



RackStation

RS2821RP+



Reliable Data Management for Business Workloads

Synology RackStation RS2821RP+ is a 3U 16-bay rackmount NAS with cost-effective file management, sharing, and backup capabilities, specially designed for small business and remote office deployments. Powered by Synology's DiskStation Manager (DSM), RS2821RP+ units come with powerful built-in business services and can easily be expanded with SSD cache and 10/25GbE networking capabilities.

Highlights

- **High Performance**
Support critical workloads with up to 2,200 MB/s read and 1,164 MB/s write performance¹
- **Redundant Power**
Maximize uptime with two redundant power supply units
- **Expansion Options**
Scale up to 28 drives with the RX1217(RP)² and add 10/25GbE networking or fast NVMe SSD Cache with PCIe add-in cards³
- **High Availability**
Combine two devices into a Synology High Availability cluster for maximum service uptime and minute-level failover
- **Extendable Warranty**
Includes a 3-year limited warranty with an optional extension to 5 years⁴

Versatile and Reliable Storage Platform

RS2821RP+ combines ample performance with versatile storage capabilities to deliver a cost-efficient data management solution.

- Up to 2,200/1,164 MB/s sequential read/write performance to support multi-user and demanding workloads¹
- 16 SATA HDD/SSD 2.5"/3.5" bays, expandable to 28 with a Synology [RX1217\(RP\)](#) expansion unit²



Next-Generation File System

Btrfs is a modern file system designed to safeguard data integrity through metadata mirroring, file self-healing, and fast snapshot replication.

Optimized for Data Protection and Integrity

Powered by Synology's [DSM](#) operating system, tailored for data management, and built upon the [Btrfs](#) file system, data stored on the RS2821RP+ are safely guarded by modern data protection technologies.

- **Advanced snapshot technology** provides schedulable and near-instantaneous data protection of shared folders and LUNs
- **File and folder-level data restoration** enables restoration of specific files or folders
- **Flexible storage quota system** helps admins manage available space by specifying storage limits for shared folders
- **File self-healing** detects and recovers corrupted files using mirrored metadata and RAID configurations
- **Inline compression** compresses data before they are written to the drive, reducing write commands and optimizing storage space



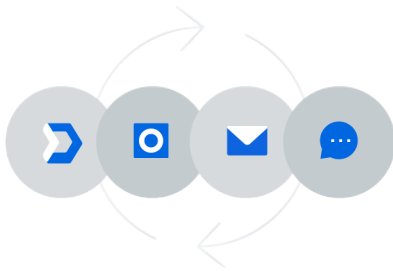
Synology Backup Solutions

DSM backup solutions are designed to be low-maintenance, with different RPO/RTO targets, storage efficiency, and backup destinations available depending on your requirements.

Data Backup Solutions for IT Infrastructure

Synology Active Backup Suite is a collection of license-free backup solutions built to protect Windows PCs and servers, VMs, other file servers, and SaaS applications:

- **Active Backup for Business (ABB)** consolidates backup tasks for physical and virtual environments with rapid restoration of files, entire physical machines, and VMs.
- **Active Backup for Google Workspace** allows users to back up Google Workspace data including from Gmail, Contacts, Calendar, and Drive.
- **Active Backup for Microsoft 365** provides complete backup of Microsoft 365 data including from OneDrive for Business, SharePoint Online, emails, contacts, and calendar.



Synology Collaboration Suite

A powerful and secure private cloud solution that lets teams collaborate, sync files, and communicate with others anytime, anywhere.

Remote and On-Premises Collaboration

Synology's collaboration suite provides a private cloud solution for on-premises and remote workers to concurrently edit documents, share files, manage emails, send instant messages, and more.

By leveraging a private cloud infrastructure, businesses can ensure complete data ownership and multi-layered security.

Synology Office includes Synology Documents, Spreadsheets, and Slides, which allow multiple users to edit, comment on, and share files together.

Synology Drive allows data access, synchronization, on-demand file restoration, and backup.

Synology Chat brings teams together with one-on-one chats, group chats, and encrypted private channels over multiple platforms.

Synology MailPlus⁵ provides a secure, reliable, and private email server.

Synology Calendar helps teams keep track of what is most important with convenient calendar sharing and scheduling.



