



RackStation

RS822+ RS822RP+

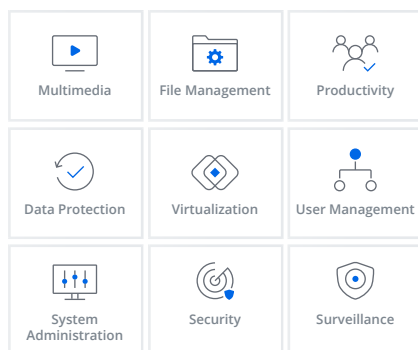


Flexible and Versatile Storage for Effective Data Management

Synology RackStation RS822+/RS822RP+ is a 4-bay rackmount NAS enclosed in a compact 1U chassis. Running the powerful Synology DiskStation Manager (DSM) operating system, it is ideal for data backup, sharing, and synchronization. Its small size, stable performance, and storage scalability makes it suitable for branch offices and small and medium-sized businesses with ever-increasing data management needs.

Highlights

- **High Performance**
Over 2,103/1,074 MB/s sequential read/write throughput supports stable data transfers¹
- **Easy Expansion**
Scale up to 8 drives with one Synology RX418 Expansion Unit²
- **Flexible Connectivity**
Four 1GbE ports support network failover and load balancing, with optional 10/25GbE expansions available³
- **SSD Cache Support**
Boost random IOPS performance with optional SSD cache⁴



Full-Featured Operating System

RS822+/RS822RP+ runs the Synology DSM operating system, offering dependable storage, efficient productivity solutions, extensive backup options, and solid security.



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.

Versatile Storage for Any Purpose

The RS822+/RS822RP+ comes out of the box with intuitive and comprehensive file management, media organization, and backup options, making it an ideal edge storage solution for medium and large studios or a comprehensive data management platform for retail and hospitality settings.

- Up to **2,103 MB/s sequential read** and **1,074 MB/s sequential write** performance¹ enables fast file sharing, syncing, streaming, and backup for multiple users
- Supports 4 x 3.5" or 2.5" SATA HDD/SSD,⁵ with the option to **expand to 8 drives** with a Synology RX418 expansion unit
- Up to **32 GB DDR4 ECC memory** for protection against potential crashes and inadvertent changes in data through automatic correction of data errors
- Accommodate multiple streams or transfer tasks with **four Gigabit RJ-45 ports**, which can be bonded using **Link Aggregation** to provide automatic **network failover** and **load balancing**
- Adjust your storage platform as more demanding needs arise with an optional **10GbE SFP+/RJ-45** or **25GbE SFP28 add-in network card**, an **M.2 SSD adapter card**, or a **M.2 NVMe SSD & 10GbE combo adapter card** via the PCIe 3.0 slot³
- Further bolstering dependability, the RS822RP+ is equipped with a **redundant power supply**

Built for Data Protection and Integrity

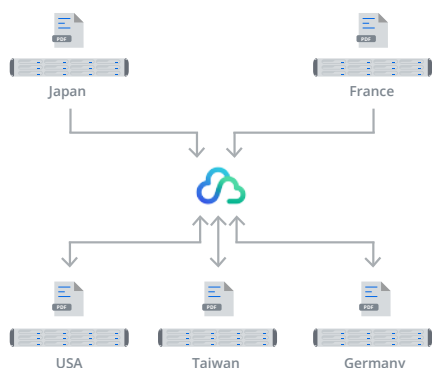
Safeguard your critical data with the **powerful storage management features** of Synology DSM, built on the advanced **Btrfs** file system.

- **Advanced snapshot technology** provides schedulable and near-instantaneous data protection for shared folders and LUNs
- **File and folder-level data restoration** enables recovery 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** minimizes storage consumption and extends the life of drives by compressing data before it is written to the storage pool



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.



Keeping Teams Connected

With Hybrid Share-enabled folders, remote teams retain full access to the most up-to-date files while benefiting from reduced local storage footprint and bandwidth usage.⁶

Complete Data and Device Backup Solutions

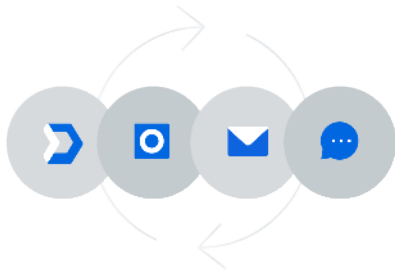
Synology DSM comes standard with a complete package of **backup solutions** available at no extra cost.

