RackStation RS816

Synology RackStation RS816 is a compact and scalable 4-bay rackmount NAS with outstanding performance, providing a comprehensive rack-level storage solution for any growing business to effectively manage, share and sync data. You can easily expand your storage capacity with up to 8 drives, minimizing the time spent on setup and maintenance. Synology RS816 is backed with Synology's 3-year limited warranty.

Highlights

- **Scalable 4-bay 1U rackmount NAS for business workgroups**
- **Encryption reading performance improved 80% to 148.98 MB/s and writing performance improved 142% to 81.42 MB/s[1]**
- **Outstanding performance of 219.62 MB/s in reading and 145.15 MB/s in writing under Windows environment[1]**
- **Dual-core CPU with built-in floating-point unit**
- **12-inch depth allows for ultra-dense installation**
- **Dual 1GbE LAN with failover and Link Aggregation support**

Compact Rackmount NAS with Great Performance

Synology RS816 is a compact 1U 4-bay NAS with a depth of only 12 inches, desgined to boost your productivity in your workplace. Equipped with a **Marvell® ARMADA™ dual-core CPU** and **1GB DDR3 RAM**, RS816 delivers high performance – **219.62 MB/s reading** speed and **145.15 MB/s writing** speed – under RAID 5 configuration in a Windows® environment.[1] Powered with a **hardware encryption engine**, RS816 excels with its high-speed encrypted data transmission – over **148.98 MB/s for reading** and **81.42 MB/s for writing** – allowing you to enjoy rapid data transmssion while keeping your valuable data secure and away from potential threats.

RS816 comes with **one eSATA** port and **dual USB 3.0 ports** for fast data transmission to various kinds of external storage devices. The **hot-swappable drive tray** design allows easy installation and maintenance for both 2.5-inch and 3.5-inch HDDs without any additional tools. **Dual Gigabit LAN ports** provide failover support to ensure continual network service uptime and Link Aggregation to increase overall network bandwidth.

Flexible Scability for More Capacity

As your data storage continues to grow, Synology RS816 can grow with you. RS816 can be connected to dedicated expansion units for additional storage on the fly, growing capacity with minimal effort. When paired with a RX415 expansion unit through the specially designed eSATA connector, RS816 can be expanded to up to a total of **8 drives** with a raw capacity of up to **64TB**.

Comprehensive Office Applications

With Synology RS816 and its rich business applications, you can boost personal productivity and more importantly, work more efficiently. **SpreadSheet** allows you to create, edit and simultaneously collaborate on a spreadsheet with multiple users on any browser, and share it with a specific group of people effortlessly. **VPN Server** offers an easy VPN solution, providing a secure way of connecting to a private LAN from a remote location. **RADIUS Server** strengthens network security by overseeing wireless access authentication via the RADIUS (Remote Authentication Dial-In User Service) networking protocol. **Surveillance Station** offers a centralized interface to manage IP cameras deployed in your office or home, allowing users traveling miles away to safeguard their personal environment by watching live views, recording events, and taking snapshots with a computer or iOS/Android device.

Cross-platform File Synchronization

Auto-synchronize your files among DiskStation, PC and mobile devices using Synology Cloud Station.

Anytime Availability

Access your RackStation anywhere using Synology mobile apps.

Cross-Platform File Sharing and Data Synchronization

Synology RS816 supports comprehensive network protocols, ensuring a seamless file sharing experience across Windows®, Mac®, and Linux® platforms. **Windows AD** and **LDAP integration** allow RS816 to fit quickly and effortlessly into any existing network environment without the necessity to recreate user accounts. **Cloud Sync** keeps your Dropbox, Google™ Drive, Microsoft OneDrive, Baidu and Box storages in sync with your Synology NAS at home. The **Cloud Station Suite** allows you to sync files among multiple devices — Windows PC, Mac, Linux, iOS or Android™ tablets/phones — effortlessly keeping everything up-to-date. All file sharing over the Internet is protected at a high security level with the HTTPS, firewall, and IP auto-block mechanisms supported by RS816.

Easy and Smart Backup Solutions

With block-level incremental backup and cross-version deduplication, **Synology Hyper Backup** provides multi-version backup with optimized storage utilization and allows multiple backup destinations to local shared folders, external hard drives, network shared folders, rsync servers, and public cloud services. **Hyper Backup Vault** provides an overview of all the backup history and storage consumption of each backup task.
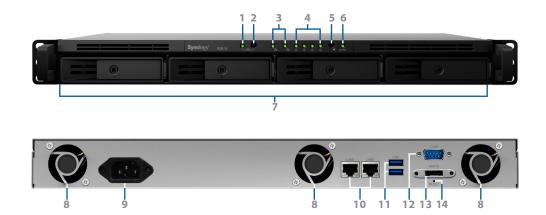
Anywhere/Anytime Availability

QuickConnect and **EZ-Internet** configure your RS816 to be accessed over the Internet with minimal effort. Multimedia content is easily accessible via Synology's popular mobile apps like **DS photo**, **DS audio**, and **DS video**. Other apps, like **DS download**, **DS file**, and **DS cloud**, allow file download/access/synchronization from anywhere at anytime.

Energy Efficient and Easy Management Design

Synology RS816 is designed and developed with energy efficiency in mind. Compared with its other rackmount storage server counterparts, RS816 consumes only 27.9W in regular operation. The support of Wake on LAN/WAN and scheduled power on and off can further reduce power consumption and operation cost. HDD hibernation can be configured to take effect automatically when the system has been inactive for a specified period of time. This not only saves energy but also extends the lifespan of the hard disks.

