

RackStation RS1619xs+



Brand: Synology
Product Code: RS1619xs+
Availability: 10
Weight: 8.16kg
Dimensions: 44.00mm x 480.00mm x 518.60mm
Call for Price:

Short Description

Synology NAS Rackstation (Diskless) (RS1619xs+), 4-bay; 8GB DDR4

Description

Fast storage with outstanding computing power

RS1619xs+ is a high-performance and scalable 1U rackmount NAS designed with upgradable memory and M.2 SSD cache configuration to meet the needs of modern businesses that require a flexible, reliable, and efficient storage solution.



CPU

Quad-core up to 2.7GHz



RAM options

8GB DDR4 UDIMM, up to 64GB



High Performance

1,523 MB/s sequential reading, 162,097 iSCSI random read IOPS



Scalability

Up to 16 drives with one RX1217/RX1217RP

Variable options to boost system computing performance

Equipped with a PCIe 3.0 slot, RS1619xs+ supports installing a 10GbE/25GbE NIC for fast data transmission. Built-in M.2 2280 SSD cache slots further benefit IO-intensive tasks, such as virtualization or mail server deployment.

M.2 SSD support

Dual M.2 2280 slots supporting NVMe/SATA SSDs

10GbE/25GbE support

optional high-speed network capacity for bandwidth-intensive environments



5-year warranty

At Synology, we are committed to product innovation and quality. Synology guarantees a robust and reliable data management experience with a 5-year limited warranty, providing responsive technical support and hardware replacement services to maximize your return on investment.

Complete iSCSI and virtualization solutions

Synology iSCSI storage supports most virtualization solutions such as VMware vSphere, Microsoft Hyper-V, Citrix Xen Server, and OpenStack Cinder to enhance work efficiency. You can run and manage multiple virtual machines on Windows, Linux, or DSM using Virtual Machine Manager.



Next-generation file system for better data protection

The Btrfs file system introduces advanced storage technologies and optimized snapshots to prevent data corruption and reduce maintenance overhead. While ensuring high-level data integrity, it also offers flexible, efficient data protection and recovery tools.

Flexible Shared Folder/User Quota System provides comprehensive quota control on all user accounts and shared folders

Snapshot Replication provides schedulable and storage capacity-saving data protection with 1,024 shared folder backups and 65,000 system-wide snapshots

File or folder level data restoration makes data recovery fast and flexible

Automatic file self-healing detects and recovers corrupted files without user intervention



Ultimate Backup Solution

RS1619xs+ integrates various backup applications into an intuitive user interface, offering durable storage technologies to safeguard your valuable data on any device.



Active Backup for Business

Centralize backup tasks for VMware, Windows, and file servers. Restore whatever you want fast and reliably when needed.



Hyper Backup

Comprehensively back up your data to a local shared folder, an external device, another Synology NAS, an rsync server, or a public cloud to ensure data safety.



Drive Package

Safeguard your computer with Synology Drive Client. Effortlessly perform real-time data backups and point-in-time file recovery.



Active Backup for Microsoft 365 / Google Workspace

Protect corporate data stored on the cloud. On-premise backup solution with a centralized dashboard. Optimize storage efficiency with single instancing and block-level deduplication technology.

[Microsoft 365](#) [Google Workspace](#)

Digital asset protection

Powered by Synology DiskStation Manager (DSM), Synology NAS offers advanced security measures to protect against sudden data loss and potential security holes.

Security Advisor

Analyze system settings, password strength and network preferences, and remove any possible malware.

AppArmor

A kernel-level enhancement that blocks malicious programs from accessing unauthorized system resources.

AES 256-bit encryption

Encrypt shared folders and network data transmission to avoid unauthorized data access.

2-step verification

Prevent others from logging in to your DSM by generating a six-digit one-time password (OTP) on your mobile device.

Powered by Synology DiskStation Manager

DSM UI

Award-winning operating system with an intuitive user interface and powerful capabilities.

