

Datasheet



RackStation

RS822RP+

Synology

RS822RP+



Flexible and Versatile Storage for Effective Data Management

Synology RackStation 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.

- **High Performance**
Over 2,100/1,000 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

Versatile Storage for Any Purpose

The 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.

- Over **2,100 MB/s sequential read** and **1,000 MB/s sequential write** performance¹ enables fast file sharing, syncing, streaming, and backup for multiple users
- Supports 4 × 3.5" or 2.5" SATA HDD/SSD, 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 **redundant power supply units**

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

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 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

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

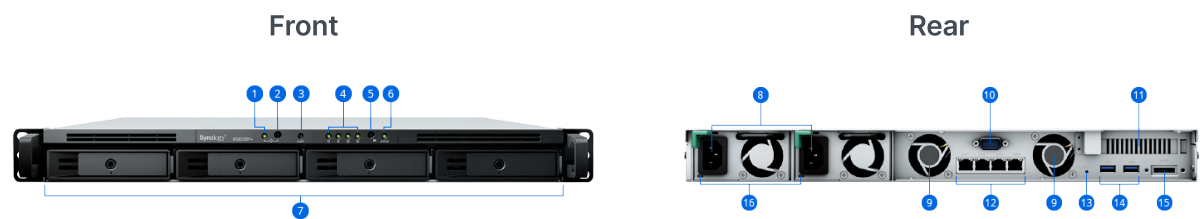
Synology Surveillance Station transforms the RS822RP+ into a powerful Network Video Recorder solution with support for up to 40 IP cameras.⁸

- 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, and mobile apps
- Event-based rules to trigger specific actions
- Email, SMS, and push notification options
- Safeguard critical footage by dual recording to **C2 Surveillance**

Notes:

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. 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](#)

Hardware Overview



No.	Name	No.	Name
1.	Power Indicator	9.	Fans
2.	Power Button	10.	Console Port
3.	Alert Indicator	11.	PCI Express Expansion Slot
4.	Drive Status Indicators	12.	1GbE RJ-45 Ports
5.	Mute Button	13.	Reset Button
6.	Status Indicator	14.	USB 3.2 Gen 1 Ports
7.	Drive Trays	15.	eSATA Port
8.	Power Ports	16.	Redundant Power LEDs

Technical Specifications

Hardware

CPU

CPU Model	AMD Ryzen V1500B
CPU Quantity	1
CPU Architecture	64-bit
CPU Frequency	2.2 GHz
Hardware Encryption Engine	Yes

Memory

System Memory	2 GB DDR4 ECC SODIMM
Memory Module Pre-installed	2 GB (2 GB x 1)
Total Memory Slots	2
Maximum Memory Capacity	32 GB (16 GB x 2)
Notes	Please select Synology memory modules for optimum compatibility and reliability. Synology will not provide complete product warranty or technical support if non-Synology memory modules are used for memory expansion.

Storage

Drive Bays	4
Maximum Drive Bays with Expansion Unit	8 (RX418 × 1)
Drive Type	<ul style="list-style-type: none">• 3.5" SATA HDD• 2.5" SATA SSD
Hot Swappable Drive	Yes

External Ports

RJ-45 1GbE LAN Port	4
USB 3.2 Gen 1 Port	2
Expansion Port	1

PCIe

PCIe Expansion	1 x Gen3 ×8 slot (x4 link)
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Appearance

Form Factor (RU)	1U
Size (Height x Width x Depth)	44 mm x 480 mm x 518.6 mm
Weight	8.0 kg
Rack Installation Support	4-post 19" rack (Synology Rail Kit - RKM114/RKS-02)
Notes	The rail kit is sold separately

Others

System Fan	40 mm x 40 mm x 20 mm x 2 pcs
AC Input Power Voltage	100 V to 240 V AC
Power Frequency	50/60 Hz, Single Phase

Temperature

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

General DSM Specifications

Storage Management

Maximum Single Volume Size	108 TB
Maximum Internal Volume Number	64
SSD Read/Write Cache (Determining cache size)	Yes
Supported RAID Type	Synology Hybrid RAID,Basic,JBOD,RAID 0,RAID 1,RAID 5,RAID 6,RAID 10

Notes

- Each internal volume (may consist of multiple drives) is expandable up to 108TB.
- Actual maximum storage pool and volume sizes depend on drive sizes used, the number of drive bays available, and the RAID configuration.
- Usable capacity for each volume will be lower than the maximum volume size and is dependent on the filesystem and the amount of system metadata stored.

