Synology®

Datasheet

RackStation

RS2423+

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RackStation

RS2423+

Versatile Storage Solution for Business Workloads

The RS2423+ is a versatile and cost-effective 2U 12-bay storage server for central data storage and sharing, endpoint and server backup, surveillance management, and other business applications. With over 3,500/1,700 MB/s sequential read/write performance, up to 216 TB of raw storage,[1] and the option to boost I/O speeds through SSD caching, the RS2423+ provides flexible storage with strong built-in data protection capabilities.

- **Solid Performance**
  Over 3,500/1,700 MB/s sequential read/write throughput[2] supports office-wide applications
- **On-Demand Expansion**
  Scale up to 24 drive bays and 432 TB of raw storage with one Synology RX1223RP Expansion Unit[3]
- **Comprehensive Backups**
  Protect your IT infrastructure with license-free solutions for backup, replication, and recovery
- **Availability Safeguards**
  Hot-swappable drives, online volume expansion and high-availability clustering help keep services online

Robust Storage Server for Office Applications

The RS2423+ is a 2U 12-bay rackmount server designed to help small and medium-sized businesses and branch offices consolidate their data management onto one system. Built-in data protection solutions and easy hardware expandability make it an excellent option for all scenarios requiring dependable and cost-efficient data storage.

- Over **3,500/1,700** MB/s sequential read/write performance supports large data transfer volumes and enables fast file sharing, syncing, and backup for multiple users
- All-flash and hybrid storage support means that users can add **SATA SSDs as storage volumes or read/write cache** to speed up HDD volumes, or add-in card[4]
- Built-in **10GbE connectivity and two Gigabit ports** can be supplemented with additional **1/10/25GbE** ports thanks to a PCIe 3.0 expansion slot[5]
- Simple capacity **expansion to 432 TB** of raw storage is available whenever needed with a Synology RX1223RP Expansion Unit[3]
- **Hot-swappable drive trays** and **online volume management** allow for **storage management without downtime**.

Built-in Data and Uptime Protection Solutions

License-free solutions help protect data and configurations on your Synology system, ensure maximum system uptime, and back up and restore all your devices, VMs, and cloud applications.

- Synology High Availability provides fast failover between two identical Synology units to keep services online when disaster strikes
- Snapshot Replication provides schedulable, near-instantaneous data protection with version control, ensuring that all shared folders and LUNs on your Synology system remain safe and available[1]
- Hyper Backup protects your Synology system by backing up shared folders and configurations to multiple destinations, including the secure C2 Storage public cloud,[6] with efficiency delivered by built-in deduplication, integrity checks, compression, and versioning
- Synology Active Backup Suite lets you consolidate protection of Windows clients and servers, Linux endpoints, Synology systems, VMware® and Hyper-V® VMs, and SaaS applications, maximizing storage efficiency with data deduplication technology

Collaboration and Communication Hub for Teams

Synology's collaboration 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 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 of shared files
- Synology Chat brings teams together with one-on-one chats, group chats, and encrypted private channels over multiple platforms
- Synology MailPlus[7] provides a secure, reliable, and private email server
- Synology Calendar helps teams keep track of priorities with convenient calendar sharing and scheduling
- Synology Hybrid Share combines reliable on-premises storage with efficient syncing of shared folders in the cloud to enable seamless cross-site synchronization and local file access at LAN speed[7]

Reliable and Secure Virtualization and Containerization

Leverage your Synology system as virtual machine storage, VM backup server, and alternative container for VM host, with full certification for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack environments.

- **Synology Storage Console** for VMware or Windows platforms lets you manage VM storage components directly from your hypervisor. VMware VAAI integration and Windows ODX help offload storage operations and speed up data transfer
- **Host lightweight containers and VMs** for testing, sandboxing, and emergency recovery purposes with Container Manager and Synology Virtual Machine Manager, a native hypervisor that supports Windows, Linux, and virtualized versions of DSM[8]

Private Video Surveillance

Synology Surveillance Station transforms any Synology system into a powerful network video recorder (NVR).

- 8,300+ supported camera models

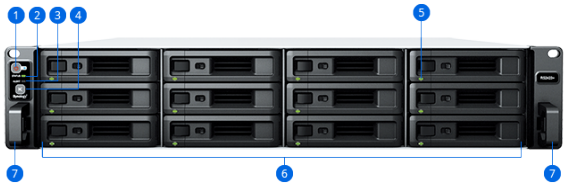
- ONVIF support for a broader selection of cameras
- Private, subscription-free storage of recordings
- Access through web browsers, desktop clients, and mobile apps
- Event-based rules to trigger specific actions
- Email, SMS, and push notification options
- Simultaneous recording to the cloud with C2 Surveillance for an extra layer of data protection and more convenient sharing[9]

Notes:

