

## RackStation

# RS2418+ RS2418RP+



Synology RackStation RS2418+/RS2418RP+ is a 12-bay NAS designed for small- and medium-sized businesses. It provides flexible storage and M.2 SSD expandability, ideal to serve as a file server or centralized backup destination. It can be seamlessly integrated in virtual environments and provides easy-to-use storage applications to safeguard company data assets. Synology RS2418+/RS2418RP+ is backed by Synology's 3-year limited warranty.

## Scalable Storage Server On Demand

Synology RS2418+/RS2418RP+ is a 2U, 12-bay network-attached storage solution, providing flexible storage capacity for growing businesses. It can support up to 24 drives when connected to one Synology **RX1217/RX1217RP**<sup>1</sup> expansion unit. It is ideal to serve as a file server, a centralized backup target, or a hub-and-spoke backup target for distributed businesses.

RS2418+/RS2418RP+ is equipped with a **quad-core** processor and **4GB DDR4 memory** (**up to 64GB**)<sup>2</sup>. With Link Aggregation enabled, RS2418+/RS2418RP+ delivers sequential throughput performance at over **1,400 MBps reading** and **580 MBps writing**<sup>3</sup> and the iSCSI 4K random IOPS performance can reach over **38,900 in reading** and **27,000 in writing**,<sup>3</sup> able to be expanded with the addition of an M.2 SSD cache.

## Cross-Platform File Sharing and Data Synchronization

RS2418+/RS2418RP+ can serve as a centralized backup destination, providing large storage capacity with affordable cost of ownership. Large amount of data scattered on employees' workstations can be easily backed up and synced to a centralized target on RS2418+/RS2418RP+. **Cloud Sync** keeps your Dropbox, Google Drive, Microsoft OneDrive, Baidu, and Box storage in sync with RS2418+/RS2418RP+. **Synology Drive** synchronizes your files across various platforms, including Windows, macOS, Linux, Android and iOS. Use the universal portal to access your data anytime and anywhere.

With block-level incremental backup and cross-version deduplication, Synology **Hyper Backup** provides multi-version backup with optimized storage utilization and allows for backing up to multiple destinations—local shared folders, external hard drives, network shared folders, rsync servers, and public cloud services.

## Highlights

- High performance and scalable 2U NAS readily adapts to demanding business needs
- Outstanding performance at over 1,400 MBps sequential read throughput and 27,000 4K random write IOPS<sup>3</sup>, capable of installing optional 10GbE NICs
- Scale up to 24 drives with Synology RX1217/RX1217RP¹
- Comprehensive file services including SMB, NFS, FTP and WebDAV with Windows ACL & Domain/LDAP support
- Dynamic iSCSI/NFS storage for VMware, Windows Hyper-V, Citrix, and OpenStack
- Advanced Btrfs file system offering 65,000 system-wide snapshots and 1,024 snapshots per shared folder
- Backed with SRS, Synology's next business-day replacement service<sup>4</sup>

#### **Effortless Virtualization Environment**

Synology iSCSI storage fully supports most virtualization solutions to enhance work efficiency with a simple management interface, including VMware, Citrix, Hyper-V, and OpenStack. With VMware vSphere™ 6.5 and VAAI integration certification, RS2418+/RS2418RP+ helps offload specific storage operations and optimizes computation power for unparalleled performance and efficiency in VMware environments. Windows Offloaded Data Transfer (ODX) speeds up data transfer and migration rates, while OpenStack Cinder support turns your Synology NAS into a block-based storage component.

## Btrfs: Next Generation Storage Efficiency

RS2418+/RS2418RP+ 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 improves the overall stability.
- Flexible Shared Folder/User Quota System provides comprehensive quota control over all user accounts and shared folders.
- Advanced snapshot technology with customizable backup schedule allows up to 1,024 copies of shared folder backups in a minimum 5-minute interval without occupying huge storage capacity and system resources.
- **File or folder level data restoration** brings huge conveniences and saves time for users who wish to restore only a specific file or folder.
- **File self-healing**: Btrfs file system can auto-detect corrupted files with mirrored metadata, and recover broken data using the supported RAID volumes, which include RAID1, 5, 6, and 10.

## Reliability, Availability & Disaster Recovery

System reliability is of paramount importance to businesses which depend upon their commercial servers every day. RS2418+/RS2418RP+ responds to these concerns with wide-ranging availability and redundancy features:

- **Synology High Availability** ensures seamless transition between clustered servers in the event of server failure with minimal impact on applications.
- **Redundant power supplies, system fans** and **network ports** with failover support ensure maximum continuous service uptime.
- High reliability system design including **fan-less CPU heat-sink** and passive cooling technology, preventing single points of failure.
- Optional 5-year warranty<sup>5</sup> is available in select regions.









#### Virtualization Ready

Synology RS2418+/RS2418RP+ is an optimized and certified storage solution for various virtualization environments.





