easily into a current network structure and compatible with Windows®, Mac®, and Linux systems, the RS810+/RS810RP+ provides the entire office data redundancy and protection. PC Users can back up their data to the Synology RS810+/RS810RP+ using the free Synology Data Replicator software, while Mac OS X users enjoy native Apple® Time Machine® integration. A backup wizard is also provided for backing up data in the RS810+/RS810RP+ to another Synology DiskStation or any rsync server via an encrypted transmission, or to an external hard drive via USB or eSATA connection. Furthering options, the wizard also makes it easy to backup to the cloud via Amazon® S3.

Full-featured Business Applications

Running on the award-winning system, Synology DiskStation Manager 2.3, the Synology RS810+/RS810RP+ provides users with business critical applications and features, including cross platform file sharing among Windows®, Mac®, and Linux®. Windows ADS integration allows the Synology RS810+/RS810RP+ to seamlessly fit in an existing business network environment with no need to recreate user accounts.

Remote access is simplified with the included encrypted FTP server and the web-based file explorer, Synology File Station 3. HTTPS, the built-in firewall, and IP auto-block support ensure file sharing over the Internet is protected at a high security level.
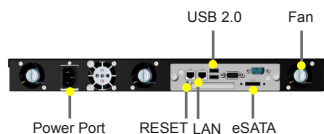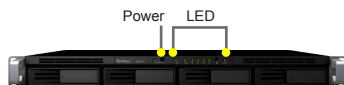
The Synology RS810+/RS810RP+ helps to reduce IT costs as it replaces several pieces of network hardware. Synology Web Station with support for PHP/MySQL content allows for the hosting of up to 30 websites on a single Synology RS810+/RS810RP+. Synology Surveillance Station offers a centralized interface to safeguard every part of the business by deploying IP cameras throughout the network. The Mail Station add-on turns a Synology RS810+/RS810RP+ into a mail server.

Energy Efficient Design

Synology RackStations are designed and developed with energy efficiency in mind. Compared with its average server counterparts, the Synology RS810+/RS810RP+ consumes a relatively low amount of power at 68 watts only in operation. The support of Wake on LAN/WAN, scheduled power on/off and hard drive hibernation help to further reduce power consumption and operation cost.

All Synology products are produced with RoHS compliant parts and packed with recyclable packing materials. Synology acknowledges our responsibility as a global citizen to continually work to reduce the environmental impact of every product produced.

CONNECTIONS & BUTTONS

Power   LED

USB 2.0   Fan

Power Port   RESET LAN eSATA

Technical Specifications

Hardware

- CPU: Intel® Atom™ D510, Dual Core 1.67 GHz, with floating point
- RAM Size: DDR2 1GB (64bit@DDR800)
- Internal HDD[4]: 4X 3.5" SATA(II) or 4X 2.5" SATA/SSD
- External HDD Interface: 2X USB ports, 1X eSATA port
- Rail Kit: Synology 1U Rail Kit Sliding / Synology 1U Rail Kit Fixed (optional)
- Size:

- RS810+: 44mm X 430.5mm X 457.5mm
- RS810RP+: 44mm X 430.5mm X 570.5mm
- Weight:
  - RS810+: 7.1kg
  - RS810RP+: 9.68kg
- LAN: 2X Gigabit
- Wireless Support[5]
- Fan: 3X (40mm X 40mm)
- Noise Level[6]: 31.1 dB(A)/52.7 dB(A)
- Power Recovery

- AC Input Power Voltage: 100V to 240V
- Power Frequency: 50Hz to 60Hz, Single Phase
- Max Internal Capacity: 12TB (4X 3TB hard drives)[7]
- Operating Temperature: 5°C to 35°C (40°F to 95°F)
- Storage Temperature: -10°C to 70°C (15°F to 155°F)
- Relative Humidity: 5% to 95% RH
- Max Operating Altitude: 10,000 feet
- Power Consumption[8]: 68W (Access); 28W (HDD Hibernation)
- Certification: FCC Class A, CE Class A