- **Active Backup Suite** consolidates backup tasks and offers rapid restoration of Windows and Linux endpoints, VMs, Synology systems, and SaaS applications
- **Snapshot Replication** creates point-in-time copies of shared folders and LUNs to protect them from accidental modifications or ransomware incidents
- **Hyper Backup** backs up your NAS data to multiple destinations securely and efficiently with integrity checks and powerful deduplication, compression, and versioning options
- **C2 Storage for Hyper Backup** offers a dedicated secure public cloud destination for Synology NAS backup data⁶

File Sharing and Synchronization for Hybrid Teams

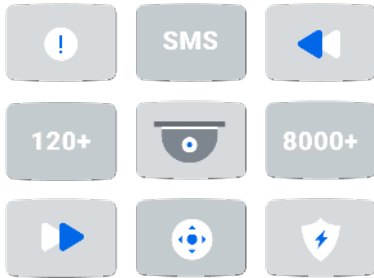
A compact size, easy installation, and powerful remote management options make the RS822+/RS822RP+ suitable for deployment as an **edge server** to provide convenient and effective file access, sharing, and synchronization across multiple sites.

- **Wide network protocol support** ensures seamless file sharing experience across Windows, Mac, and Linux platforms, while **compatibility with Windows AD and LDAP** enables easy integration into any existing network environment
- **Hybrid Share** combines reliable on-premises storage and efficient syncing of shared folders in the cloud to enable seamless cross-site synchronization and local access at LAN speed⁶
- **Synology Active Insight** lets you monitor system performance and health, login activities, and backup task status for all your Synology servers safely in the cloud, with automated alerts and notifications in case of potential issues or suspicious events⁷
- **Cloud Sync** keeps your Dropbox, Google Drive, Microsoft OneDrive, Baidu, and Box storage in sync with your RackStation
- **Seamless file sharing capability** is combined with a **high level of security**, including HTTPS support, a built-in firewall, and multiple IP and account intrusion auto-blocking mechanisms



Synology Productivity Suite

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



Always On Guard

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

Powerful Collaboration and Sharing Tools

Synology's [productivity suite](#) provides a private cloud solution for on-site and remote workers to concurrently edit documents, share files, manage emails, send instant messages, and more.

- [Synology Drive](#) is a cloud file management solution that supports file sharing, remote data access, cross-device and cross-site synchronization, on-demand file restoration, and backup
- The [Synology Office](#) extension lets users collaborate on documents, spreadsheets, and presentation slides in real time, supported by convenient options such as file versioning for easy restoration and password protection
- [Synology Photos](#) serves as a media organization hub for enthusiasts and professionals looking to efficiently manage and share their photos and videos through intuitive browsing options and secure sharing methods

Private Video Surveillance

[Synology Surveillance Station](#) transforms the RS822+/RS822RP+ into a powerful Network Video Recorder solution with support for up to 40 IP cameras.⁸

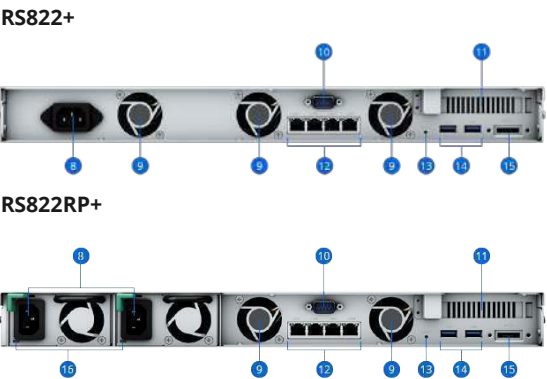
- 8,300+ [supported camera models](#)
- ONVIF support for a broader selection of cameras
- Private, subscription-free storage of recordings
- Access through web browsers, desktop clients, or mobile apps
- Event-based rules to trigger specific actions
- Email, SMS, and push notification options
- Safeguard critical footage by dual recording to [C2 Surveillance](#)

Hardware Overview

Front



Rear



1	Power Indicator	2	Power Button	3	Alert Indicator	4	Drive Status Indicators
5	Mute Button	6	Status Indicator	7	Drive Trays	8	Power Ports
9	Fans	10	Console Port	11	PCI Express Expansion Slot	12	1GbE RJ-45 Ports
13	Reset Button	14	USB 3.2 Gen 1 Ports	15	eSATA Port	16	Redundant Power LEDs