File System

Internal Drives	Btrfs,ext4
External Drives	Btrfs,ext4,ext3,FAT32,NTFS,HFS+,exFAT

File Services

File Protocol	SMB,AFP,NFS,FTP,WebDAV,Rsync
Maximum Number of SMB Connections (FSCT-Based) with RAM Expansion	130
Windows Access Control List (ACL) Integration	Yes
NFS Kerberos Authentication	Yes

Account & Shared Folder

Maximum Local User Accounts	1,024
Maximum Local Groups	256
Maximum Shared Folder	256
Maximum Shared Folder Sync Tasks	8

Virtualization

VMware ESXi 6.5 and VAAI	Yes
Windows Server 2022	Yes
Citrix Ready	Yes
OpenStack	Yes

Security

Firewall, encryption shared folder, SMB encryption, FTP over SSL/TLS, SFTP, rsync over SSH, login auto block, Let's Encrypt support, HTTPS (customizable cipher suite)

General Specifications

Supported Protocols	SMB1 (CIFS), SMB2, SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, HTTP, HTTPS, FTP, SNMP, LDAP, CalDAV
Supported Browsers	Chrome, Firefox, Edge, Safari
Supported Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svenska, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文
Notes	For an updated list of supported browser versions, check the DSM Technical Specifications .

Packages and Applications

Synology Drive

Synchronizes files across Windows®, macOS®, Linux®, Android™ and iOS. The built-in cross-platform portal allows access to data anytime and anywhere

Maximum Number of Users	250
Maximum Number of Hosted Files	5,000,000 (applies to files indexed or hosted by Synology Drive . For file access through other standard protocols, refer to the File Services section above)

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

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 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.

SAN Manager

Maximum iSCSI Target Number	64
Maximum LUN	128
LUN Clone/Snapshot, Windows ODX	Yes

Virtual Machine Manager

Recommended Virtual Machine Instances	8 (Learn more)
Recommended Virtual DSM Number (Licenses required)	8 (including 1 Free License)

Hyper Backup

Supports local backup, network backup, and data backup to other servers and public clouds, including C2 Storage

Snapshot Replication

Maximum Snapshots per Shared Folder	256
Maximum of System Snapshots	4,096

Synology High Availability

Reduces service downtime by combining two identical NAS into a high-availability cluster

Synology Chat

Maximum Number of Users	150
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Synology Office

Maximum Number of Users	240
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Synology MailPlus / MailPlus Server

A secure, reliable, and private mail solution featuring high-availability, load balancing, security, and filtering options

Free Email Accounts	5 (Additional accounts require purchase of licenses)
Maximum Number of Users	290

Surveillance Station

Default Licenses	2 (Additional cameras require purchase of licenses)
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Suggested Maximum IP Cameras and Total FPS (H.264)

- 1080p: 40 channels, 800 FPS
- 3M: 35 channels, 350 FPS
- 5M: 28 channels, 280 FPS
- 4K: 17 channels, 170 FPS

Suggested Maximum IP Cameras and Total FPS (H.265)

- 1080p: 40 channels, 1200 FPS
- 3M: 40 channels, 600 FPS
- 5M: 40 channels, 480 FPS
- 4K: 20 channels, 200 FPS

Central Management System

Provides a single interface to manage and monitor multiple Synology NAS

VPN Server

Maximum Connections	8
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Other packages

Additional 3rd-party packages are available in the Package Center

Environment & Packaging

Environment safety

RoHS Compliant

Packaging Content

- Main Unit X 1
- Accessory Pack X 1
- AC Power Cord X 2
- Quick Installation Guide X 1

Optional Accessories

- DDR4 ECC SODIMM: [D4ES02-4G/D4ES02-8G/D4ES01-16G](#)
- Expansion Units: [RX418](#)
- Enterprise Series 3.5" SATA HDD: [HAT5300 Series](#)
- Plus Series 3.5" SATA HDD: [HAT3300 Series](#)
- Enterprise Series 2.5" SATA SSD: [SAT5200 Series](#)
- M.2 SSD & 10GbE Combo Adapter Card: [E10M20-T1](#)
- M.2 SSD Adapter Card: [M2D20/M2D18](#)
- 25GbE Network Interface Card: [E25G30-F2](#)
- 10GbE Network Interface Card: [E10G30-F2/E10G30-T2/E10G18-T1](#)
- Rail Kit Sliding: [RKS-02](#)
- Rail Kit Mounted: [RKM114*](#)

Notes

- Certain items may not be available in your location. Please contact your local distributors for more information.
- Upgrade to DSM 7.2-64551 or later before installing the M2D18.

Warranty

3-year hardware warranty, extendable to 5 years with [EW202](#) or [Extended Warranty Plus](#)

Notes

- The warranty period starts from the purchase date as stated on your purchase receipt. ([Learn more](#))
 - [Extended Warranty Plus](#) is only available in Europe and North America. [EW201/EW202](#) is only available in Asia, Africa, and Oceania. For exact availability information please visit their respective websites.
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