Synology®

RackStation
RS1619xs+

Synology RackStation RS1619xs+ is a high-performance 1U rackmount NAS with comprehensive storage, data backup, and collaboration applications, suitable for small- to medium-sized businesses. RS1619xs+ simplifies data management, optimizes virtualization environments, and rapidly expands storage capacity with minimal time investment in setup and maintenance. Synology RS1619xs+ is backed by Synology's 5-year limited warranty.

Powerful NAS Solution in 1U Form Factor

Synology RS1619xs+ is a 1U 4-bay rackmount network attached storage solution equipped with a **quad-core** processor, **8 GB DDR4 memory (expandable up to 64 GB)**, and four Gigabit LAN ports. With an optional 10GbE network adapter card installed, RS1619xs+ delivers **sequential reading throughput over 1,523 MB/s** and **162,097 iSCSI random read IOPS** under a RAID 5 configuration[1].

RS1619xs+ comes with two **onboard M.2 SSD slots**, allowing fast system cache creation with **M.2 2280 NVMe/SATA SSDs** without occupying internal 3.5" drive bays. RS1619xs+ also provides great flexibility to easily scale up to 16 drives when connected to one **Synology RX1217/RX1217RP expansion unit**[2]. Storage capacity can be expanded according to your business needs with minimal effort.

Enterprise-Grade Applications

Powered by the innovative Synology DiskStation Manager (DSM), RS1619xs+ comes fully-equipped with applications and features designed specifically for large-scale 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 RS1619xs+ 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

- Powerful 1U NAS for growing businesses, featuring a quad-core CPU with AES-NI and 8 GB (up to 64 GB) DDR4 ECC UDIMM
- Built-in M.2 NVMe/SATA SSD slots for system cache support
- Excellent performance of over 1,523 MB/s sequential reading and 162,097 iSCSI random read IOPS[1]
- Optional 10GbE NIC support
- Scalable up to 16 drives with Synology RX1217/RX1217RP
- Complete virtualization solution with Synology Virtual Machine Manager
- Backed by Synology's 5-year limited warranty & Synology Replacement Service (SRS)[3]

Btrfs: Next Generation Storage Efficiency

RS1619xs+ 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 shared folders to be backed up in a minimum **5-minute interval**, without consuming heavy system resources.
- **File and 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.
- **File self-healing**: Btrfs file system is able to auto-detect corrupted files with mirrored metadata and recover broken data using the 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 lightning-fast snapshot creation, recovery, and cloning.

Virtual Machine Manager

RS1619xs+ is designed with virtualization in mind. **Virtual Machine Manager** enables you to test new software in sandboxes, isolate your customers' machines, and increase the flexibility of your server.

- **Virtual DSM** provides an equally intuitive experience as **DiskStation Manager**, offering a reliable storage solution with robust features.
- **Various Operating Systems Support** lets you run **Windows**, **Linux**, and **Virtual DSM** on your Synology NAS in just a few steps.
- **Snapshots for Virtual Machines** is a snapshot technology provided by Virtual Machine Manager, allowing you to perfectly clone and restore a virtual machine within seconds.
- **Live Migration** lets you seamlessly migrate Virtual DSM instances from one Synology NAS to another.
- **Flexible IT Resource Management** allows you to allocate hardware resources like computing power, storage space, or network interfaces across several virtual machines.
- **Multi-Tenant Environments** allow you to create multiple isolated virtual machines for subsidiary business units or departments.
- **Synology iSCSI Storage** fully supports most virtualization solutions to enhance work efficiency with a simple management interface.

Next-Generation File System

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

Virtual Machine Manager

Virtual Machine Manager implements various virtualization solutions, allowing you to manage multiple virtual machines on your RS1619xs+, including **Windows**, **Linux**, and **Virtual DSM**.

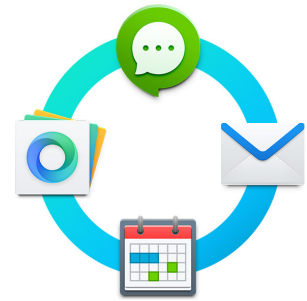## A Powerful Collaboration Solution

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 access data from anywhere. You can also install the online editor Synology **Office** and collaborate with others on **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 effortlessly. 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 start conversations instantly and safely and optimizes companies' internal communications with its powerful information management and interaction features.

Synology Collaboration Suite

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

Reliability, Availability & Disaster Recovery

System reliability is critical for businesses everywhere. RS1619xs+ responds to these concerns with wide-ranging availability and redundancy features:

- Synology **High Availability** ensures seamless transitioning between clustered servers in the event of unexpected disasters and ensures that your services remain online.
- **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 power supplies**, **system fans**, and **network ports** with failover support ensure continual service uptime.
- High reliability system design, including **fan-less CPU heat-sink** and **passive cooling technology**, prevents single points of failure.
- **DDR4 ECC U-DIMM** reduces power consumption and has error detection and correction capabilities during data transmission.
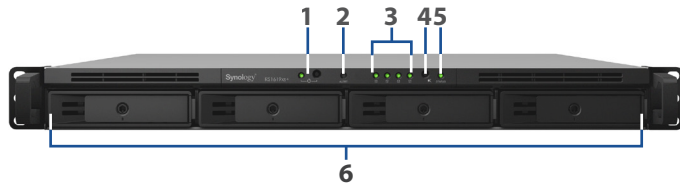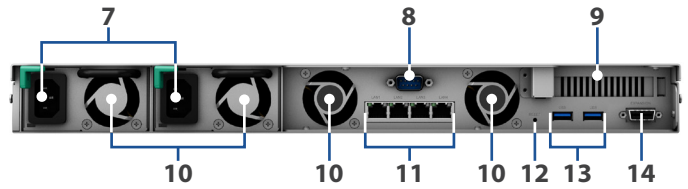
Hardware Overview

