RackStation
RS1219+

Synology RackStation RS1219+ is a 2U 8-bay rackmount NAS powered by a quad-core processor with AES-NI hardware encryption engine. With the ability to supercharge your storage with the optional M.2 SSD adapter card for dual SSD cache drives, RS1219+ is ideal to serve as a centralized file server for simplifying data management, protecting your critical assets and sharing files across different platforms. Synology RS1219+ is backed by Synology's 3-year limited warranty.

2U Compact Storage Server

Synology RS1219+ is a 8-bay network attached storage solution with high performance and scalable capacity. RS1219+ supports up to 12 drives when connecting with one **RX418** expansion unit[3], allowing you to easily scale up on demand. Since both RS1219+ and RX418 are only **12 inches** in depth, they can fit in a 2-post rack. In addition to a **10GbE add-on card**, the PCIe slot also supports the optional **M.2 SATA SSD adapter card**[1] to function as an SSD cache to greatly enhance storage performance without using the 3.5" drive bays.

RS1219+ is equipped with a quad-core processor and **2GB DDR3 memory** (expandable up to 16GB). In a 10GbE network environment, RS1219+ delivers outstanding sequential throughput performance at over **1,310 MB/s reading** and **470 MB/s writing**[2].

Enterprise-grade Applications

Powered by the innovative Synology DiskStation Manager (DSM), RS1219+ comes fully-equipped with applications and features designed specifically for small or growing businesses:

- **Windows® AD** and **LDAP** support allows easy integration with existing business directory services.
- **Windows ACL** support provides fine-grained access control and efficient privilege settings, allowing RS1219+ to fit seamlessly into existing infrastructure.
- Internet file access is simplified by the encrypted FTP server and the web-based file explorer, Synology **File Station**. HTTPS, firewall, and IP auto-block support ensures file sharing over the Internet is protected with a high level of security.
- **Application Privileges** controls access to applications and packages based on each individual account, user group, or IP address.

Highlights

- Quad-core 2U 8-bay NAS with AES-NI support, and 2GB DDR3 memory, expandable up to 16GB
- Compact chassis design with the capability to fit in a 2-post rack
- PCIe slot for optional 10GbE add-on card. Buit-in four 1GbE (RJ-45) ports with failover and Link Aggregation support
- Boost IOPS system performance with M.2 SSD cache by using optional M2D17 adapter card[1]
- High performance of over 1,310 MB/s reading and 470 MB/s writing[2]
- Advanced Btrfs file system offering 65,000 system-wide snapshots and 1,024 snapshots per shared folder
- Scale up to 12 drives with Synology RX418[3]

Btrfs: Next Generation Storage Efficiency

RS1219+ introduces the **Btrfs file system**, bringing the most advanced storage technologies to meet the management needs of modern businesses:

- **Advanced snapshot technology** with customizable backup schedule allows up to **1,024 copies** of shared folder backups in a minimum **5-minute interval** without occupying huge storage capacity and system resources.
- **File or folder level data restoration** brings huge conveniences and saves time for users who wish to restore only a specific file or folder.
- **Flexible Shared Folder** and **User Quota System** provides comprehensive quota control on all user accounts and shared folders.
- **Built-in data integrity check** detects data and file system corruption with data and meta-data checksums and improves the overall stability.
- **File self-healing**: Btrfs file system is able to auto-detect corrupted files with mirrored metadata, and to recover broken data using supported RAID volumes, which include RAID1, 5, 6, and 10.
- A cutting-edge **iSCSI service** built for IT administrators that offers advanced LUN and provides with lightning-fast snapshot creation, recovery and cloning.

Next-Generation File System

A modern file system designed to address obstacles often encountered in enterprise storage systems. It safeguards data integrity through metadata mirroring, self-healing and snapshot replication.

Ultimate Backup Solution

RS1219+ integrates various backup applications to safeguard your important data on any device with an intuitive user interface and durable storage technologies.

- Desktop Backup: **Cloud Station Backup** safeguards your PC, Mac, or other desktop devices. RS1219+ is also compatible with Time Machine, allowing you to effortlessly backup your Mac to Synology NAS.
- NAS Backup: **Hyper Backup** comprehensively backs up your data to a local shared folder, an external device, another Synology NAS, an rsync server, a public cloud service, or **C2 Backup** to ensure data safety.
- Server Backup: **Active Backup for Server** provides an agentless backup solution. It centralizes data from Windows and Linux servers through SMB and rsync to effectively minimize deployment and management costs.
- SaaS Backup: **Active Backup for Office 365/G Suite** is an on-premise backup solution for public clouds with a centralized dashboard. Optimize storage efficiency with single instancing and block-level deduplication technology.