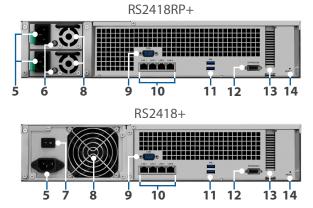


#### **Next-Generation File System**

A modern file system designed to address obstacles often encountered in enterprise storage systems. Safeguarding data integrity through metadata mirroring, self-healing and snapshot replication.

Front Rear





1	Power button and indicator	2	Beep off button	3	Drive tray	4	Drive status indicator
5	Power port	6	PSU indicator and beep off button	7	Power supply on/off switch	8	PSU fan
9	Console port	10	1GbE RJ-45 port	11	USB 3.0 port	12	Expansion port
13	PCIe expansion slot	14	RESET button				

# **Technical Specifications**

#### Hardware

CPU	Intel Atom C3538 quad-core 2.1GHz				
Hardware encryption engine	Yes (AES-NI)				
Memory	4 GB DDR4 Non-ECC UDIMM (expandable up to 64 GB with 16 GB ECC UDIMM x 4)				
Compatible drive type	12 x 3.5" or 2.5" SATA SSD/HDD (drives not included)				
Hot swappable drive	Yes				
External port	<ul><li>2 x USB 3.0 port</li><li>1 x Expansion port</li></ul>				
Size (HxWxD)	<ul> <li>88 x 430.5 x 664 mm (RS2418+)</li> <li>88 x 482 x 696 mm (RS2418+ with server ears)</li> <li>88 x 430.5 x 692 mm (RS2418RP+)</li> <li>88 x 482 x 724 mm (RS2418RP+ with server ears)</li> </ul>				
Weight	<ul><li>13.22 kg (RS2418+)</li><li>13.85 kg (RS2418RP+)</li></ul>				
LAN	4 x 1GbE (RJ-45)				
PCIe 3.0 slot	<ul> <li>x8 slot x 1 (4-lane)</li> <li>High-performance network interface card support</li> <li>M.2 SATA SSD adapter card support</li> </ul>				
Wake on LAN/WAN	Yes				
Scheduled power on/off	Yes				
System fan	4 (80 x 80 x 25 mm)				
AC input power voltage	100V to 240V AC				
Power frequency	50/60Hz, 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				
Maximum operating altitude	5,000 m (16,400 ft)				
C I DCM C					

### **General DSM Specification**

Networking protocol	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN ™, L2TP)  • Internal: Btrfs, ext4  • External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT6			
File system				
Supported RAID type	Synology Hybrid RAID (SHR), Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 10			

Storage management	Maximum internal volumes: 512     Maximum iSCSI targets: 32     Maximum iSCSI LUNs: 256     iSCSI LUN clone/snapshot support				
SSD cache	SSD read-write cache support				
File sharing capability	<ul> <li>Maximum local user accounts: 2,048</li> <li>Maximum local groups: 256</li> <li>Maximum shared folders: 512</li> <li>Maximum concurrent SMB/NFS/AFP/FTP connections: 1,000</li> </ul>				
Privilege	Windows Access Control List (ACL), application privilege				
Directory service Windows® AD integration: Domain users login via SMB/NFS/AFP/FTP/File Station, LDAP integration					
Virtualization	VMware vSphere® 6.5, Microsoft Hyper-V®, Citrix®, OpenStack®				
Security	Firewall, encrypted shared folder, SMB encryption, FTP over SSL/TLS, SFTP, rsync over SSH, login auto block, Let's Encrypt support, HTTPS (Customizable cipher suite)				
Supported client	Windows 7 and 10, Mac OS X <sup>®</sup> 10.11 onwards				
Supported browser	Chrome®, Firefox®, Internet Explorer® 10 onwards, Safari® 10 onwards; Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards)				
Interface 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				