Applications

File Station 3

FTP Server
- Bandwidth Control
- Custom FTP Passive Port Range
- Anonymous FTP
- Transfer Log

Web Station
- Virtual Host (up to 30 websites)
- PHP/MySQL
- Alternative HTTP Error Page
- 3rd-Party Applications Support

Surveillance Station 4
- Default IP cam #: 1
- MAX IP cam # (licenses required): 20[9]

Photo Station 4
- Supported Image Format: BMP, JPG (jpe, jpeg), GIF, RAW (arw, srf, sr2, dcr, k25, kdc, cr2, crw, nef, mrw, ptx, pef, raf, 3fr, erf, mef, mos, orf, rw2, dng, x3f)
- Supported Video Format[10]: 3G2, 3GP, ASF, AVI, DAT, DivX, FLV, M4V, MOV, MP4, MPEG, MPG, QT, WMV, XviD, RM, RMVB, VOB, RV30, RV40, AC3, AMR, WMA3

Download Station 2
- Supported Download Protocols: BT/HTTP/FTP/NZB/eMule
- Custom BitTorrent Port Range
- BitTorrent / eMule Bandwidth Control

Audio Station 2
- Supported Audio Format: (USB Mode) AAC, FLAC, M4A, MP3, Ogg Vorbis, WMA, WMA VBR; (Streaming Mode) MP3, M4A, M4B
- Supported Playlist Format: M3U, WPL
- Internet Radio: SHOUTcast, Radioio

DLNA/UPnP Media Server
- PS3/Xbox 360 Support
- Supported Audio Format: AAC, FLAC, M4A, MP3, Ogg, Vorbis, PCM, WAV, WMA, WMA VBR, WMA PRO, WMA Lossless
- Supported Video Format: 3GP, 3G2, ASF, AVI, DAT, DivX, DVR-MS, ISO, M2T, M2TS, M4V, MKV, MP4, MPEG1, MPEG2, MPEG4, MTS, MOV, QT, SWF, TP, TRP, TS, VOB, WMV, XviD, RV30, RV40, AC3, AMR, WMA3
- Supported Image Format: BMP, JPG (jpe, jpeg), GIF, ICO, PNG, PSD, TIF (tiff), UFO, RAW (arw, srf, sr2, dcr, k25, kdc,

cr2, crw, nef, mrw, ptx, pef, raf, 3fr, erf, mef, mos, orf, rw2, dng, x3f)
- Supported Subtitles Format: srt, psb, smi, ass, ssa, sub, idx, ifo

iTunes Server
- Supported Audio Format[11]: MP3, M4A, M4P, WAV, AIF
- Supported Video Format: M4V, MOV, MP4
- Supported Playlist Format: M3U, WPL

Printer Server[12]
- Max Printer #: 2
- Printing Protocols: LPR, CIFS, AppleTalk

Synology Packages
- Mail Station
- SqueezeCenter
- Webalizer
- phpMyAdmin

iPhone Applications
- DS photo
- DS audio
- DS cam

General Specifications

Networking Protocols
- CIFS, AFP, FTP, iSCSI, Telnet, SSH, NFS, SNMP

File System
- EXT3
- FAT32 (External Disk Only)[13]
- NTFS (External Disk Read Only)[14]

Volume Management
- Synology Hybrid RAID
- iSCSI Target (Max size: 24TB):32
- Volume Type: Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 5+Spare, RAID 6, RAID 10
- RAID Migration: from Basic to RAID 1, Basic to RAID 5, Basic to RAID 5+Spare, RAID 1 to RAID 5, RAID 1 to RAID 5+Spare, RAID 5 to RAID 5+Spare, RAID 5 to RAID 6
- Expand RAID 1, RAID 5, RAID 5+Spare or RAID 6 with Larger Hard Drives