Virtual Machine Manager

Virtual Machine Manager implements various virtualization solutions, allowing you to manage multiple virtual machines on your RS1219+, including **Windows**, **Linux**, and **Virtual DSM**.

Effortless Virtualization Environment
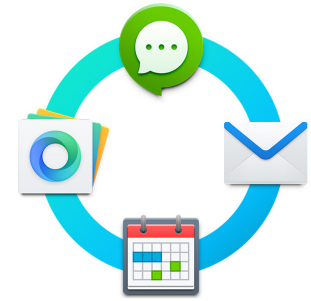
Synology's **Virtual Machine Manager** adds unlimited capabilities to your NAS. Set up and run various virtual machines, including **Windows, Linux**, and **Virtual DSM** so that you can test new software versions in a sandbox environment, isolate your customers' machines, and increase the flexibility of your RS1219+ with reduced hardware deployment and maintenance costs.

Synology iSCSI storage fully supports most virtualization solutions to enhance work efficiency with a simple management interface. **VMware vSphere™ 6.5** and **VAAI** integration helps offload storage operations and optimizes computation efficiency. **Windows Offloaded Data Transfer (ODX)** speeds up data transfer and migration rates, while **OpenStack Cinder** support turns your Synology NAS into a block-based storage component.

A Powerful Collaboration Solution

Use the collaboration suite on your Synology NAS to build a private cloud to enhance team cooperation and boost productivity.

- **Synology Drive** allows you to access the data and files on Synology NAS through a unified portal and allows cross-platform synchronization for you to enjoy anywhere data access. You can also install **Synology Office** to take advantage of the online collaborative editor, which provides **Document**, **Spreadsheet** and **Slides**.

- **Synology MailPlus** allows your business to set up a private and reliable mail server with the support of high-availability design, and gives your employees an intuitive web-based client to manage emails and boost productivity.

- **Synology Calendar** enables you to manage team schedules, and organize daily tasks without a hassle. Event information can also be synced to your CalDAV clients, allowing you to check schedules anywhere and anytime.

- **Synology Chat** is a web-based application that allows you to create a safe and secure place where conversations can be held in real-time. It optimizes companies' internal communications with powerful information management and interaction features.
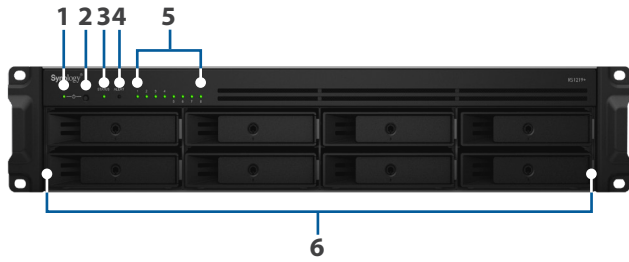
Reliability, Availability & Disaster Recovery

System reliability is of paramount importance to businesses which depend upon their commercial servers every day. RS1219+ responds to these concerns with wide-ranging availability and redundancy features:
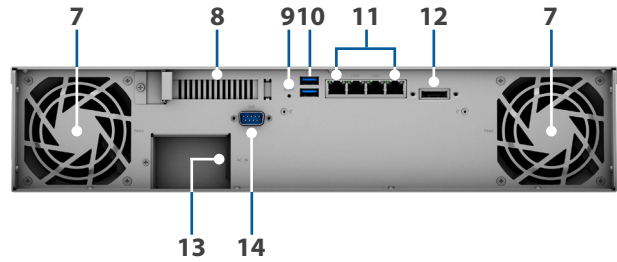
- **Synology High Availability** ensures seamless transition between clustered servers in the event of server failure with minimal impact on applications.

- **Snapshot Replication** provides schedulable, near-instantaneous data protection, ensuring business documents in shared folders, virtual machines in iSCSI LUNs, or dockerized application data remain safe and available in the event of a disaster.

- **Redundant system fans** and **network ports** with failover support ensure maximum continuous service uptime.

- **Optional 5-year warranty**[4] is available in select regions.

