



RackStation

RS2421+

RS2421RP+



## Reliable Data Management for Business Workloads

Synology RackStation RS2421+ and RS2421RP+ (redundant power) are 2U 12-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), RS2421(RP)+ 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 1,154 MB/s write performance<sup>1</sup>
- **Redundant Power**  
Maximize uptime with two redundant power supply units (RS2421RP+)
- **Expansion Options**  
Scale up to 24 drives with the RX1217(RP)<sup>2</sup> and add 10/25GbE networking or fast NVMe SSD Cache with PCIe add-in cards<sup>3</sup>
- **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 years<sup>4</sup>

## Versatile and Reliable Storage Platform

RS2421(RP)+ units combine ample performance with versatile storage capabilities to deliver a cost-efficient data management solution.

- Up to 2,200/1,154 MB/s sequential read/write performance to support multi-user and demanding workloads<sup>1</sup>
- 12 SATA HDD/SSD 2.5"/3.5" bays, expandable to 24 with a Synology [RX1217\(RP\)](#) expansion unit<sup>2</sup>



### 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 RS2421+/RS2421RP+ 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



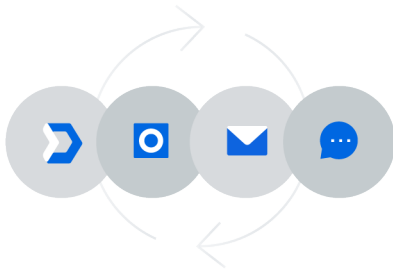
## Synology Backup Solutions

*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 MailPlus<sup>5</sup>** 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 or NFS, or running VMs directly on the RS2421+/RS2421RP+ using Virtual Machine Manager, Synology DSM provides comprehensive tools to protect your virtual machines.

## Private Video Surveillance

With [Synology Surveillance Station](#), the RS2421+/RS2421RP+ become powerful Network Video Recorder solutions with support for up to 40 IP cameras<sup>6</sup>.

- 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

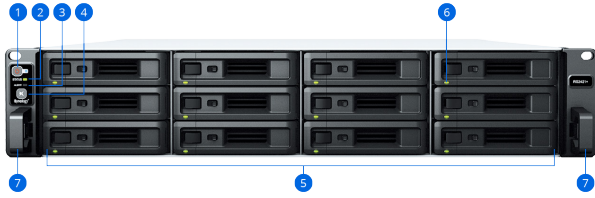
DSM streamlines provisioning for and management of virtual machines with full certification for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack virtualization environments.

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.

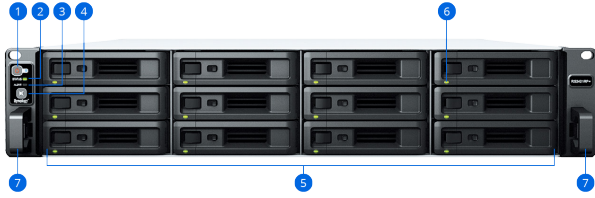
[Synology Virtual Machine Manager \(VMM\)](#) is a hosted hypervisor for virtual machines running Windows®, Linux®, or virtualized versions of DSM with recovery mechanisms that ensure data protection on each VM<sup>7</sup>.

# Hardware Overview

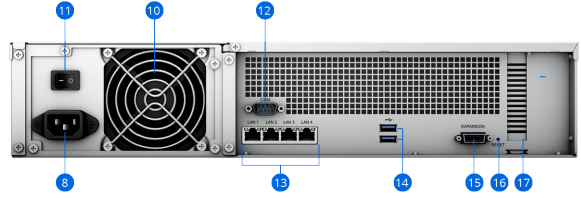
## RS2421+ (Front)



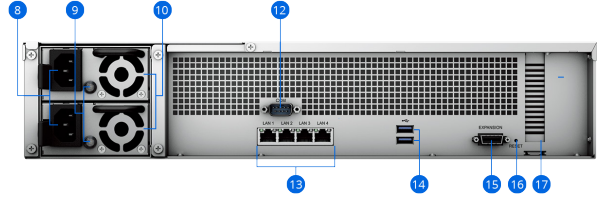
## RS2421RP+ (Front)



