



RackStation **RS2416+/RS2416RP+**

Synology RackStation RS2416+/RS2416RP+ features an all-new quad-core CPU with an AES-NI hardware encryption engine, providing outstanding performance and data encryption acceleration. With four built-in Gigabit LAN ports, scalability of up to 24 drives, and advanced snapshot technology for data protection, Synology RS2416+/RS2416RP+ is the ideal storage solution for centralizing data backups, protecting critical assets and sharing files across different platforms. Synology RS2416+/RS2416RP+ is backed with Synology's 3-year limited warranty.

Highlights

- **Advanced snapshot technology for data protection**
- **Introduced Btrfs file-system with built-in data integrity check**
- **High availability technology & redundant power supplies* ensure service uptime**
- **Scale up to 24 drives with Synology RX1214/RX1214RP²**
- **SSD read/write cache boost overall system performance**
- **Four Gigabit LAN ports with failover and Link Aggregation support**
- **VMware®, Microsoft® Hyper-V®, and Citrix® ready**

Safeguards Your Big Data with Superior Performance

In the era of big data, finding a place to store and share tones of business files while maintaining data safety is extremely important for small and medium-sized businesses, and Synology RS2416+/RS2416RP+ is the ideal solution. With a brand-new **quad-core CPU**, built-in **AES-NI hardware encryption engine**, **expandable RAM module** up to 6GB, and **read/write-optimized SSD cache**, RS2416+/RS2416RP+ delivers up to an average **450.47 MB/s reading** and **381.92 MB/s writing** speed under RAID 5 configuration in a Windows® environment, and an encrypted data transmission at over **399.89 MB/s reading** and **198.72 MB/s writing**¹.

Btrfs: Next Generation Storage Efficiency

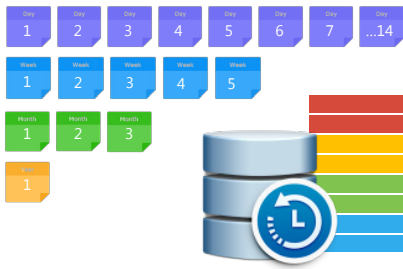
RS2416+/RS2416RP+ introduces the **Btrfs file system**, bringing the most advanced storage technologies to meet the management needs of modern businesses:

- **Built-in data integrity check** detects data and file system corruption with data and meta-data checksums and improve overall stability.
- **Flexible Shared Folder/User Quota System** provides comprehensive quota control on all user accounts and shared folders.
- **Advanced snapshot technology** with customizable backup schedule allows up to **256 copies** of shared folder backups without occupying huge storage capacity and system resources.
- **File or folder level data restoration** brings huge convenience and saves time for users who wish to restore only the specific single file or folder.
- **Cloud Station with file versioning** reduces down to half of storage consumption when compared with Ext4 file system.

Comprehensive Business Applications

Powered by the innovative Synology DiskStation Manager (DSM), RS2416+/RS2416RP+ comes fully-equipped with business applications and features:

- Easy integration with existing business network environments through **Windows® AD** and **LDAP** directory services without recreating user accounts.
- **Windows ACL** support provides fine-grained access control and efficient privilege settings, allowing RS2416+/RS2416RP+ to fit seamlessly into current infrastructure.
- Built-in backup applications protect information assets by regularly backing up files and iSCSI LUNs locally and remotely.



The Btrfs file system brings storage management to the next level by providing more efficient storage utilization, scheduled shared folder snapshot, and file / folder-level data restoration.



Synology High Availability ensures seamless transition between clustered servers in the event of server failure with minimal impact to businesses.

Resilient and Reliable

In addition to superior performance, RS2416+/RS2416RP+ is built for reliability. **Four Gigabit LAN ports** provide redundancy in the event of unexpected hardware failure while **hot swappable drives** also help to minimize system downtime during drive replacement. **Passive cooling technology** eliminates the dependency upon a dedicated processor cooling fan. Should a fan fail, built-in redundancy mechanisms will spin up functional fan(s) to improve ventilation.

Uninterrupted availability is a critical goal for all businesses; however, many businesses worldwide still remain unprepared for disaster. **Redundant power supply units (RS2416RP+ only)** minimizes the chance of a complete system shutdown due to sudden power loss. **High Availability Manager** can ensure seamless transition between clustered servers in the event of server failure with minimal impact to applications to decrease the risk of unexpected interruptions and costly downtime.