Synology Collaboration Suite

A powerful and secure private cloud solution for business collaboration and organization, offering intuitive and effective management options.

Hardware Overview

Front

Rear

1	Power indicator	2	Power button	3	Status indicator	4	Alert indicator
5	Drive status indicator	6	Drive tray	7	Fan	8	PCIe expansion slot
9	RESET button	10	USB 3.0 port	11	1GbE RJ-45 port	12	eSATA port
13	Power port	14	Console port				

Technical Specifications

Hardware

CPU	Intel Atom C2538 quad-core 2.4GHz
Hardware encryption engine	Yes (AES-NI)
Memory	2 GB DDR3L-1600 Non-ECC SO-DIMM (expandable up to 16 GB with 8GB SO-DIMM x 2)
Compatible drive type	8 x 3.5" or 2.5" SATA SSD/HDD (drives not included) 2 x M.2 SATA 2280/2260/2242 SSD[1] (drives not included)
Hot swappable drive	Yes
External port	• 2 x USB 3.0 port • 1 x eSATA port
Size (HxWxD)	• 88 x 430.5 x 297.6 mm • 88 x 481.9 x 306.6 mm (with server ears)
Weight	6.90 kg
LAN	4 x 1GbE (RJ-45)
Wake on LAN/WAN	Yes
PCIe 2.0 slot	• 1 x 4-lane x8 slot • 10GbE network interface cards support • M.2 SATA SSD adapter card support[3]
Scheduled power on/off	Yes
System fan	2 (80 x 80 x 25 mm)
AC input power voltage	100V to 240V AC
Power frequency	50/60Hz, single phase
Operating temperature	0°C to 40°C (32°F to 104°F)
Storage temperature	-20°C to 60°C (-5°F to 140°F)
Relative humidity	5% to 95% RH
Maximum operating altitude	3,048 m (10,000 ft)

General DSM Specification

Networking protocol	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN ™, L2TP)
File system	• Internal: Btrfs, ext4 • External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT[5]
Supported RAID type	Synology Hybrid RAID (SHR), Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
Storage management	• Maximum single volume size: 108TB • Maximum of system snapshots: 65,536[6] • Maximum internal volumes: 512 • Maximum iSCSI targets: 128 • Maximum iSCSI LUNs: 256 • iSCSI LUN clone/snapshot support
SSD cache	• SSD read-write cache support • M.2 SATA SSD support[1]
File sharing capability	• Maximum local user accounts: 2,048 • Maximum local groups: 256 • Maximum shared folders: 512 • Maximum concurrent SMB/NFS/AFP/FTP connections: 500
Privilege	Windows Access Control List (ACL), application privilege
Directory service	Windows® AD integration: Domain users login via SMB/NFS/AFP/FTP/File Station, LDAP integration
Virtualization	VMware vSphere® 6.5, Microsoft Hyper-V®, Citrix®, OpenStack®
Security	Firewall, encrypted shared folder, SMB encryption, FTP over SSL/TLS, SFTP, rsync over SSH, login auto block, Let's Encrypt support, HTTPS (Customizable cipher suite)
Supported client	Windows 7 and 10, Mac OS X® 10.11 onwards
Supported browser	Chrome®, Firefox®, Internet Explorer® 10 onwards, Safari® 10 onwards; Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards)
Interface Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, 日本語, 한국어, 繁體中文, 简体中文

Packages and Applications

File Server & Synchronization	
Drive	Provide universal portal to synchronize your files across various platforms, including Windows, macOS, Linux, Android and iOS. The built-in universal portal allows you to access data anytime and anywhere. Maximum Number of Synced Files: 1,000,000 / single file reaction time 437 ms Maximum Number of Concurrent Connections for PC Clients: 550
File Station	Virtual drive, remote folder, Windows ACL editor, compressing/extracting archived files, bandwidth control for specific users or groups, creating sharing links, transfer logs
FTP Server	Bandwidth control for TCP connections, custom FTP passive port range, anonymous FTP, FTP SSL/TLS and SFTP protocol, boot over the network with TFTP and PXE support, transfer logs
Presto File Server	High-speed data transfer over WAN with exclusive SITA technology between Synology NAS and desktop[7]
Cloud Sync	One or two-way synchronization with public cloud storage providers including Alibaba Cloud OSS, Amazon Drive, 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, Yandex Disk
Universal Search	Offer global search into applications and files
iSCSI Storage & Virtualization	
Storage Analyzer	Volume and quota usage, total size of files, volume usage and trends based on past usage, size of shared folders, largest/most/least frequently modified files
Virtual Machine Manager	Deploy and run various virtual machines on Synology NAS, including Windows, Linux, or Virtual DSM
Data Protection & Backup Solution	
Hyper Backup	Support local backup, network backup, and backup data to public clouds
Backup tools	DSM configuration backup, macOS Time Machine support, Cloud Station Backup Shared folder sync - maximum tasks: 8
Snapshot Replication	• Maximum shared folder snapshots: 1,024 • Maximum replications: 32
High Availability Manager	Reduce service downtime by setting up two identical NAS into one high-availability cluster
Active Backup for G Suite	Support G Suite My Drive and Team Drive backup and restoration
Active Backup for Office 365	Support Office 365 OneDrive for Business, mail, contacts, and calendar backup and restoration
Active Backup for Server	Business-wise file server backup, Back up servers via SMB or Rsync protocol

