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

;
כ
ן

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 256 Number 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
- Basic to RAID 1

RAID Migration

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 <u>this article</u> 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

<u>File System</u>	Internal Drives External Drives	 configuration. Volumes over 108 TB require 32 GB of memory or more. Btrfs ext4 Btrfs ext4 ext4 ext3 FAT NTFS
	Notes	 HFS+ exFAT exFAT Access can be installed for free from Package Center in DSM 7.0. In DSM 6.2 or earlier
File Services	File Protocol	versions, exFAT Access needs to be purchased in Package Center. • SMB • AFP
		 NFS FTP WebDAV Rsync
	Maximum Concurrent	2,000
	SMB/AFP/FTP Connections	10.000
	Maximum Concurrent SMB/AFP/FTP Connections (with RAM expansion)	10,000
	Windows Access Control	
	List (ACL) Integration NFS Kerberos Authentication	n
	Nrs 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

Hybrid Share

Hyper Backup

High Availability Log Center Virtualization

Folder	Maximum Local User	16,000
	Accounts	
	Maximum Local Groups	512
	Maximum Shared Folder	512
	Maximum Shared Folder	32
	Sync Tasks	
	Maximum Hybrid Share	15
	Folders	
	Folder and Package Backup	
	Entire System Backup	
	Notes	Full-system backup requires
		DSM 7.2 or later.
	Synology High Availability	
	Syslog Events per Second	3,000
	VMware ESXi 6.5 and VAA	I
	Windows Server 2016	
	Windows Server 2019	
	Windows Server 2022	
	Citrix Ready	
	OpenStack	

	General	Spec	cificat	ions
--	---------	------	---------	------

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, ??????, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, ?eský, ??????, ???, ???, ????, ????
	Notes	For an updated list of supported browser versions, check the <u>DSM Technical</u> <u>Specifications</u> .
Add-on Packages view the c 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,	512

Windows ODX

Free Email Accounts

Notes

Synology MailPlus /

MailPlus Server

iSCSI Manager has been renamed to SAN Manager in DSM 7.0. 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 prepopulated 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: antispam, 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

Snapshot Replication

DLNA Compliance **Facial Recognition Object Recognition** Maximum Snapshots per Shared Folder

1,024

Surveillance Station

Maximum of System Snapshots Default Licenses

Suggested Maximum IP Cameras and Total FPS (H.264)

Suggested Maximum IP Cameras and Total FPS (H.265)

Notes

65,536

2 (Additional cameras require purchase of licenses)

- 1080p: 75 channels, 1050 FPS
- 3M: 60 channels, 600 FPS
- 5M: 40 channels, 400 FPS
- 4K: 28 channels, 280 FPS
- 1080p: 75 channels, 2250 FPS
- 3M: 75 channels, 1125 FPS
- 5M: 70 channels, 700 FPS
- 4K: 49 channels, 490 FPS
- 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 <u>NVR Selector</u> 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	1,800 (the number of
	Concurrent Sync Clients	connections that can be
		maintained when the
		recommended number of
	D 1. 1.N 1	hosted files was reached)
	Recommended Number of	50,000,000 (applies to files
	Hosted Files	indexed or hosted
		by <u>Synology Drive</u> . 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.

• Btrfs file system and non-encrypted shared folders were used during the aforementioned testing.

Synology Office

Suggested Users Notes

7,000

- 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	8 (Learn more)
		9 (including 1 Erec Linguage)
		8 (including 1 Free License)
	Number (Licenses required)	
	Notes	The specifications vary
		depending on system
		configuration and memory
		size.
VPN Server	Maximum Connections	60

Specification	
NAS	
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	Yes
Engine	
Memory	8 GB DDR4 ECC UDIMM
Drive Bays	4
Hot Swappable Drive	Yes
RJ-45 1GbE LAN Port	4
USB 3.2 Gen 1 Port	2
System Fan	40 mm x 40 mm x 2 pcs
Power Supply Unit /	150 watts
Adapter	
Total Memory Slots	4
Maximum Memory	64 GB (16 GB x 4)
Capacity	
Expansion Port	1
PCIe Expansion	1 x Gen3 x8 slot (x8 link)
Form Factor (RU)	1U
Redundant Power Supply	Yes
Draduat Callary	

Product Gallery