Technical Specifications

Hardware

CPU	AMD Ryzen™ V1500B quad-core (8-thread) 2.2 GHz
Hardware encryption engine	AES-NI
Memory	2 GB DDR4 ECC SODIMM (expandable up to 32 GB)
Compatible drive types	• 4 x 3.5" or 2.5" SATA HDD/SSD (drives not included) • Synology only guarantees full functionality, reliability, and performance for Synology drives listed on the compatibility list⁵
Hot swappable drives	Yes
External ports	• 2 x USB 3.2 Gen 1 ports • 1 x Expansion port (eSATA)
Form factor	Rackmount 1U
Size (HxWxD)	• RS822+: 44 x 430.5 x 457.6 mm/44 x 480 x 492.6 mm (with server handles) • RS822RP+: 44 x 430.5 x 483.6 mm/44 x 480 x 518.6 mm (with server handles)
Weight	• RS822+: 6.4 kg • RS822RP+: 8.0 kg
LAN ports	4 x 1GbE RJ-45
Wake on LAN/WAN	Yes
PCIe expansion	• 1 x Gen3 4-lane x8 slot • High-performance network interface card support • M.2 NVMe/SATA SSD adapter card support
Scheduled power on/off	Yes
System fans	• RS822+: 3 x (40 x 40 x 20 mm) • RS822RP+: 2 x (40 x 40 x 20 mm)
AC input power voltage	100 V to 240 V AC
Power frequency	50/60 Hz, single phase
Operating environment	• Temperature: 0°C to 35°C (32°F to 95°F) • Relative humidity: 8% to 80% RH
Storage environment	• 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 Specifications

Networking protocols	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, and VPN (PPTP, OpenVPN™, L2TP)
File systems	- Internal: Btrfs, ext4 - External: Btrfs, ext4, ext3, FAT32, NTFS, HFS+, exFAT
Supported RAID types	Synology Hybrid RAID (SHR), Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, and RAID 10
Storage management	- Max. single volume size: 108 TB - Max. number of system snapshots: 65,536⁹ - Max. number of internal volumes: 64
SSD cache	- Read/write cache support - M.2 NVMe and 2.5" SATA SSD support
File sharing capabilities	- Max. number of local user accounts: 2,048 - Max. number of local groups: 256 - Max. number of shared folders: 512 - Max. number of concurrent SMB/NFS/AFP/FTP connections: 500¹⁰
Privileges	Windows® Access Control List (ACL) and 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, and Kubernetes
Security	Firewall, shared folder encryption, SMB encryption, FTP over SSL/TLS, SFTP, rsync over SSH, login auto block, Let's Encrypt support, and HTTPS (customizable cipher suite)
Supported browsers	Google Chrome®, Firefox®, Microsoft Edge®, Safari® 13 and later, and Safari (iOS 13.0 and later) on iPad, Chrome (Android™ 11.0 and later) on tablets
Interface languages	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ไทย, 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 - Max. number of hosted files: 50,000,000 - Max. 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
Hybrid Share ⁶	Efficiently synchronizes files across sites by keeping shared data on Synology C2 Storage and streaming files to Synology NAS worldwide on request. Frequently requested files are cached at each site for low-latency access
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 ¹¹	Enables high-speed data transfer over WAN between Synology NAS and desktop platforms through the exclusive SITA technology
Cloud Sync	Offers one or two-way synchronization with public cloud storage providers including Alibaba Cloud OSS, 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	Search through files, metadata, and more on your NAS. Integration with Windows Search and macOS Spotlight makes it easy to find files
Migration Assistant	Migrates data, system setting, and applications seamlessly from one Synology NAS to another to ensure maximum service availability
SAN Storage & Virtualization	
SAN Manager	- Max. number of iSCSI targets: 128 - Max. number of LUNs: 256 - LUN clone/snapshot support
Virtual Machine Manager ¹²	Supports running Windows®, Linux®, and Virtual DSM-based virtual machines on Synology NAS
Data Protection & Backup Solutions	
Hyper Backup	Supports local backup, network backup, and data backup to other devices, Synology NAS, and public clouds including C2 Storage
Backup tools	- DSM configuration backup, macOS® Time Machine® support, Synology Drive Client desktop application - Shared folder sync supports a maximum of 32 tasks