Public Cloud Integration

Back up and synchronize data easily between public cloud accounts and your NAS.

Synology High Availability

Seamless transition between clustered servers in the event of a server failure to minimize the impact on applications.

Snapshot Replication

Schedulable and instantaneous data protection of shared folders and iSCSI LUNs for quick disaster recovery.

Virtual Machine Manager

Run various operating systems in isolated sandboxes. Seamlessly clone, store, and migrate virtual machines.

Security

Shield your Synology NAS from the most sophisticated threats with industry-leading security solutions.

Software

DSM Specifications

[Storage Management](#)

Maximum Single Volume Size

- 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](#))

SSD TRIM

RAID Group

Supported RAID Type

- RAID F1
- Basic
- JBOD
- RAID 0
- RAID 1
- RAID 5
- RAID 6
- RAID 10

RAID Migration

- Basic to RAID 1

Volume Expansion with
Larger HDDs

Volume Expansion by
Adding a HDD

Global Hot Spare Supported
RAID Type

Notes

- Basic to RAID 5
- RAID 1 to RAID 5
- RAID 5 to RAID 6
- RAID F1
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- RAID F1
- JBOD
- RAID 5
- RAID 6 (with Expansion Unit)
- RAID F1
- RAID 1
- RAID 5
- RAID 6 (with Expansion Unit)
- RAID 10 (with Expansion Unit)
- 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.
- Actual maximum storage pool and volume sizes depend on drive sizes used, the number of drive bays available, and the RAID

configuration.

- Volumes over 108 TB require 32 GB of memory or more.

File System

Internal Drives

- Btrfs
- ext4

External Drives

- Btrfs
- ext4
- ext3
- FAT
- NTFS
- HFS+
- exFAT

Notes

exFAT Access can be installed for free from Package Center in DSM 7.0. In DSM 6.2 or earlier versions, exFAT Access needs to be purchased in Package Center.

File Services

File Protocol

- SMB
- AFP
- NFS
- FTP
- WebDAV
- Rsync

Maximum Concurrent SMB/AFP/FTP Connections 2,000

Maximum Concurrent SMB/AFP/FTP Connections (with RAM expansion) 10,000

Windows Access Control

List (ACL) Integration

NFS Kerberos Authentication

Notes

- Regarding data concerning tests with RAM expansion, all memory slots are installed with the maximum capacity of supported RAM.
- During testing, the

maximum number of SSDs supported by this model is installed in a RAID 5 configuration.

- The testing standard was based on the maximum number of concurrent connections supported by this model. During the testing, 25% of the connections were used to transfer files concurrently. The transfer process guaranteed that the connections were not interrupted; the minimum transfer speed was not guaranteed.

[Account & Shared Folder](#)

Maximum Local User Accounts	16,000
Maximum Local Groups	512
Maximum Shared Folder	512
Maximum Shared Folder Sync Tasks	32

[Hybrid Share](#)

Maximum Hybrid Share Folders	15
------------------------------	----

[Hyper Backup](#)

Folder and Package Backup	
Entire System Backup	
Notes	Full-system backup requires DSM 7.2 or later.

[High Availability](#)

Synology High Availability

[Log Center](#)

Syslog Events per Second	3,000
--------------------------	-------

[Virtualization](#)

VMware ESXi 6.5 and VAAI
Windows Server 2016
Windows Server 2019
Windows Server 2022
Citrix Ready
OpenStack

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	<ul style="list-style-type: none"> • Chrome • Firefox • Edge • Safari
	Supported Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svenska, Nederlands, ???????, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, ?eský, ???????, ???, ???, ????, ????
	Notes	For an updated list of supported browser versions, check the DSM Technical Specifications .
Add-on Packages view the complete package list Central Management System Synology Chat	Suggested Users Notes	400 Models with expandable memory are tested with their maximum supported memory.
Download Station	Maximum Concurrent Download Tasks	80
SAN Manager	Maximum iSCSI Target Number	256
	Maximum LUN LUN Clone/Snapshot, Windows ODX Notes	512 iSCSI Manager has been renamed to SAN Manager in DSM 7.0.
Synology MailPlus / MailPlus Server	Free Email Accounts	5 (Additional accounts require purchase of licenses)