Always On Guard

Protect your business with Synology's reliable and intuitive VMS solution. Surveillance Station combines intelligent monitoring and robust management features for flexible deployment scenarios.



Flexible Virtualization

Whether providing VM storage through iSCSI, NFS, or running VMs directly on the RS2821RP+ using Virtual Machine Manager, Synology DSM provides comprehensive tools to protect your virtual machines.

Private Video Surveillance

With [Synology Surveillance Station](#), the RS2821RP+ becomes a powerful Network Video Recorder solution with support for up to 40 IP cameras⁶.

- 7,600+ [supported camera models](#)
- ONVIF support to prevent vendor lock-in
- Private, subscription-free storage of recordings
- Access through web browser, dedicated desktop clients, or mobile app
- Event-based rules to trigger specific actions
- Email, SMS, or push notification options

Virtualization and Certified Storage

DSM streamlines provisioning for and management of virtual machines with full certification for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack virtualization environments.

Synology Storage Console for VMware or Windows platforms lets you manage storage directly from your hypervisor. VMware VAAI integration and Windows ODX help offload storage operations and speed up data transfer.

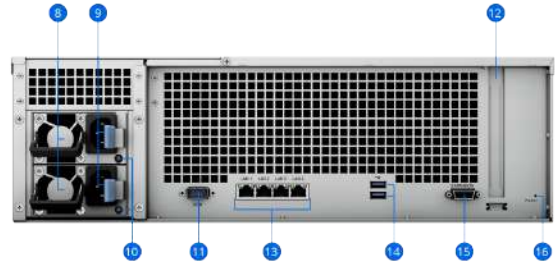
[Synology Virtual Machine Manager \(VMM\)](#) is a hosted hypervisor for virtual machines running Windows®, Linux®, or virtualized versions of DSM with recovery mechanisms that ensure data protection on each VM⁷.

Hardware Overview

Front



Rear



1	Power Button & Indicator	2	Status Indicator	3	Alert Indicator	4	Alert Off Button
5	Drive Status Indicators	6	Drive Trays	7	Rail Kit Release Tab	8	PSU Fans
9	Power Ports	10	PSU Indicators	11	Console Port	12	PCIe Expansion Slot
13	1GbE RJ-45 Ports	14	USB 3.2 Ports	15	Expansion Port	16	Reset Button

Technical Specifications

Hardware

CPU	AMD Ryzen™ V1500B quad-core 2.2 GHz
Hardware encryption engine	Yes (AES-NI)
Memory	4 GB DDR4 ECC UDIMM (expandable up to 32 GB)
Compatible drive types ⁸	<ul style="list-style-type: none"> 16 x 3.5" or 2.5" SATA HDD/SSD (drives not included) Only Synology SAT5200 2.5" or Synology SNV3400/3500 M.2 SSDs (sold separately) can be used for SSD cache⁹
Hot swappable drive	Yes
External ports	<ul style="list-style-type: none"> 2 x USB 3.2 Gen 1 ports 1 x Expansion port (Infiniband)
Form factor	Rackmount 3U
Size (HxWxD)	132.3 x 482 x 656.5 mm (with server handles)
Weight	17.1 kg
Rack installation support	4-post 19" rack
LAN ports	4 x 1GbE RJ-45
Wake on LAN/WAN	Yes
PCIe 3.0 slot	<ul style="list-style-type: none"> 1 x 4-lane x8 slot Supports network interface cards² and M.2 NVMe SSD adapter cards for SSD cache⁹
Scheduled power on/off	Yes
System fans	3 x (80 x 80 x 32 mm)
AC input power voltage	100 V to 240 V AC
Power frequency	50/60 Hz, single phase
Operating temperature	0°C to 35°C (32°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 protocols	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
File systems	<ul style="list-style-type: none"> Internal: Btrfs, ext4 External: Btrfs, ext4, ext3, FAT32, NTFS, HFS+, exFAT¹⁰
Supported RAID types	Synology Hybrid RAID, Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10