Robust & Affordable Scalability Up to 168 TB

When the storage capacity of RS2416+/RS2416RP+ nears its limit, expansion is easily accomplished with Synology Expansion Unit RX1214/RX1214RP via specially-designed connection cables to maximize data transmission throughput between the main server and the expansion unit. RX1214/RX1214RP can directly expand the existing storage on RS2416+/RS2416RP+ to a maximum 168 TB capacity.

Virtualization Ready

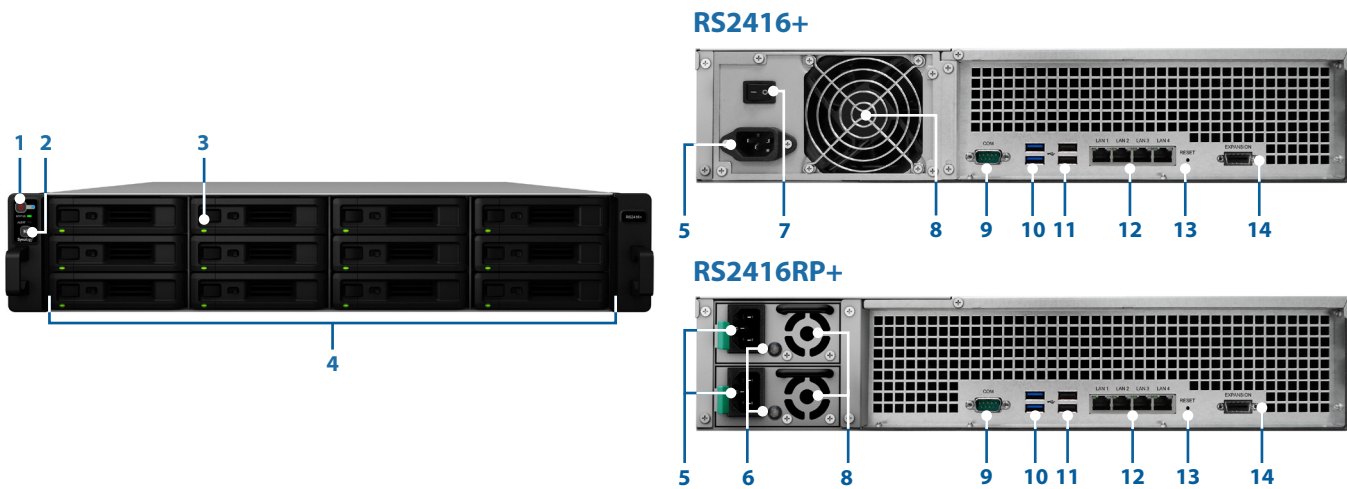
With iSCSI support in DSM, RS2416+/RS2416RP+ provides seamless storage solutions for virtualization environments, including VMware®, Citrix®, and Hyper-V®. With VMware vSphere 5 and VAAI integration, RS2416+/RS2416RP+ helps offload specific storage operations and optimizes computation power for unparalleled performance and efficiency in VMware environments. It is the ideal alternative to SAN solution for businesses. Affordable and cost-effective, iSCSI allows SMB users to consolidate storage into data center storage arrays while providing hosts with the illusion of locally-attached disks.

Energy Efficient and Easy Management Design

Synology RS2416+/RS2416RP+ is designed and developed with energy efficiency in mind. Compared with the average storage server counterparts, RS2416+/RS2416RP+ consumes a relatively low amount of power. 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 the responsibility as a global citizen to continually work to reduce the environmental impact of every product produced.

Connections & Buttons



1	Power button and indicator	2	Beep off button	3	Drive status indicator	4	Drive tray
5	Power port	6	PSU indicator and beep off button	7	Power supply on/off switch	8	PSU fan
9	Console port	10	USB 3.0 port	11	USB 2.0 port	12	LAN port
13	RESET button	14	Expansion port				

