

## RackStation

## RS4017xs+



Designed to meet tomorrow's intensive storage requirements, Synology RackStation RS4017xs+ provides reliable, high-performance network attached storage for enterprises seeking rock-solid stability along with business collaboration applications and virtualization acceleration. With up to 40 drive scalability, RS4017xs+ simplifies data management with minimal time investment required for setup and maintenance. Synology RS4017xs+ is backed by Synology's 5-year limited warranty.

### Powerful Storage Solution with Ample Upgradability

Equipped with an **Intel Xeon D-1541 8-core CPU**, **8GB DDR4 ECC UDIMM**, and **16 x 3.5" drive bays** in a **3U form factor**, Synology RS4017xs+ is the ideal companion for intensive data processing, video post-productions, and virtualization applications that increasingly require more storage space.

RS4017xs+ comes natively with **dual 10GBase-T ports** and four Gigabit ports, along with two 8-lane PCIe 3.0 slots for additional high performance network interface cards (NICs). When configured with 6 x 10GbE ports with Link Aggregation enabled, RS4017xs+ provides ultra-high **sequential throughput at over 4,900 MB/s and 690,000 sequential IOPS<sup>1</sup>**.

System memory and storage capacity of RS4017xs+ can be further extended. Up to **64GB** of DDR4 ECC UDIMM can be installed to support multiple virtualization instances, and with two **Synology RX1217/RX1217RP<sup>2</sup>** expansion units connected, a combined total of **40 drive bays** can be freely arranged for storage management.

### Rock-Solid Data Protection

The **Snapshot Replication** application provides schedulable, near-instantaneous data protection. It replicates **65,000** system-wide backup copies to offsite servers and local volumes, bringing near-instantaneous data protection and ensuring data in shared folder or virtual machines in iSCSI LUNs remain available in the event of disaster.

With block-level incremental backup and cross-version deduplication, Synology **Hyper Backup** provides multi-version backup with optimized storage space utilization and allows multiple backup destinations to local shared folders, external hard drives, network shared folders, rsync server, and public cloud services.

### Highlights

- 3U chassis and 16 drive trays design to provide high storage capacity
- Ultra-high performance of over 4,900 MB/s sequential read throughput and 690,000 sequential read IOPS<sup>1</sup>
- Intel Xeon D-1541 8-core CPU and 8GB (up to 64GB) DDR4 ECC UDIMM
- Dual 10GBase-T ports and optional 10GbE NICs support, providing up to 6 x 10GbE ports for maximum performance throughput
- Scale up to 40 drives with 2 x Synology RX1217/RX1217RP<sup>2</sup>
- Complete virtualization solution for VMware, Citrix, Microsoft Hyper-V, and OpenStack
- Advanced Btrfs file system offering 65,000 system-wide snapshots and 1,024 snapshots per shared folder
- Backed with 5 year, next business day replacement service

## Btrfs: Next Generation Storage Efficiency

RS4017xs+ integrates the **Btrfs** file system, bringing the most advanced storage technologies to meet the management needs of modern large-scale businesses:

- **Flexible Shared Folder / User Quota System** provides comprehensive quota control on all user accounts and shared folders.
- **Advanced snapshot technology** with customizable backup schedule allows up to **1,024** copies of shared folder backups and **65,000** copies of system-wide snapshots without occupying huge storage capacity and system resources.
- **File or folder level data restoration** brings huge convenience and saves time for users who wish to restore only a specific file or folder.
- **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 RAID 1, 5, 6, and 10.

## Virtualization Ready

RS4017xs+ provides seamless storage solutions for virtualization environments, including **VMware**, **Citrix**, **Hyper-V**, and **OpenStack**. With **VMware vSphere 6 and VAAI** integration certified, RS4017xs+ helps offload specific storage operations and optimizes computation power for unparalleled performance and efficiency in VMware environments. **Windows Offloaded Data Transfer (ODX)** and **Synology Advanced LUN** support greatly improves the efficiency on massive data transfer and migration. With **OpenStack** support, RS4017xs+ can be used as a block-based storage component for servers complying with the **Cinder API**.

## Comprehensive Business Applications

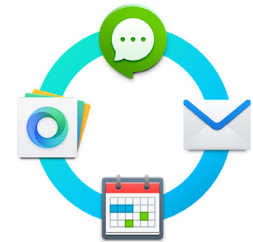
Powered by the innovative Synology **DiskStation Manager (DSM)**, RS4017xs+ comes fully-equipped with applications and features designed specifically for large-scale business:

- **Windows® AD and LDAP** support allows easy integration with existing business directory services without recreating user accounts.
- **Windows ACL** support provides fine-grained access control and efficient privilege settings, allowing RS4017xs+ to fit seamlessly into current infrastructure.
- **MailPlus** allows your business to set up a secure, reliable, and private mail server while giving your employees a modern mail client for receiving and sending messages.
- **Powerful collaboration suite** with Synology **Office**, **Calendar** and **Chat** for secure and high performance private communications and content organization that your organization can easily manage and control.



