

RackStation

RS2818RP+



Synology RackStation RS2818RP+ is a 16-bay NAS designed for small- and medium-sized businesses. It provides large, scalable storage capacity with affordable total cost of ownership, ideal to serve as a centralized backup destination or a file server, providing easy-to-use storage applications to safeguard company's data assets. Synology RS2818RP+ is backed by Synology's 3-year limited warranty.

Scalable Storage Server On-Demand

Synology RS2818RP+ is a 3U, 16-bay network-attached storage solution, providing large storage capacity for growing businesses. It can support up to **28 drives** when connected to one Synology **RX1217 or RX1217RP¹** expansion unit. Storage capacity can be expanded according to your business needs with minimal effort. It is ideal to serve as a centralized backup target, a file server or a hub-and-spoke backup target for distributed businesses.

RS2818RP+ is equipped with a **quad-core** processor and **4GB DDR4 memory (expandable up to 64GB)²**. With Link Aggregation enabled, RS2818RP+ delivers outstanding sequential throughput performance at over **1,400 MB/s reading** and **580 MB/s writing³** and the iSCSI random IOPS performance can reach over **38,100 in reading** and **26,000 in writing³**.

Btrfs: Next Generation Storage Efficiency

RS2818RP+ 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

- High storage capacity NAS in 3U chassis enclosure with 16 drive bays
- High performance of over 1,400 MB/s sequential read throughput and 26,000 random write IOPS³, capable of installing optional 10GbE NICs
- Quad core, 2.1 GHz CPU and 4GB DDR4 memory, expandable up to 64GB²
- Scale up to 28 drives with Synology RX1217/RX1217RP¹
- Advanced Btrfs file system offering 65,000 system-wide snapshots and 1,024 snapshots per shared folder
- Complete virtualization solution with Synology Virtual Machine Manager. Dynamic iSCSI/NFS storage for VMware, Windows Hyper-V, Citrix, and OpenStack
- Backed with SRS, Synology's next business-day replacement service⁴

Cross-Platform File Sharing and Data Synchronization

RS2818RP+ 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 RS2818RP+. **Cloud Sync** keeps your Dropbox, Google Drive, Microsoft OneDrive, Baidu, and Box storage in sync with RS2818RP+. **Cloud Station Suite** allows you to effortlessly sync files across multiple devices, including Windows, macOS, Linux, and Android or iOS mobile devices.

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.

Effortless Virtualization Environment

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 RS2818RP+ 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.

Reliability, Availability & Disaster Recovery

System reliability is of paramount importance to businesses which depend upon their commercial servers every day. RS2818RP+ 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 warranty⁵** is available in select regions.



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.



Effective Sync & Backup Solution

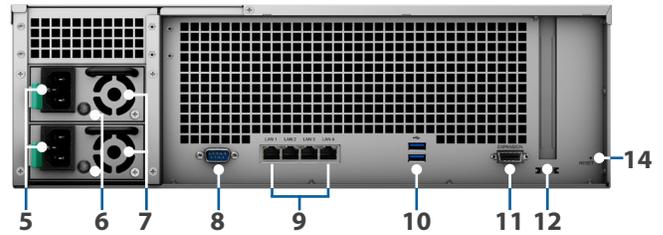
Synology RS2818RP+ can serve as a centralized backup destination, allowing you to back up files from multiple devices via Cloud Station Backup.

Hardware Overview

Front



Rear



1	Power button and indicator	2	Beep off button	3	Drive tray	4	Drive status indicator
5	Power port	6	PSU indicator	7	PSU fan	8	Console port
9	1GbE RJ-45 port	10	USB 3.0 port	11	Expansion port	12	PCIe expansion slot
13	USB 3.0 port	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	16 x 3.5" or 2.5" SATA SSD/HDD (drives not included)
External port	<ul style="list-style-type: none"> • 2 x USB 3.0 port • 1 x Expansion port
Size (HxWxD)	<ul style="list-style-type: none"> • 132.3 x 430.5 x 624.5 mm • 132.3 x 482 x 656.5 mm (with server ears)
Weight	17.4 kg
LAN	4 x 1GbE (RJ-45)
PCIe 3.0 slot	<ul style="list-style-type: none"> • x8 slot x 1 (4-lane) • High-performance network interface card support
Wake on LAN/WAN	Yes
Scheduled power on/off	Yes
System fan	3 (80 x 80 x 32 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)

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"> • Internal: Btrfs, ext4 • External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT®
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"> • 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 style="list-style-type: none"> • Maximum local user accounts: 2,048 • Maximum local groups: 256 • Maximum shared folders: 512 • Maximum concurrent SMB/NFS/AFP/FTP connections: 1,000
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: 1,000
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"> • Maximum replications: 64 • Maximum shared folder snapshots: 1,024 • Maximum system snapshots: 65,536
Synology Directory Server	A flexible and cost-effective domain controller solution
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"> • Chat maximum users: 1,500 • Office maximum users: 1,800 • Calendar: support CalDAV and access via mobile devices
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 style="list-style-type: none">• RS2818RP+ main unit x 1• Quick Installation Guide x 1• Accessory pack x 1• AC power cord x 2
Optional accessories	<ul style="list-style-type: none">• 4GB DDR4-2133 Non-ECC UDIMM (D4N2133-4G)• 16GB DDR4-2133 ECC UDIMM (RAMEC2133DDR4-16G)• Synology E10G17-F2 / E10G15-F1 10Gbps Ethernet adapters• Expansion Unit RX1217/RX1217RP• RKS1317-Rail Kit Sliding• VisualStation VS360HD, VS960HD• Surveillance Device License Pack• MailPlus License Pack• Virtual DSM License Pack
Warranty	3 years ⁷

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

1. RS2818RP+ supports one Synology Expansion Unit RX1217/RX1217RP, sold separately.
2. RS2818RP+ 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.
7. The warranty period starts from the purchase date as stated on your purchase receipt. Visit <https://www.synology.com/company/legal/warranty> for more information.

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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