Technical Specifications

Hardware

CPU	Intel Atom C2538 quad-core 2.4GHz
Hardware encryption engine	Yes (AES-NI)
RAM size	DDR3-1600 2GB (Expandable, up to 6GB)
Compatible drive type	3.5" or 2.5" SATA III / SATA II x 12 (hard drives not included)
Maximum internal raw capacity	96TB (12 x 8TB HDD) (The actual capacity will differ according to volume types)
Hot swappable drive	Yes
External ports	USB 3.0 x 2, USB 2.0 x 2, expansion port x 1
Size (HxWxD)	88mm x 430mm x 692mm
Weight	12.56 Kg (RS2416+) / 13.24 Kg (RS2416RP+)
LAN	Gigabit x 4
Wake on LAN/WAN	Yes
AC input power voltage	100V to 240V AC
Power frequency	50 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: Btrfs, ext4 External: Btrfs, ext4, ext3, FAT, NTFS, HFS+
Storage management	Maximum single volume size: 108TB, Maximum internal volume: 512, Maximum iSCSI target: 32, Maximum iSCSI LUN: 256, iSCSI LUN clone/snapshot support; SSD read/write cache support
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: 512, Maximum concurrent CIFS/AFP/FTP connections : 512

Privilege	Windows Access Control List (ACL)
Virtualization	VMware vSphere 5, Microsoft® Hyper-V, Citrix Ready
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	Cloud Station, Evidence Integrity Authenticator, Photo Station Uploader, Snapshot Manager for VMware, Snapshot Manager for Windows, NFS Plug-in for VMware VAAI
Supported Clients	Windows XP onward, Mac OS X® 10.5 onward, Ubuntu 9.04 onward
Supported Browsers	Chrome™, Firefox®, Internet Explorer®: 8 or later, Safari® 5 or later, Safari (iOS® 5 or later on iPad®), Chrome (Android 4.0 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 Amazon Glacier; shared folder sync - maximum task number: 8
Mail Server	Supported Mail Server protocols: POP3, SMTP, IMAP, support LDAP/AD account
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
Web Station	Virtual host (up to 30 websites), PHP/MariaDB®, 3rd-party applications support
High Availability Manager	Combines two RS2416+/RS2416RP+ into one high-availability cluster
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
Security Advisor	Malware detection/removal, user account/password, network, system-related security scan
Log Center	SSL connection, log rotation: 6 months, 1 year, 2 years, 3 years, email notification
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

Surveillance Station	Maximum IP camera #: 40 (total of 1200 FPS at 720p, H.264) (Including two free camera licenses. Procurement of additional licenses is required.)
VPN Server	Maximum connections: 20; supported VPN protocols: PPTP, OpenVPN™, L2TP
Mail Station	Webmail interface for Mail Server; receiving mails from multiple POP3 mailboxes, customizable SMTP server
Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Cloud Station	Maximum concurrent file transfers: 512, 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
Note Station	Rich-text note organization with versioning, encryption, sharing, media embedding and attachments
Other Packages	Photo Station, Audio Station, Download Station, iTunes® Server, 3rd-party packages

Environment and Packaging

Environment	RoHS Compliant
Package Content	RS2416+/RS2416RP+ main unit x 1, accessory pack x 1, AC power cord x 1 (RS2416+), AC power cord x 2 (RS2416RP+), welcome note x 1
Optional Accessories	Camera License Pack, 4GB DDR3-1600 RAM module, Synology Rail Kit Sliding (RKS1314), VS360HD, Expansion Unit (RX1214/RX1214RP) x 1
Warranty	3 years

*Model specifications are subject to change without notice. Please refer to www.synology.com for the latest information.

1. Performance figures are tested with Btrfs file system and could vary on different environments.
2. RS2416+/RS2416RP+ supports one Synology RX1214/RX1214RP, 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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Headquarters

Synology Inc. 3F-3, No. 106, Chang An W. Rd., Taipei, Taiwan Tel: +886 2 2552 1814 Fax: +886 2 2552 1824

China

Synology Shanghai
20070, Room 516, No. 638, Hengfeng Rd., Zhabei Dist., Shanghai, China

France

Synology France SARL
39 rue Louis Blanc,
92400 Courbevoie, France
Tel: +33 147 176288

North & South America

Synology America Corp.
3535 Factoria Blvd SE #200,
Bellevue, WA 98006, USA
Tel: +1 425 818 1587

United Kingdom

Synology UK Ltd.
Unit C, Denbigh West Business Park,
Third Avenue, Bletchley,
Milton Keynes, MK1 1DH, UK
Tel: +44 1908 366380

Germany

Synology GmbH
Grafenberger Allee 125
40237 Düsseldorf
Deutschland
Tel: +49 211 9666 9666