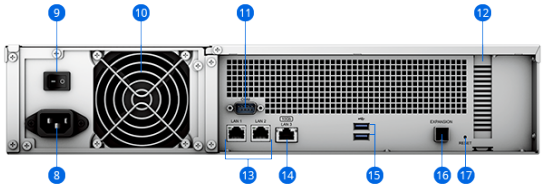
1. Raw capacity. Usable storage capacity may vary depending on drives used and RAID configuration.
2. Performance figures obtained through internal testing by Synology. Actual performance may vary depending on the testing environment, usage, and configuration. See performance charts for more information.
3. RS2423+ supports up to 24 drives with a Synology RX1223RP Expansion Unit, sold separately.
4. SSD cache can be enabled by using Synology SAT5200 Series 2.5" SATA SSD drives in standard drive bays or without occupying drive bays by installing Synology SNV3400 and SNV3500 Series M.2 NVMe SSD drives using M2D20 or E10M20-T1 adapter cards. Drives and adapter cards are sold separately.
5. For the most up-to-date list of compatible NICs and HBAs, please check our compatibility list.
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. Five MailPlus email accounts are included. Additional email accounts can be added with the purchase of Synology MailPlus License Packs. Learn more
8. 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.
9. C2 Surveillance requires purchase of an eligible annual subscription. Each additional channel requires a separate subscription. A free trial is available.

Hardware Overview

Front



Rear



No.	Name	No.	Name
1.	Power Button and Indicator	10.	PSU fans
2.	Status Indicator	11.	Console Port
3.	Alert Indicator	12.	PCI Express Expansion Slot
4.	Mute Button	13.	1GbE RJ-45 Ports
5.	Drive Status Indicators	14.	10GbE RJ-45 Port
6.	Drive Trays	15.	USB 3.2 Gen 1 Ports
7.	Rail Kit Release Tabs	16.	Expansion Port
8.	Power Port	17.	Reset Button
9.	PSU on/off switch		

Technical Specifications

Hardware

CPU

CPU Model	AMD Ryzen V1780B
CPU Quantity	1
CPU Core	4
CPU Architecture	64-bit
CPU Frequency	3.35 (base) / 3.6 (turbo) GHz
Hardware Encryption Engine	Yes

Memory

System Memory	8 GB DDR4 ECC UDIMM
Memory Module Pre-installed	8 GB (8 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	12
Maximum Drive Bays with Expansion Unit	24 (RX1223RP x 1)
Drive Type	• 3.5" SATA HDD • 2.5" SATA SSD
Hot Swappable Drive	Yes
Notes	Synology only guarantees full functionality, reliability, and performance for Synology drives listed on the compatibility list. The use of non-validated components may limit certain functionality and result in data loss and system instability.

External Ports

RJ-45 1GbE LAN Port	2
RJ-45 10GbE LAN Port	1
USB 3.2 Gen 1 Port	2
Expansion Port	1

PCIe

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

Appearance

Form Factor (RU)	2U
Size (Height x Width x Depth)	88 mm x 482 mm x 552 mm
Weight	11.5 kg
Rack Installation Support	4-post 19" rack (Synology Rail Kit - RKS-02)
Notes	The rail kit is sold separately

Others

System Fan	60 mm x 60 mm x 38 mm x 3 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	• 200 TB (32 GB memory required) • 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	• 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. • Volumes over 108 TB require DSM 7.2-64570 or above and 32 GB of memory or more.

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	380
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	12

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	680
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

Synology Office

Maximum Number of Users	660

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	790

Surveillance Station

Default Licenses	2 (Additional cameras require purchase of licenses)
Suggested Maximum IP Cameras and Total FPS (H.264)	• 1080p: 75 channels, 2100 FPS • 3M: 75 channels, 1500 FPS • 5M: 75 channels, 900 FPS • 4K: 55 channels, 550 FPS
Suggested Maximum IP Cameras and Total FPS (H.265)	• 1080p: 75 channels, 2250 FPS • 3M: 75 channels, 2250 FPS • 5M: 75 channels, 1500 FPS • 4K: 75 channels, 900 FPS

Central Management System

Provides a single interface to manage and monitor multiple Synology NAS

VPN Server

Maximum Connections	12

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 1
- Quick Installation Guide X 1

Optional Accessories

- DDR4 ECC UDIMM: D4EU01-8G/D4EU01-16G
- Expansion Units: RX1223RP
- 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
- 25GbE Network Interface Card: E25G30-F2
- 10GbE Network Interface Card: E10G30-F2/E10G30-T2/E10G18-T1
- Rail Kit Sliding: RKS-02

Notes

- For multi-module memory configurations, all modules must be identical and share the same model number. Check the Product Manual of your Synology product for recommended memory configurations.
- Certain items may not be available in your location. Please contact your local distributors for more information.

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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