

## RackStation

# RS818+/RS818RP+



Synology RackStation RS818+/RS818RP+ is a 1U 4-bay rackmount NAS designed for small and medium-sized businesses. Powered by a quad-core processor with AES-NI hardware encryption engine, RS818+/RS818RP+ provides both high performance and scalable storage, ideal for centralizing data backups, protecting critical assets, and sharing files across different platforms. Synology RS818+/RS818RP+ is backed by Synology's 3-year limited warranty.

## High-speed Scalable Storage Server

Synology RS818+/RS818RP+ is a 4-bay network attached storage solution equipped with an **quad-core** processor and **2GB DDR3 memory (expandable up to 16GB)**. RS818+/RS818RP+ supports one optional 10GbE add-in network interface card, and with Link Aggregation enabled, RS818+/RS818RP+ delivers high sequential throughput performance at over **1,099 MB/s reading** and **401 MB/s writing**<sup>1</sup>.

RS818+/RS818RP+ can support up to 8 drives when connected to one Synology **RX418** expansion unit<sup>2</sup>. Storage capacity can be expanded according to your business needs with minimal effort.

## Btrfs: Next Generation Storage Efficiency

RS818+/RS818RP+ 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.

## Highlights

- Quad-core 4-bay NAS with AES-NI support, with over 1,099 MB/s reading and 401 MB/s writing performance
- PCIe slot for optional 10GbE add-in network interface card
- Four 1GbE (RJ-45) ports with failover and Link Aggregation support
- 2GB DDR3 memory, expandable up to 16GB
- Scale up to 8 drives with RX418 expansion unit<sup>2</sup>
- Redundant power supplies ensure service uptime (RS818RP+ only)
- Advanced Btrfs file system offering 65,000 system-wide snapshots and 1,024 snapshots per shared folder

## Comprehensive Business Applications

Powered by the innovative Synology DiskStation Manager (DSM), RS818+/RS818RP+ comes fully-equipped with applications and features designed specifically for small or growing businesses:

- **Windows® AD and LDAP** support allows easy integration with existing business directory services.
- **Windows ACL** support provides fine-grained access control and efficient privilege settings, allowing RS818+/RS818RP+ to fit seamlessly into existing infrastructure.
- Internet file access is simplified by the encrypted FTP server and the web-based file explorer, Synology **File Station**. HTTPS, firewall, and IP auto-block support ensures file sharing over the Internet is protected with a high level of security.
- **Application Privileges** controls access to applications and packages based on each individual account, user group, or IP address.
- **MailPlus** allows your business to set up a secure, reliable, and private mail server while giving your employees a modern mail client for receiving and sending messages.
- With Synology **Office, Calendar** and **Chat**, the powerful **Collaboration Suite** allows secure and efficient private communications as well as content organization that your business can easily manage and control.



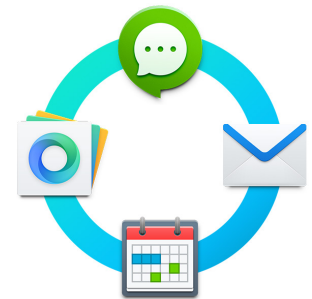
### Next-Generation File System

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.

## Virtualization Ready

Synology's **Virtual Machine Manager** adds unlimited capabilities to your NAS. Set up and run various virtual machines, including **Windows, Linux,** and **Virtual DSM** so that you can test new software versions in a sandbox environment, isolate your customers' machines, and increase the flexibility of your RS818+/RS818RP+ with reduced hardware deployment and maintenance costs.

Synology iSCSI storage fully supports most virtualization solutions to enhance work efficiency with a simple management interface. **VMware vSphere™ 6.5** and **VAAI** integration helps offload storage operations and optimizes computation efficiency. **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.



### Synology Collaboration Suite

A powerful and secure private cloud solution for business collaboration and organization, offering intuitive yet effective management options.

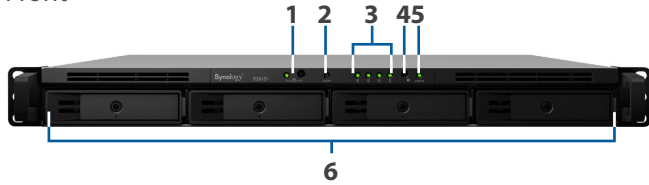
## Reliability, Availability & Disaster Recovery

System reliability is of paramount importance to businesses which depend upon their commercial servers every day. RS818+/RS818RP+ responds to these concerns with wide-ranging availability and redundancy features:

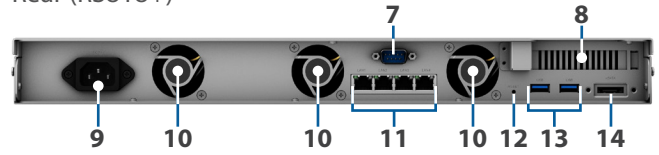
- **Synology High Availability** ensures seamless transition between clustered servers in the event of server failure with minimal impact on applications.
- **Redundant power supplies** (RS818RP+ only), **system fans** and **network ports** with failover support ensure maximum continuous service uptime.
- High reliability system design including **fan-less CPU heat-sink** and passive cooling technology, preventing single points of failure.
- **Optional 5-year warranty<sup>4</sup>** is available in select regions.