Storage management	<ul style="list-style-type: none"> • Maximum single volume size: 108 TB • Maximum system snapshots: 65,536¹¹ • Maximum internal volumes: 64
SSD cache	<ul style="list-style-type: none"> • Read/write cache support • 2.5" SATA SSD support • M.2 NVMe SSD support⁹
File sharing capabilities	<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: 1,000¹²
Privileges	Windows® Access Control List (ACL), application privileges
Directory services	Connects with Windows® AD/LDAP servers enabling domain users to login via SMB/NFS/AFP/FTP/File Station using their existing credentials.
Virtualization	VMware vSphere®, Microsoft Hyper-V®, Citrix®, OpenStack®
Security	Firewall, shared folder encryption, SMB encryption, FTP over SSL/TLS, SFTP, rsync over SSH, login auto block, Let's Encrypt support, HTTPS (customizable cipher suite)
Supported clients	Windows® 7 onwards, macOS® 10.12 onwards
Supported browsers	Chrome®, Firefox®, Edge®, Internet Explorer® 10 onwards, Safari® 10 onwards, Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards) on tablets
Interface languages	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文

Packages and Applications

File Server & Synchronization	
Drive	Synchronizes files across Windows®, macOS®, Linux®, Android™ and iOS. The built-in cross-platform portal allows access to data anytime and anywhere. <ul style="list-style-type: none"> • Maximum number of hosted files: 1,000,000 • Maximum number of concurrent connections for PC clients: 550
File Station	Provides virtual drives, remote folders, Windows® ACL editor, compression/extraction of archived files, bandwidth control for specific users/groups, creation of sharing links, and transfer logs.
FTP Server	Supports bandwidth control for TCP connections, custom FTP passive port ranges, anonymous FTP, FTP over TLS/SSL and SFTP protocols, network booting with TFTP and PXE support, and transfer logs.
Presto File Server ¹³	Enables high-speed data transfer over WAN through the exclusive SITA technology between Synology NAS and desktop.
Cloud Sync	Offers one or two-way synchronization with public cloud storage providers including Alibaba Cloud OSS, Amazon S3-compatible storage, Backblaze B2, Baidu Cloud, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, MegaDisk, Microsoft OneDrive, OpenStack Swift-compatible storage, Tencent COS, WebDAV servers and Yandex Disk.
Universal Search	Enables global search of applications and files.
iSCSI Storage & Virtualization	
iSCSI Manager	<ul style="list-style-type: none"> • Maximum iSCSI targets: 128 • Maximum iSCSI LUNs: 256 • iSCSI LUN clone/snapshot support
Virtual Machine Manager	Deploys and runs virtual machines on the Synology NAS, including Windows®, Linux®, and Virtual DSM.
Data Protection & Backup Solution	
Hyper Backup	Supports local backup, network backup, and data backup to public clouds.
Backup tools	<ul style="list-style-type: none"> • DSM configuration backup, macOS® Time Machine® support, Synology Drive Client desktop application • Shared folder sync supports a maximum of 16 tasks
Snapshot Replication	<ul style="list-style-type: none"> • Maximum number of snapshots for shared folders: 1,024 • Maximum number of replications: 32
Synology High Availability	Reduces service downtime by combining two identical NAS into a high-availability cluster.
Active Backup for G Suite	Supports backup and restoration of Google Workspace My Drive, Team Drive, Gmail, Contacts, and Calendar.
Active Backup for Microsoft 365	Supports backup and restoration of Microsoft 365 OneDrive for Business, mail, contacts, and calendar.
Active Backup for Business	An all-in-one backup solution designed for heterogeneous business IT environments. It enables IT admins to remotely manage and protect PCs, servers, and VMs from one centralized console.

Productivity & Collaboration

Collaboration tools	Users can collaborate through the instant messaging service Synology Chat, the online editor Synology Office, and the scheduling assistant Synology Calendar. <ul style="list-style-type: none">• Maximum users for Chat: 1,500• Maximum users for Office: 1,800• Calendar supports CalDAV and access via mobile devices
Note Station	A note taking platform that supports rich text, note organization and versioning, encryption, sharing, media embedding, and attachments.
Synology MailPlus Server	A secure, reliable, and private mail solution featuring high-availability, load balancing, security, and filtering ⁵ .
Synology MailPlus	An intuitive webmail interface for Synology MailPlus Server with customizable mail labels, filters, and user interface.