Front

Rear

1	Power button and indicator	2	Alert indicator
5	Status indicator	6	Drive tray
9	PCIe expansion slot	10	Fan
13	USB 3.0 port	14	Expansion port

3	Drive status indicator	4	Beep off button
7	Power port	8	Console port
11	1GbE RJ-45 port	12	Reset button

Technical Specifications

Hardware

CPU	Intel Xeon D-1527 quad-core 2.2GHz, Turbo Boost up to 2.7GHz
Hardware encryption engine	Yes (AES-NI)
Memory	8 GB DDR4-2133 ECC UDIMM (expandable up to 64 GB)
Compatible drive type	• 4 x 3.5" or 2.5" SATA SSD/HDD (drives not included) • 2 x M.2 2280 NVMe/SATA SSD (drives not included)
Hot swappable drive	Yes
External port	• 2 x USB 3.0 port • 1 x expansion port
Size (HxWxD)	• 44 x 430.5 x 483.6 mm • 44 x 480 x 518.6 mm (with server ears)
Weight	8.16 kg
LAN	4 x Gigabit (RJ-45)
Wake on LAN/WAN	Yes
PCIe 3.0 slot	• 1 x 8-lane x8 slot • 10GbE/25GbE network interface card support
Scheduled power on/off	Yes
System fan	2 (40 x 40 x 28 mm)
AC input power voltage	100V to 240V AC
Power frequency	50/60Hz, single phase
Operating temperature	5°C to 35°C (40°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)

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[4]
Supported RAID type	Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, RAID F1
Storage management	• Maximum single volume size: 108TB/200TB (at least 32 GB RAM required, for RAID 5 or RAID 6 groups only) • Maximum system snapshots: 65,536[5] • Maximum internal volume: 1,024
SSD cache	• Read-write cache support • M.2 SSD support (M.2 NVMe/SATA SSD)
File sharing capability	• Maximum local user account: 16,000 • Maximum local group: 512 • Maximum shared folder: 512 • Maximum concurrent SMB/NFS/AFP/FTP connection: 2,000

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, encryption 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 onwards, 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) on tablets
Interface Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文

Packages and Applications

File Server & Synchronization	
Drive	Provide a 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 hosted files: 3,000,000 • Maximum number of concurrent connections for PC clients: 1,800
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[6]	High-speed data transfer over WAN with exclusive SITA technology between Synology NAS and desktop
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	
iSCSI Manager	• Maximum iSCSI target: 256 • Maximum iSCSI LUN: 512 • iSCSI LUN clone/snapshot support
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 task number: 32
Snapshot Replication	• Maximum of shared folder snapshots: 1,024 • Maximum of Replication: 64
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 Business	All-in-one backup solution designed for heterogeneous business IT environment, enabling IT admins to remotely manage and monitor protection over PC, servers and VM on one centralized console
Productivity & Collaboration	
Collaboration tools	Collaborate with instant message service Chat, online editor Office, and scheduling assistant Calendar • Chat maximum user: 4,000 • Office maximum user: 2,900 • 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	Support smart AI album with facial and subject recognition, photo editing and sharing features, and iOS and Android mobile applications
Other packages	Video Station, Photo Station, Audio Station, iTunes® Server
Surveillance	
Surveillance Station	Maximum IP camera: 75 (total of 2,250 FPS at 720p, H.264) (Including 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: 40, supported VPN protocol: PPTP, OpenVPN™, L2TP/IPSec
Mail Server	Supported Mail Server Protocols: POP3, SMTP, IMAP, Support LDAP/AD account
Mail Station	Webmail interface for Mail Server to receive emails from multiple POP3 mailboxes, customizable SMTP server
Web Station	Virtual host (up to 30 websites), PHP/MariaDB®, third-party applications support
Other packages	DNS Server, RADIUS Server, Log Center
Others	
Storage Analyzer	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, least recently accessed files
Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Security Advisor	Malware detection/removal, user account/password, network, system-related security scan
Other packages	Additional 3rd-party packages available on Package Center

Environment and Packaging

Environment safety	RoHS compliant
Package content	• RS1619xs+ main unit x 1 • Quick Installation Guide x 1 • Accessory pack x 1 • AC power cord x 2
Optional accessories	• 8GB/16GB DDR4-2133 ECC UDIMM (RAMEC2133DDR4-8G/RAMEC2133DDR4-16G) • Synology E10G17-F2/E10G18-T1/E10G18-T2 10Gbps Ethernet adapters • Synology Expansion Unit RX1217/RX1217RP • VisualStation VS360HD, VS960HD • Surveillance Device License Pack • MailPlus License Pack • Virtual DSM License Pack
Warranty	5 years

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

1. Performance figures may vary depending on environment, usage, and configuration.
2. RS1619xs+ supports one Synology RX1217/RX1217RP, sold separately.
3. Synology Replacement Service (SRS) is available in selected countries only. For more information about SRS, please visit srs.synology.com.
4. exFAT Access is purchased separately in Package Center.
5. System snapshot includes snapshots taken by iSCSI Manager, Snapshot Replication, and Virtual Machine Manager. Availability of these packages varies by model.
6. Presto File Server License is purchased separately in Package Center.

SYNOLOGY INC.

Synology creates network-attached storage, IP surveillance solutions, and network equipment that transform the way users manage data, conduct surveillance, and manage networks in the cloud era. By taking full advantage of the latest technologies, Synology aims to help users centralize data storage and backup, share files on-the-go, implement professional surveillance solutions, and manage networks in reliable and affordable ways. Synology is committed to delivering products with forward-thinking features and the best in class customer services.

RS1619xs+-2018-ENU-REV002

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