Snapshot Replication	• Max. number of snapshots for shared folders: 1,024 • Max. number of replications: 32
Synology High Availability	Reduces service downtime by combining two identical NAS into a high-availability cluster
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, Synology systems, and VMs from one centralized console
Active Backup for Google Workspace	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, Outlook, Contacts, and Calendar
Productivity & Collaboration	
Collaboration tools	Collaborate with instant messaging service Synology Chat, online documents editor Synology Office, and scheduling assistant Synology Calendar • Max. number of concurrent users for Chat: 150 • Max. number of 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 options
Synology MailPlus ¹³	An intuitive webmail interface for Synology MailPlus Server with configurable mail labels, filters, and user interface
Multimedia	
Synology Photos	An efficient photo management solution for professional and amateur photographers. Automated tools allow users to group, filter, organize, and share content while keeping their photos safe and secure
Other packages	Video Station, Audio Station, and iTunes® Server
Surveillance	
Surveillance Station ⁷	Max. number of IP cameras: 40, for a total of 1,200 FPS at 720p (H.264)
Management & Administration	
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	• Max. number of connections: 40 • Supported VPN protocols: PPTP, OpenVPN™, L2DTP/IPSec
Active Insight ⁸	Monitor health statistics, login activity, and backup statuses for your Synology servers worldwide, and receive notifications and advice from our centralized cloud-hosted management platform
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
Web Station	Enables hosting for up to 30 websites with support for PHP/MariaDB® and 3rd-party applications
Other packages	DNS Server, RADIUS Server, and Log Center
Others	
iOS/Android™ applications	Synology Drive, Synology MailPlus, Synology Secure SignIn, Synology Chat, Synology LiveCam, Synology Active Insight, DS cam, DS file, DS finder, and DS note
Other packages	Additional 3rd-party packages are available in the Package Center

Environment and Packaging

Environmental safety	RoHS compliant
Package contents	• 1 x RS822+/RS822RP+ main unit • 1 x Quick Installation Guide • 1 x Accessory pack • 1 x AC power cord (RS822+)/2 x AC power cord (RS822RP+)
Optional accessories ¹⁴	• DDR4 ECC SODIMM: D4ES02-4G/D4ES02-8G/D4ES01-16G • 2.5" SATA SSD: SAT5200 series • 3.5" SATA HDD: HAT5300 series • M.2 SSD & 10GbE Combo Adapter Card: E10M20-T1 • M.2 SSD Adapter Card: M2D20 • 10/25 Gbps Adapter Cards: E25G21-F2/E10G21-F2/E10G18-T1/E10G18-T2 • Expansion Unit: RX418 • RKM114-Rail Kit Mounted/RKS-02-Rail Kit Sliding • MailPlus License Pack¹³ • Surveillance Device License Pack⁷ • Virtual DSM License Pack¹² • Extended Warranty: EW202, Extended Warranty Plus¹⁵
Warranty	3 years ^{15, 16}

Note: Specifications are subject to change without notice. Please refer to the model's [specifications page](#) for the most up to date information.

1. Performance figures obtained through internal testing by Synology. Actual performance may vary depending on the testing environment, usage, and configuration. See [performance charts](#) for more information.
2. RS822+/RS822RP+ supports up to 8 drives with the addition of a [Synology RX418](#) expansion unit, sold separately.
3. For the most up-to-date list of compatible NICs, please check our [compatibility list](#).
4. SSD cache can be enabled using SNV3400/SNV3500 NVMe SSDs along with a M2D20 or E10M20-T1 adapter card, or by using a compatible 2.5" SATA SSD. All devices sold separately.
5. Check our [compatibility list](#) for supported drives.
6. C2 Storage for Hyper Backup and Hybrid Share requires purchase of an annual or monthly [subscription](#). A free trial is available for each newly registered device.
7. Certain advanced features require purchase of a premium subscription. A free trial is available. [Learn more](#)
8. Surveillance Station includes two free licenses. Connecting more cameras and devices requires additional licenses. [Learn more](#)
9. System snapshots include snapshots taken by SAN Manager, Snapshot Replication, and Virtual Machine Manager.
10. Maximum concurrent connections can be increased to 2,000 by installing at least 8 GB of RAM memory.
11. Presto File Server license can be purchased separately through the application.
12. 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](#).
13. Five MailPlus email accounts are included. Additional email accounts can be added with the purchase of Synology MailPlus License Packs. [Learn more](#)
14. Please refer to our [compatibility list](#) for the latest optional accessories list.
15. Up to 5 years of warranty are available as an additional bundle with Extended Warranty Plus or Extended Warranty, both 2-year extended warranty service add-ons available in select regions. Check availability for [Extended Warranty EW202](#) or [Extended Warranty Plus](#).
16. The warranty period starts from the date of purchase as stated on your purchase receipt. [Learn more](#) about our limited product warranty policy.

SYNOLOGY INC.

© 2022, 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.

RS822+/RS822RP+-2022-ENU-REV001