## **Packages and Applications**

0 11					
File Station	Virtual drive, remote folder, Windows ACL editor, compressing/extracting archived files, bandwidth control for specific users or groups, creating sharing links, transfer logs				
FTP Server	Bandwidth control for TCP connections, custom FTP passive port range, anonymous FTP, FTP SSL/TLS and SFTP protocol, boot over the network with TFTP and PXE support, transfer logs				
Universal Search	Offer global search into applications and files				
Hyper Backup	Support local backup, network backup, and backup data to public clouds				
Active Backup for Server	Centralize data backup for Windows and Linux servers without client installation				
Backup tools	DSM configuration backup, macOS Time Machine support, Cloud Station Backup Shared folder sync - maximum tasks: 8				
Cloud Station Suite	Sync data between multiple platforms by installing the client utilities on Windows, Mac, Linux, Android and iOS devices, while retaining up to 32 historical versions of files  Maximum concurrent file transfers: 1,000				
Drive	<ul> <li>Maximum Number of Synced Files: 1,000,000 / single file reaction time 437 ms</li> <li>Maximum Number of Concurrent Connections for PC Clients: 550</li> </ul>				
Cloud Sync	One or two-way synchronization with public cloud storage providers including Amazon Drive, Amazon S3-compatible storage, Baidu clouc Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, MegaDisk, Microsoft OneDrive, OpenStack Swift-compatible storage, WebDAV servers, Yandex Disk				
Surveillance Station	Maximum IP cameras: 40 (total of 1,200 FPS at 720p, H.264) (includes two free camera licenses; additional cameras require the purchasing of additional licenses)				
Virtual Machine Manager	Deploy and run various virtual machines on Synology NAS, including Windows, Linux, or Virtual DSM				
High Availability Manager	Reduce service downtime by setting up two identical NAS into one high-availability cluster				
Snapshot Replication	<ul> <li>Maximum replications: 32</li> <li>Maximum shared folder snapshots: 1,024</li> <li>Maximum system snapshots: 65,536</li> </ul>				
Active Directory Server	A flexible and cost-effective domain controller solution				
CMS	Provide a single interface to manage and monitor multiple Synology NAS				
VPN Server	Maximum connections: 20, supported VPN protocol: PPTP, OpenVPN™, L2TP/IPSec				
MailPlus Server	Secure, reliable, and private mail solution with high-availability, load balancing, security and filtering design (Includes 5 free email account licenses; additional accounts require the purchasing of additional licenses)				
MailPlus	Intuitive webmail interface for MailPlus Server, customizable mail labels, filters, and user interface				
Collaboration tools	<ul> <li>Chat maximum users: 1,500</li> <li>Office maximum users: 1,800</li> <li>Calendar: support CalDAV and access via mobile devices</li> </ul>				
Note Station	Rich-text note organization and 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				
Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update				

Download Station	Supported download protocols: BT, HTTP, FTP, NZB, eMule, Thunder, FlashGet, QQDL Maximum concurrent download tasks: 80
Web Station	Virtual host (up to 30 websites), PHP/MariaDB®, 3rd-party applications support
Other packages	Video Station, Photo Station, Audio Station, DNS Server, RADIUS Server, iTunes® Server, Log Center, additional 3rd-party packages are available in Package Center

#### **Environment and Packaging**

Environment safety	RoHS compliant			
Package content	<ul> <li>RS2418+/RS2418RP+ main unit x 1</li> <li>Quick Installation Guide x 1</li> <li>Accessory pack x 1</li> <li>AC power cord x 2</li> </ul>			
Optional accessories	<ul> <li>4GB DDR4-2133 Non-ECC UDIMM (D4N2133-4G)</li> <li>16GB DDR4-2133 ECC UDIMM (RAMEC2133DDR4-16G)</li> <li>Synology E10G17-F2/E10G15-F1 10Gbps Ethernet adapters</li> <li>Synology M2D17 M.2 SSD adapter card</li> <li>Expansion Unit RX1217/RX1217RP</li> <li>RKS1317-Rail Kit Sliding</li> <li>VisualStation VS360HD, VS960HD</li> <li>Surveillance Device License Pack</li> <li>MailPlus License Pack</li> <li>Virtual DSM License Pack</li> </ul>			
Warranty	3 years			

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

- $1. \quad RS2418+/RS2418RP+ \ supports \ one \ Synology \ Expansion \ Unit \ RX1217/RX1217RP, sold \ separately.$
- 2. RS2418+/RS2418RP+ comes with 4GB DDR4 Non-ECC UDIMM and can support up to 64GB with optional ECC UDIMM.
- 3. Performance figures may vary depending on environment, usage, and configuration.
- 4. Synology Replacement Service (SRS) is available in selected countries only. For more information about SRS, please visit srs.synology.com.
- 5. 5 year warranty is available as an optional bundle with EW202, 2-year Extended Warranty service add-on. Visit https://www.synology.com/en-global/products/Extended\_Warranty for more information on availability.
- 6. exFAT Access is purchased separately in Package Center.

#### 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.

Copyright © 2018, Synology Inc. All rights reserved. Synology, the Synology logo are trademarks or registered trademarks of Synology Inc. Other product and company names mentioned herein may be trademarks of their respective companies. Synology may make changes to specification and product descriptions at anytime, without notice.

RS2418+/RS2418RP+-2018-ENU-REV004

#### Headquarters

Synology Inc. 9F., No.1, Yuandong Rd., Banqiao Dist., New Taipei City 220, Taiwan Tel: +886 2 2955 1814 Fax: +886 2 2955 1884

China	France	North & South America	United Kingdom	Germany
Synology Shanghai	Synology France SARL	Synology America Corp.	Synology UK Ltd.	Synology GmbH
200070, Room 516, No. 638 Hengfeng Rd., Zhabei Dist. Shanghai, China	39 rue Louis Blanc, 92400 Courbevoie, France Tel: +33 147 176288	3535 Factoria Blvd SE #200 Bellevue, WA 98006, USA Tel: +1 425 818 1587	Unit 5 Danbury Court, Linford Wood, Milton Keynes, MK14 6PL, United Kingdom Tel: +44 (0)190 804 8029	Grafenberger Allee 125 40237 Düsseldorf Deutschland Tel: +49 211 9666 9666