

Datasheet



RackStation

RS1619xs+

Synology

RS1619xs+



1U rackmount flagship aims for file collaboration and high-performance computation

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 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 1,500 MB/s sequential reading and 209,000 iSCSI random read IOPS¹
- 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 warranty³

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 1,500 MB/s** and **209,000 iSCSI random read IOPS** under a RAID 5 configuration¹.

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.

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.

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.

Reliability, Availability & Disaster Recovery

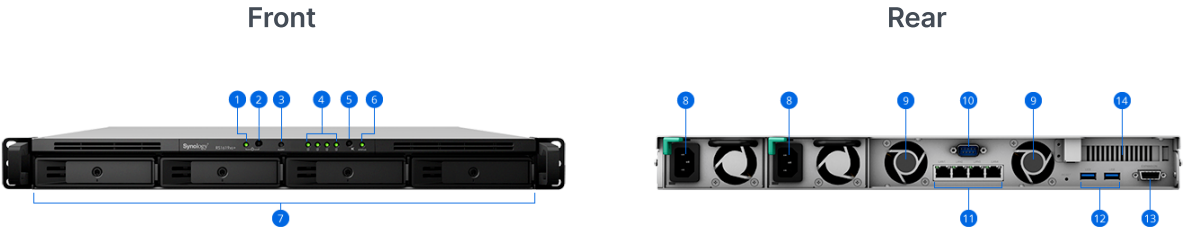
System reliability is critical for businesses everywhere. RS1619xs+ responds to these concerns with wide-ranging availability and redundancy features:

- 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.

Notes:

1. Performance figures may vary depending on environment, usage, and configuration.
2. RS1619xs+ supports one Synology RX1217/RX1217RP, sold separately.
3. The warranty period starts from the purchase date as stated on your purchase receipt.

Hardware Overview



| No. | Name | No. | Name |
|-----|------------------------|-----|---------------------|
| 1. | Power indicator | 8. | Power port |
| 2. | Power button | 9. | System fan |
| 3. | Alert indicator | 10. | Console port |
| 4. | Drive status indicator | 11. | 1GbE RJ-45 port |
| 5. | Beep off button | 12. | USB 3.0 port |
| 6. | Status indicator | 13. | Expansion port |
| 7. | Drive tray | 14. | PCIe expansion slot |

Technical Specifications

Hardware

| CPU | |
|----------------------------|------------------------------|
| CPU Model | Intel Xeon D-1527 |
| CPU Quantity | 1 |
| CPU Core | 4 |
| CPU Architecture | 64-bit |
| CPU Frequency | 2.2 (base) / 2.7 (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 | 4 |
| Maximum Memory Capacity | 64 GB (16 GB x 4) |
| 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 | 16 (RX1217 × 1) |
| M.2 Drive Slots | 2 (NVMe & SATA) |
| Drive Type | <ul style="list-style-type: none"> • 3.5" SATA HDD • 2.5" SATA HDD • 2.5" SATA SSD • M.2 2280 NVMe & SATA SSD |
| Hot Swappable Drive | Yes |
| Notes | The hot swappable drive feature is not supported by M.2 SSD slots. |

| 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 (x8 link) |

| Appearance | |
|-------------------------------|--|
| Form Factor (RU) | 1U |
| Size (Height x Width x Depth) | 44 mm x 480 mm x 518.6 mm |
| Weight | 8.16 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 28 mm x 2 pcs |
| AC Input Power Voltage | 100V to 240V AC |
| Power Frequency | 50/60 Hz, Single Phase |

| Temperature | |
|----------------------------|-------------------------------|
| Operating Temperature | 5°C to 35°C (40°F to 95°F) |
| Storage Temperature | -20°C to 60°C (-5°F to 140°F) |
| Operating Humidity | 8% to 80% RH |
| Storage Humidity | 5% to 95% RH |
| Maximum Operating Altitude | 5,000 m |