## RS2421+ (Rear)



## RS2421RP+ (Rear)



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

# 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 <sup>8</sup>	<ul style="list-style-type: none"> <li>12 x 3.5" or 2.5" SATA HDD/SSD (drives not included)</li> <li>Only Synology SAT5200 2.5" or Synology SNV3400/3500 M.2 SSDs (sold separately) can be used for SSD cache<sup>9</sup></li> </ul>
Hot swappable drive	Yes
External ports	<ul style="list-style-type: none"> <li>2 x USB 3.2 Gen 1 ports</li> <li>1 x Expansion port (Infiniband)</li> </ul>
Form factor	Rackmount 2U
Size (HxWxD)	<ul style="list-style-type: none"> <li>RS2421+: 88 x 482 x 552 mm (with server handles)</li> <li>RS2421RP+: 88 x 482 x 578 mm (with server handles)</li> </ul>
Weight	<ul style="list-style-type: none"> <li>RS2421+: 11.5 kg</li> <li>RS2421RP+: 11.9 kg</li> </ul>
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"> <li>1 x 4-lane x8 slot</li> <li>Supports network interface cards<sup>2</sup> and M.2 NVMe SSD adapter cards for SSD cache<sup>9</sup></li> </ul>
Scheduled power on/off	Yes
System fans	3 x (60 x 60 x 38 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)
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## 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"> <li>Internal: Btrfs, ext4</li> <li>External: Btrfs, ext4, ext3, FAT32, NTFS, HFS+, exFAT<sup>10</sup></li> </ul>
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"> <li>Maximum single volume size: 108 TB</li> <li>Maximum system snapshots: 65,536<sup>11</sup></li> <li>Maximum internal volumes: 64</li> </ul>
SSD cache	<ul style="list-style-type: none"> <li>Read/write cache support</li> <li>2.5" SATA SSD support</li> <li>M.2 NVMe SSD support<sup>9</sup></li> </ul>
File sharing capabilities	<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: 1,000<sup>12</sup></li> </ul>
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, 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. <ul style="list-style-type: none"> <li>Maximum number of hosted files: 1,000,000</li> <li>Maximum number of concurrent connections for PC clients: 550</li> </ul>
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 <sup>13</sup>	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"> <li>Maximum iSCSI targets: 128</li> <li>Maximum iSCSI LUNs: 256</li> <li>iSCSI LUN clone/snapshot support</li> </ul>
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"> <li>DSM configuration backup, macOS® Time Machine® support, Synology Drive Client desktop application</li> <li>Shared folder sync supports a maximum of 16 tasks</li> </ul>
Snapshot Replication	<ul style="list-style-type: none"> <li>Maximum number of snapshots for shared folders: 1,024</li> <li>Maximum number of replications: 32</li> </ul>

<b>Synology High Availability</b>	Reduces service downtime by combining two identical NAS into a high-availability cluster.
<b>Active Backup for G Suite</b>	Supports backup and restoration of Google Workspace My Drive, Team Drive, Gmail, Contacts, and Calendar.
<b>Active Backup for Microsoft 365</b>	Supports backup and restoration of Microsoft 365 OneDrive for Business, mail, contacts, and calendar.
<b>Active Backup for Business</b>	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

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

## Multimedia

<b>Moments</b>	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.
<b>Other packages</b>	Video Station, Photo Station, Audio Station, iTunes® Server

## Surveillance

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

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

## Others

<b>Storage Analyzer</b>	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.
<b>Antivirus Essential</b>	Provides full system scans, scheduled scans, white list customization, and auto-update of virus definitions.
<b>iOS/Android™ applications</b>	Synology Drive, Synology MailPlus, Synology Chat, Synology LiveCam, Moments, DS audio, DS photo, DS video, DS cam, DS file, DS finder, DS note
<b>Other packages</b>	Additional 3rd-party packages are available in the Package Center.

## Environment and Packaging

<b>Environment safety</b>	RoHS compliant
<b>Package contents</b>	<ul style="list-style-type: none"> <li>• 1 x RS2421+/RS2421RP+ main unit</li> <li>• 1 x Quick Installation Guide</li> <li>• 1 x Accessory pack</li> <li>• RS2421+: 1 x AC power cord</li> <li>• RS2421RP+: 2 x AC power cords</li> </ul>

Optional accessories <sup>14</sup>	<ul style="list-style-type: none"> <li>• DDR4 ECC UDIMM: D4EU01-4G/D4EC-2666-8G/D4EC-2666-16G</li> <li>• RKS1317 Rail Kit</li> <li>• 10GbE Network Interface Cards: E10G21-F2/E10G18-T2/E10G18-T1</li> <li>• 25GbE Network Interface Card: E25G21-F2</li> <li>• M.2 SSD &amp; 10GbE Combo Adapter Card: E10M20-T1</li> <li>• M.2 SSD Adapter Card: M2D20</li> <li>• M.2 NVMe SSD: SNV3400, SNV3500<sup>9</sup></li> <li>• 2.5" SATA SSD: SAT5200</li> <li>• 3.5" SATA HDD: HAT5300</li> <li>• Expansion Unit: RX1217(RP)</li> <li>• VisualStation units: VS960HD, VS360HD</li> <li>• MailPlus License Pack<sup>5</sup></li> <li>• Surveillance Device License Pack<sup>6</sup></li> <li>• Virtual DSM License Pack<sup>7</sup></li> </ul>
Warranty	3 years <sup>4</sup>

Note: Model specifications are subject to change without notice. Please refer to [www.synology.com](http://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. RS2421+/RS2421RP+ supports up to 24 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.
5. Five MailPlus email accounts are included with the RS2421+/RS2421RP+. 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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