Productivity & Collaboration	
Collaboration tools	Collaborate with instant message service "Chat", online editor "Office", and scheduling assistant "Calendar" Chat maximum user: 1,500 Office maximum user: 1,800 Calendar: support CalDAV and access via mobile devices
Note Station	Rich-text note organization and versioning, encryption, sharing, media embedding and attachments
MailPlus Server	Secure, reliable, and private mail solution with high-availability, load balancing, security and filtering design (Includes 5 free email account licenses; additional accounts require the purchasing of additional licenses)
MailPlus	Intuitive webmail interface for MailPlus Server, customizable mail labels, filters, and user interface
Multimedia	
Moments	Auto-sort photos with facial and subject recognition, to keep track of all your special moments in great detail
Other packages	Video Station, Photo Station, Audio Station, iTunes® Server
Surveillance	
Surveillance Station	Maximum IP cameras: 40 (total of 1,200 FPS at 720p, H.264) (includes two free camera licenses; additional cameras require the purchasing of additional licenses)
All-in-One Server	
Active Directory Server	Provide a flexible and cost-effective domain controller solution
CMS	Provide a single interface to manage and monitor multiple Synology NAS
VPN Server	Maximum connection: 30, supported VPN protocol: PPTP, OpenVPN™, L2TP/IPSec
Web Station	Virtual host (up to 30 websites), PHP/MariaDB®, 3rd-party applications support
Other packages	DNS Server, RADIUS Server, Log Center
Others	
Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Other packages	Additional 3rd-party packages available on Package Center

Environment and Packaging

Environment safety	RoHS compliant
Package content	• RS1219+ main unit x 1 • Quick Installation Guide x 1 • Accessory pack x 1 • AC power cord x 1 • C13 to C14 power cord x 1
Optional accessories	• 8GB DDR3L-1600 Non-ECC SO-DIMM kit (RAM1600DDR3L-4GBx2 • 16GB DDR3L-1600 Non-ECC SO-DIMM kit (RAM1600DDR3L-8GBx2) • Synology E10G17-F2 / E10G15-F1 10Gbps Ethernet adapters • Synology M2D17 M.2 SSD adapter card • Synology Expansion Unit RX418 • Rail Kit RKM114-Rail Kit Mounted / RKS1317-Rail Kit Sliding • VisualStation VS360HD, VS960HD • Surveillance Device License Pack • MailPlus License Pack • Virtual DSM License Pack
Warranty	3 years

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

1. RS1219+ supports dual M.2 SSDs through M2D17 adapter card, sold separately.
2. Performance figures may vary depending on environment, usage, and configuration.
3. RS1219+ supports one Synology Expansion Unit RX418, sold separately.
4. 5-year warranty is available as an optional bundle with EW202, 2-year Extended Warranty service add-on. Visit https://www.synology.com/en-global/products/Extended_Warranty for more information on availability.
5. exFAT Access is purchased separately in Package Center.
6. System snapshot includes snapshots taken by iSCSI Manager, Snapshot Replication, and Virtual Machine Manager. Availability of these packages varies by model.
7. Presto File Server License is purchased separately in Package Center.

SYNOLOGY INC.

Synology is dedicated to taking full advantage of the latest technologies to bring businesses and home users reliable and affordable ways to centralize data storage, simplify data backup, share and sync files across different platforms, and access data on-the-go. Synology aims to deliver products with forward-thinking features and the best in class customer services.

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