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

Connections & Buttons

1	Power indicator	2	Power button	3	LAN indicator	4	Disk indicator
5	Beep off button	6	Status indicator	7	Drive tray	8	Fan
9	Power port	10	LAN (RJ-45) port	11	USB 3.0 port	12	Console port
13	eSATA port	14	Reset button				

Technical Specifications

Hardware

CPU	Marvell ARMADA 385 88F6820 dual-core 1.8GHz
Hardware encryption engine	Yes
Floating point unit	Yes
RAM size	DDR3 1GB
Compatible drive type	3.5"/2.5" SATA III/II x 4 (hard drives not included)
Maximum internal raw capacity	32TB (8TB HDD x 4) (actual capacity depending on volume types)
External ports	USB 3.0 port x 2, eSATA port x 1
Size (HxWxD)	44 mm x 430.5 mm x 290 mm
Weight	4.34 kg
LAN	Gigabit (RJ-45) x 2
Wake on LAN/WAN	Yes
Scheduled power on/off	Yes
AC input power voltage	100V to 240V
Power frequency	50Hz to 60Hz, single phase
Operating temperature	5°C to 35°C (40°F to 95°F)
Storage temperature	-20°C to 60°C (-5°F to 140°F)
Relative humidity	5% to 95% RH

General

Networking protocols	CIFS, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
File system	Internal: ext4 External: ext4, ext3, FAT, NTFS, HFS+ (read only)
Storage management	Maximum single volume size: 16TB, Maximum internal volume: 256, Maximum iSCSI Target: 10, Maximum iSCSI LUN: 256
Supported RAID type	Synology Hybrid RAID (SHR), Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
File sharing capability	Maximum user account: 2048, Maximum group: 256, Maximum shared folder: 256, Maximum concurrent CIFS/AFP/FTP/File Station connection: 256
Privilege	Windows Access Control List (ACL)
Directory service	Windows AD Integration: Domain Users login via Samba (CIFS)/AFP/FTP/File Station, LDAP integration
Security	FTP over SSL/TLS, IP auto-block, firewall, encrypted network backup over Rsync, HTTPS connection
Utilities	Synology Web Assistant, Cloud Station Drive, Cloud Station Backup, Cloud Sync Decryption Tool, Evidence Integrity Authenticator, Photo Station Uploader
Supported clients	Windows 7 onwards and Mac OS X® 10.10 onwards
Supported browsers	Chrome™, Firefox®, Internet Explorer® 9 onwards, Safari® 8 onwards, Safari (iOS® 7 onwards on iPad®), Chrome (Android 4.0 onwards on tablets)

Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, 日本語, 한국어, 繁體中文, 简体中文

Applications

File Station	Virtual drive, remote folder, Windows ACL editor, compress/extract archived files, bandwidth control for specific users or groups, create sharing links, transfer logs
Backup solutions	Network backup; local backup; desktop backup; configuration backup; OS X Time Machine; backup data to public cloud; shared folder sync - maximum task number: 4
FTP Server	Bandwidth control for TCP connections, custom FTP passive port range, anonymous FTP, FTP SSL/TLS and SFTP protocols, boot over the network with TFTP and PXE support, transfer logs
Printer Server	Maximum printer: 2, printing protocols: LPR, CIFS, IPP, iOS printing, Google Cloud Print™, multi functional print server (MFP functions are for Windows PC only)
Security Advisor	Malware detection/removal, user account/password, network, system-related security scan
iOS/Android™ applications	DS cloud, DS file, DS finder, DS cam, DS note, DS audio, DS download, DS photo, DS video
Windows Phone® applications	DS file, DS finder, DS audio, DS download, DS photo, DS video

Add-on Packages

Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Cloud Station Server	Maximum concurrent file transfers: 256, retain historical and deleted file versions
Cloud Sync	One or two-way synchronization with public cloud storage providers including Amazon Cloud Drive, Amazon S3-compatible storage, Baiduyun, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, Megafon Disk, Microsoft OneDrive, OpenStack Swift-compatible storage, WebDAV servers, Yandex Disk
DLNA/UPnP® Media Server	DLNA certified, PS3®/PS4®/Xbox 360®/Xbox One® support
Download Station	Supported download protocols: BT/HTTP/FTP/NZB/eMule Maximum concurrent download task: 50
Log Center	SSL connection, log rotation: 6 months, 1 year, 2 years, 3 years, email notification
Note Station	Rich-text note organization with versioning, encryption, sharing, media embedding and attachments
Storage Analyzer	Volume and quota usage, total size of files, volume usage and trends based on past usage, size of shared folders, largest/most/least frequently modified files
Surveillance Station	Maximum IP camera: 16 (total of 480 FPS at 720p, H.264) (Including two free camera licenses. Procurement of additional licenses is required.)
VPN Server	Maximum connections: 15; supported VPN protocols: PPTP, OpenVPN™, L2TP
Web Station	Virtual host (up to 30 websites), PHP/MariaDB®, 3rd-party applications support
Other packages	Photo Station, Audio Station, iTunes® Server, 3rd-party packages

Environment and Packaging

Environment	RoHS Compliant
Package content	RS816 main unit, Welcome note, accessory pack, AC power cord
Optional accessories	Camera License Pack, VS360HD, Synology Rail Kit Sliding (RKS1314), Synology Rail Kit Mounted (RKM114), expansion unit (RX415)
Warranty	3 Years

*Model specifications are subject to change without notice. Please refer to www.synology.com for the latest information.
1. The performance figures vary on different environments. Synology is dedicated to continual performance enhancement. Please find the latest figures on www.synology.com.
2. RS816 supports one Synology Expansion Unit RX415, sold separately.

SYNOLOGY INC.

Synology is dedicated to taking full advantage of the latest technologies to bring businesses and home users reliable and affordable ways to centralize data storage, simplify data backup, share and sync files across different platforms, and access data on-the-go. Synology aims to deliver products with forward-thinking features and the best in class customer services.

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