General DSM Specifications

| Storage Management | |
|---|---|
| Maximum Single Volume Size | <ul style="list-style-type: none"> 1 PB (64 GB memory required, for RAID 6 groups only) 200 TB (32 GB memory required) 108 TB |
| Maximum Internal Volume Number | 256 |
| SSD Read/Write Cache (Determining cache size) | Yes |
| Supported RAID Type | RAID F1,Basic,JBOD,RAID 0,RAID 1,RAID 5,RAID 6,RAID 10 |
| Notes | <ul style="list-style-type: none"> Volumes over 108 TB require 32 GB of memory or more. 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. When Peta Volume is enabled, validated services and packages are required. Please refer to this article for more information on limitations. |

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) | 400 |
| Windows Access Control List (ACL) Integration | Yes |
| NFS Kerberos Authentication | Yes |

Account & Shared Folder

| | |
|----------------------------------|-------|
| Maximum Local User Accounts | 2,048 |
| Maximum Local Groups | 512 |
| Maximum Shared Folder | 512 |
| Maximum Shared Folder Sync Tasks | 12 |

Virtualization

| | |
|-------------------|---|
| VMware vSphere | ESXi 8.0 U2, ESXi 8.0 U1, ESXi 8.0, ESXi 7.0 U3, ESXi 7.0 U2, ESXi 7.0 U1, ESXi 7.0, ESXi 6.7 U3, ESXi 6.7 U2, ESXi 6.7 U1, ESXi 6.7, ESXi 6.5 U3, ESXi 6.5 U2, ESXi 6.5 U1, ESXi 6.5 |
| Microsoft Hyper-V | Windows Server 2022, Windows Server 2019, Windows Server 2016 |
| Citrix XenServer | XenServer 7 |
| OpenStack | Cinder |

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, Fibre Channel, 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 AI Console

Centralize AI management with flexible configurations for AI model integration, user access control, data privacy, usage policies, and resource allocation

| | |
|----------------------------------|---|
| Third-Party AI Model Integration | v |
| Maximum De-Identification Rate | 400 words per second |
| Notes | <ul style="list-style-type: none">De-identification performance measurement: Filters for Credit Card Numbers, IBAN, Individual Taxpayer Identification Number, SSN, and Names applied to a 4,355-word English text.To enable de-identification, your device must have at least 8 GB of memory and Container Manager installed. |

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 | 700 |
| 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

Synchronize data across multiple sites for fast and efficient multi-site teamwork. Powered by Synology C2 Storage, Hybrid Share requires purchase of a monthly or annual subscription

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 | 400 |
|-------------------------|-----|

Synology Office

| | |
|-------------------------|-----|
| Maximum Number of Users | 700 |
|-------------------------|-----|

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 | 800 |

Surveillance Station

| | |
|------------------|---|
| Default Licenses | 2 (Additional cameras require purchase of licenses) |
|------------------|---|

| | |
|--|---|
| Suggested Maximum IP Cameras and Total FPS (H.264) | <ul style="list-style-type: none">• 1080p: 75 channels, 1050 FPS• 3M: 60 channels, 600 FPS• 5M: 40 channels, 400 FPS• 4K: 28 channels, 280 FPS |
|--|---|

| | |
|--|--|
| Suggested Maximum IP Cameras and Total FPS (H.265) | <ul style="list-style-type: none">• 1080p: 75 channels, 2250 FPS• 3M: 75 channels, 1125 FPS• 5M: 70 channels, 700 FPS• 4K: 49 channels, 490 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 2
- Quick Installation Guide X 1

Optional Accessories

- DDR4 ECC UDIMM: [D4EC-2666-8G/D4EC-2666-16G](#)
- Expansion Units: [RX1217/RX1217RP](#)
- Enterprise Series 3.5" SATA HDD: [HAT5300 Series](#)
- Enterprise Series 2.5" SATA SSD: [SAT5200 Series](#)
- 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.
- All memory modules will operate at the maximum frequency specified by the CPU manufacturer.

Warranty

5 Years

Notes

The warranty period starts from the purchase date as stated on your purchase receipt. ([Learn more](#))

SYNOLOGY INC. © 2025, Synology Inc. All rights reserved. Synology, the Synology logo are trademarks or registered trademarks of Synology Inc. Other product and company names mentioned herein may be trademarks of their respective companies. Synology may make changes to specification and product descriptions at anytime, without notice.