## Hardware Overview

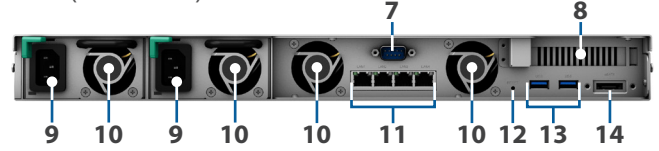
Front



Rear (RS818+)



Rear (RS818RP+)



1	Power button and indicator	2	Alert indicator	3	Drive status indicator	4	Beep off button
5	Status indicator	6	Drive tray	7	Console port	8	PCIe expansion slot
9	Power port	10	Fan	11	1GbE RJ-45 port	12	RESET button
13	USB 3.0 port	14	Expansion port				

## Technical Specifications

### Hardware

CPU	Intel Atom C2538 quad-core 2.4GHz
Hardware encryption engine	Yes (AES-NI)
Memory	2 GB DDR3L-1600 Non-ECC SO-DIMM (expandable up to 16 GB with 8GB SO-DIMM x 2)
Compatible drive type	4 x 3.5" or 2.5" SATA SSD/HDD (drives not included)
Hot swappable drive	Yes
External port	<ul style="list-style-type: none"> <li>• 2 x USB 3.0 port</li> <li>• 1 x Expansion port</li> </ul>
Size (HxWxD)	<ul style="list-style-type: none"> <li>• RS818+: 44 x 430.5 x 457.6 mm / 44 x 480 x 492.6 mm (with server ears)</li> <li>• RS818RP+: 44 x 430.5 x 483.6 mm / 44 x 480 x 518.6 mm (with server ears)</li> </ul>
Weight	<ul style="list-style-type: none"> <li>• RS818+: 6.21 kg</li> <li>• RS818RP+: 7.63 kg</li> </ul>
LAN	4 x 1GbE (RJ-45)
Wake on LAN/WAN	Yes
PCIe 2.0 slot	<ul style="list-style-type: none"> <li>• 1 x 4-lane x8 slot</li> <li>• High-performance network interface card support</li> </ul>
Scheduled power on/off	Yes
System fan	<ul style="list-style-type: none"> <li>• RS818+: 3 (40 x 40 x 20 mm)</li> <li>• RS818RP+: 2 (40 x 40 x 20 mm)</li> </ul>
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)

## General DSM Specification

Networking protocol	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
File system	<ul style="list-style-type: none"> <li>Internal: Btrfs, ext4</li> <li>External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT<sup>3</sup></li> </ul>
Supported RAID type	Synology Hybrid RAID (SHR), Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
Storage management	<ul style="list-style-type: none"> <li>Maximum single volume size: 108TB</li> <li>Maximum internal volumes: 512</li> <li>Maximum iSCSI targets: 32</li> <li>Maximum iSCSI LUNs: 256</li> <li>iSCSI LUN clone/snapshot support</li> </ul>
SSD cache	SSD read-write cache support
File sharing capability	<ul style="list-style-type: none"> <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: 500</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® 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

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: 500
Cloud Sync	One or two-way synchronization with public cloud storage providers including Amazon Drive, Amazon S3-compatible storage, Baidu cloud, 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 style="list-style-type: none"> <li>Maximum replications: 64</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 style="list-style-type: none"> <li>Chat maximum users: 1500</li> <li>Office maximum users: 400, maximum simultaneous editing users: 80</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, QDDL 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 style="list-style-type: none"> <li>RS818+/RS818RP+ main unit x 1</li> <li>Quick Installation Guide x 1</li> <li>Accessory pack x 1</li> <li>AC power cord x 1 (RS818+) / 2 (RS818RP+)</li> </ul>
Optional accessories	<ul style="list-style-type: none"> <li>8GB / 16GB DDR3L-1600 Non-ECC SO-DIMM kit (RAM1600DDR3L-4GBx2 / RAM1600DDR3L-8GBx2)</li> <li>E10G17-F2 / E10G15-F1 10Gbps Ethernet adapters</li> <li>Expansion Unit RX418</li> <li>Rail Kit RKM114-Rail Kit Mounted / 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](http://www.synology.com) for the latest information.

- Performance figures may vary depending on environment, usage, and configuration.
- RS818+/RS818RP+ supports one Synology Expansion Unit RX418, sold separately.
- exFAT Access is purchased separately in Package Center.
- 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](https://www.synology.com/en-global/products/Extended_Warranty) for more information on availability.

## 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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