Suggested Users
Notes

5,000

- Suggested users is derived from testing in an environment with 20% heavy users (each with 20,000 pre-populated emails and receiving 240 emails per day) and 80% light users (each receiving an average of 20 emails per day). [Learn more](#)
- The performance of the mail system will slightly decrease in high-availability mode due to data synchronization between the two servers.
- Functions that were enabled in all of the tests above: anti-spam, anti-virus, DNSBL, greylist, content scan, full-text search (English only).
- Models with expandable memory are tested with their maximum supported memory. To estimate the RAM requirement for your NAS, please [read this article](#)

[Media Server](#)
[Synology Photos](#)

DLNA Compliance
Facial Recognition
Object Recognition

[Snapshot Replication](#)

Maximum Snapshots per
Shared Folder 1,024

Surveillance Station

Maximum of System Snapshots	65,536
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
Notes	<ul style="list-style-type: none">• Performance figures are obtained from testing conducted with the device fully populated with drives, with their default memory configuration, and under a continuous recording setup. Actual system capabilities may vary based on configuration, drive performance, enabled features, and the presence of additional workloads.• Use NVR Selector to quickly find a suitable model based on your requirements.

- The number of streams that can be viewed simultaneously is **twice** the suggested maximum number of cameras. For example, if the suggested maximum number of cameras for a model is 10 under H.264, 1080p, the model can support up to 20 streams of the same specification at the same time.

[Synology Drive](#)

Recommended Number of Concurrent Sync Clients

1,800 (the number of connections that can be maintained when the recommended number of hosted files was reached)

Recommended Number of Hosted Files

50,000,000 (applies to files indexed or hosted by [Synology Drive](#). For file access through other standard protocols, refer to the File Services section above)

Notes

- Exceeding the recommended numbers above will not block application operations, but may result in longer response time.
- Utilizing SSD cache can significantly improve performance.
- Models with expandable memory are tested with their maximum supported memory.

Synology Office	Suggested Users Notes	7,000	<ul style="list-style-type: none"> • Btrfs file system and non-encrypted shared folders were used during the aforementioned testing. • Suggested users is derived from testing in an environment with 60% idle users (each logging in and viewing documents) and 40% active users (each executing random actions at intervals of 20 to 40 seconds) operating within documents, each document having 30 users. Learn more • Models with expandable memory are tested with their maximum supported memory. • Client performance may affect maximum simultaneous editing users. Client PCs used for testing: Intel Core i3-3220 / 8GB RAM
Virtual Machine Manager	Recommended Virtual Machine Instances Recommended Virtual DSM Number (Licenses required) Notes	8 (Learn more)	8 (including 1 Free License) The specifications vary depending on system configuration and memory size.
VPN Server	Maximum Connections	60	

Specification

NAS	
CPU Architecture	64-bit
CPU Core	4
CPU Frequency	2.2 (base) / 2.7 (turbo) GHz
CPU Model	Intel Xeon D-1527
CPU Quantity	1
Drive Bays	4
Expansion Port	1
Form Factor (RU)	1U
Hardware Encryption Engine	Yes
Hot Swappable Drive	Yes
Maximum Memory Capacity	64 GB (16 GB x 4)
Memory	8 GB DDR4 ECC UDIMM
PCIe Expansion	1 x Gen3 x8 slot (x8 link)
Power Supply Unit / Adapter	150 watts
Redundant Power Supply	Yes
RJ-45 1GbE LAN Port	4
System Fan	40 mm x 40 mm x 2 pcs
Total Memory Slots	4
USB 3.2 Gen 1 Port	2

Product Gallery