Multimedia

Moments	A feature-rich photo management application that includes AI-powered album creation from facial and subject recognition, photo editing and sharing capabilities, similar photo detection for duplicate management, auto-editing functions such as color correction and angle adjustments, and auto-selection of the best shots. Mobile applications are available on iOS and Android™ devices.
Other packages	Video Station, Photo Station, Audio Station, iTunes® Server

Surveillance

Surveillance Station	Maximum IP cameras: 40, for a total of 1,200 FPS at 720p (H.264) ⁶ .
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All-in-One Servers

Synology Directory Server	Provides a flexible and cost-effective domain controller solution.
Central Management System	Provides a single interface to manage and monitor multiple Synology NAS.
VPN Server	<ul style="list-style-type: none">• Maximum connections: 30• Supported VPN protocols: PPTP, OpenVPN™, L2TP/IPSec
Mail Server	<ul style="list-style-type: none">• Supported Mail Server protocols: POP3, SMTP, IMAP• LDAP/AD account support
Mail Station	A webmail interface for Mail Server to receive emails from multiple POP3 mailboxes and SMTP servers.
Web Station	Enables hosting for up to 30 websites with support for PHP/MariaDB® and 3rd-party applications.
Other packages	DNS Server, RADIUS Server, Log Center

Others

Storage Analyzer	Displays volume and quota usage, total size of files, volume usage and trends based on past usage, size of shared folders, large files, most recently modified files, and least recently accessed files.
Antivirus Essential	Provides full system scans, scheduled scans, white list customization, and auto-update of virus definitions.
iOS/Android™ applications	Synology Drive, Synology MailPlus, Synology Chat, Synology LiveCam, Moments, DS audio, DS photo, DS video, DS cam, DS file, DS finder, DS note
Other packages	Additional 3rd-party packages are available in the Package Center.

Environment and Packaging

Environment safety	RoHS compliant
Package contents	<ul style="list-style-type: none">• 1 x RS2821RP+ main unit• 1 x Quick Installation Guide• 1 x Accessory pack• 2 x AC power cords
Optional accessories ¹⁴	<ul style="list-style-type: none">• DDR4 ECC UDIMM: D4EU01-4G/D4EC-2666-8G/D4EC-2666-16G• RKS1317 Rail Kit• 10GbE Network Interface Cards: E10G21-F2/E10G18-T2/E10G18-T1• 25GbE Network Interface Card: E25G21-F2• M.2 SSD & 10GbE Combo Adapter Card: E10M20-T1• M.2 SSD Adapter Card: M2D20• M.2 NVMe SSD: SNV3400, SNV3500⁹• 2.5" SATA SSD: SAT5200• 3.5" SATA HDD: HAT5300• Expansion Unit: RX1217(RP)• VisualStation units: VS960HD, VS360HD• MailPlus License Pack⁵• Surveillance Device License Pack⁶• Virtual DSM License Pack⁷

Warranty3 years⁴

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

1. Performance figures obtained through internal testing by Synology. Actual performance may vary depending on the testing environment, usage, and configuration.
2. RS2821RP+ supports up to 28 drives with one Synology RX1217(RP) expansion unit, sold separately.
3. For the most up-to-date list of compatible NICs, please check our [compatibility list](#).
4. The warranty period starts from the purchase date as stated on your purchase receipt. [Learn more](#) about our limited product warranty policy. Available in select regions, an optional [EW202](#) add-on extends the 3-year warranty to 5 years.
5. Five MailPlus email accounts are included with the RS2821RP+. Additional email accounts can be added with the purchase of Synology MailPlus License Pack. [Learn more](#).
6. Surveillance Station includes 2 free licenses. Connecting more cameras and devices requires additional licenses. [Learn more](#).
7. Certain advanced features require [Virtual Machine Manager Pro](#). One Virtual DSM license is included. Additional Virtual DSM instances require the purchase of [Virtual DSM Licenses](#).
8. Check our [compatibility list](#) for validated drives to ensure system stability.
9. SSD cache can be enabled by using a compatible 2.5" SSD or without occupying drive bays by installing Synology SNV3400, SNV3500 M.2 NVMe SSD drives using M2D20 or E10M20-T1 adapter cards, sold separately.
10. exFAT Access can be purchased separately through the DSM Package Center.
11. System snapshots include snapshots taken by iSCSI Manager, Snapshot Replication, and Virtual Machine Manager. Availability of these packages varies by model.
12. Maximum concurrent connections can be increased to 2,000 with maximum installed memory of 32 GB RAM.
13. Presto File Server license can be purchased separately through the application.
14. Please refer to our [compatibility list](#) for the latest optional accessories list.

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