File Sharing Capability
- Max User Account: 2048
- Max Group: 256
- Max Shared Folder: 256
- Max Concurrent Connections (SAMBA, FTP, AFP): 512

Windows ADS Domain Integration
- Domain Users login via Samba/AFP/FTP/File Station

Backup Solutions
- Network Backup

- Local Backup
- Desktop Backup (using Synology Data Replicator 3 or Apple Time Machine backup application)
- 3rd-Party Backup Support

Security
- FTP over SSL/TLS
- IP Auto-Block
- Firewall
- Encrypted Network Backup over Rsync
- HTTPS Connection

Management
- DSM Upgrade
- Email Notification
- SMS Notification
- Customized User Quota
- DDNS Support
- PPPoE
- Resource Monitor
- UPS Management
- Scheduled Power On/Off
- Custom Management UI HTTP/HTTPS Ports

HDD Management
- HDD Hibernation
- S.M.A.R.T.
- Dynamic Bad Sector Mapping

Utilities
- Synology Assistant
- Synology Download Redirector
- Synology Data Replicator 3

Support Browsers
- Internet Explorer 7
- Internet Explorer 8
- Firefox 3
- Firefox 3.5
- Safari 3 (Mac)
- Safari 4 (Mac)

Supported Clients
- Windows 2000 onward
- Mac OS X 10.3 onward
- Ubuntu 9.04 onward

Supported Mobile Devices (Photo Station, File Station)
- iPhone OS 2.2.1 onward
- Windows Mobile (IE Mobile or Opera 9.0 onward)
- Symbian OS 9.1, S60 3rd Edition onward

Language
- Czech, Danish, Dutch, English, French, German, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese Brazil, Portuguese European, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish

Environment and Packaging

Environment
- RoHS Compliant

Package Content
- RS810+/RS810RP+ Main Unit

- Installation DVD
- Welcome Note
- Assembling Kit
- AC Power Cord

Optional Accessories
- Remote
- Camera License Pack
- Rail Kit
- L-type Mounting Brackets

1. RS810RP+ has a redundant power supply.
2. The performance figures are achieved in Synology lab by using very powerful client computers with extremely optimized network settings, and could vary on different environments. A regular office desktop/notebook may not be able to achieve these high performance figures.
3. Purchase separately.
4. Hard drive not included.
5. Wireless dongles not included. Please check http://www.synology.com/ for supported wireless dongloes.
6. Fully loaded with Seagate 1TB ST31000520AS hard drive(s) in operation; Two G.R.A.S. Type 40AE microphones, each set up at 1 meter away from the DiskStation front and rear; Background noise: 17.2 dB(A); Temperature: 23.6°C; Humidity: 58.2%; More details about dB(A) value, check http://www.quietnoise.com/facts.htm
7. The actual capacity will differ according to volume types.
8. Measured with 4 Seagate 750GB ST3750640NS hard drive. The figures could vary on different environments.
9. 1 free license to install 1 IP camera. Additional licenses can be purchased to expand the license quota.
10. User can click and download the following video formats: RM, RMVB, VOB, RV30, RV40, AC3, AMR, WMA3, but not able to play it in Photo Station as compressed Flash video.
11. The music in WAV and AIF format can be streamed, but the metadata (ex: title, album) may not be indexed on the iTunes.
12. For Mac users, RS810+/RS810RP+ supports PostScript USB printers only.
13. Primary partition only.
14. Primary partition only.

SYNOLOGY INC.

Founded in 2000, Synology is a young and energetic company dedicated to developing high-performance, reliable, versatile, and environmentally-friendly Network Attached Storage (NAS) products. Our goal is to deliver user-friendly solutions and solid customer service to satisfy the needs of businesses, home offices, individual users and families.

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Networking

External Disk

RS810+/RS810RP+

USB Printer

RS810+/RS810RP+

Wireless Router

Windows ADS Server

PC / Mac / Linux

PC / Mac / Linux

IP Camera