### Virtualization Ready

Synology RS4017xs+ is an optimized and certified storage solution for a various virtualization environments.



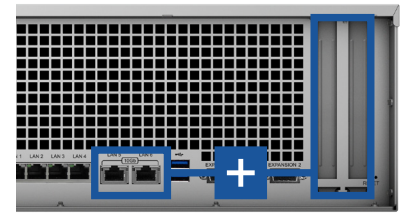
### Synology Collaboration Suite

Powerful and secure private cloud solution for business collaboration and organization with simple but effective management options.

## Reliability, Availability & Disaster Recovery

System reliability is of paramount importance to businesses which depend upon their commercial servers every day. RS4017xs+ 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.
- **Redundant power supplies, system fans** and **network ports** with failover support ensure maximum continuous service uptime.
- High reliability system design including **fan-less CPU heat-sink** and passive cooling technology, preventing single points of failure.
- **DDR4 ECC UDIMM** reduces power consumption and has error detection and correction capabilities during data transmission.



### Future-proof Networking

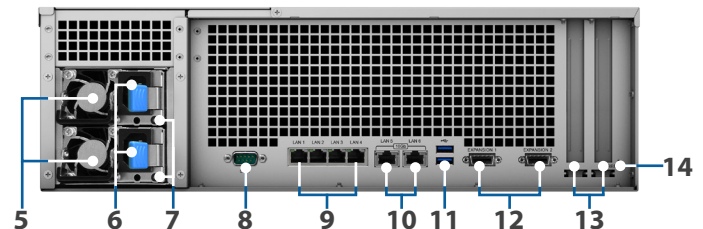
Equipped with two 10GbE and four 1GbE ports, RS4017xs+ can accommodate two additional PCIe network interface cards for flexible network bandwidth management.

## Hardware Overview

Front



Rear



1	Power button and indicator	2	Beep off button	3	Drive tray	4	Drive status indicator
5	PSU fan	6	Power port	7	PSU indicator	8	Console port
9	1GbE RJ-45 port	10	10GbE RJ-45 (10GBase-T) port	11	USB 3.0 port	12	Expansion port
13	PCIe expansion slot	14	RESET button				

# Technical Specifications

## Hardware

CPU	Intel Xeon D-1541 8-core 2.1GHz, burst up to 2.7GHz
Hardware encryption engine	Yes (AES-NI)
Memory	8 GB DDR4-2133 ECC UDIMM, expandable up to 64GB
Compatible drive type	16 x 3.5/2.5" SATA HDD/SSD
External ports	<ul style="list-style-type: none"><li>• 2 x USB 3.0 port</li><li>• 2 x Expansion port</li></ul>
Size (HxWxD)	<ul style="list-style-type: none"><li>• 132.3 x 430.5 x 624.5 mm</li><li>• 132.3 x 482 x 656.5 mm (with server ears)</li><li>• 3RU</li></ul>
Weight	17.4 kg
LAN	<ul style="list-style-type: none"><li>• 2 x 10GbE RJ45 (10GBase-T)</li><li>• 4 x 1GbE RJ45</li></ul>
PCIe 3.0 slot	<ul style="list-style-type: none"><li>• 2 x 8-lane x8 slot</li><li>• High-performance network interface card support</li></ul>
Scheduled power on / off	Yes
System fan	3 (80 x 80 x 32 mm)
AC input power voltage	100V to 240V AC
Power frequency	50 to 60Hz, single phase
Operating temperature	5°C to 35°C (40°F - 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

Networking protocol	CIFS, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
File system	<ul style="list-style-type: none"><li>• Internal: Btrfs, ext4</li><li>• External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT<sup>3</sup></li></ul>
Storage management	<ul style="list-style-type: none"><li>• Maximum single volume size: 108TB / 200TB (at least 32GB RAM required, for RAID 5 or RAID 6 groups only)</li><li>• Maximum internal volumes: 1,024</li><li>• Maximum iSCSI Targets: 128</li><li>• Maximum iSCSI LUNs: 512</li><li>• iSCSI LUN clone / snapshot support</li></ul>
Supported RAID type	Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
File sharing capability	<ul style="list-style-type: none"><li>• Maximum user account: 16,000</li><li>• Maximum user group: 512</li><li>• Maximum shared folder: 512</li><li>• Maximum concurrent CIFS / AFP / FTP connections: 2,048</li></ul>
Privilege	Windows Access Control List (ACL)
Virtualization	VMware vSphere® 6, Microsoft Hyper-V®, Citrix®, OpenStack®
Directory service	Windows® AD integration: Domain users login via Samba (CIFS) / AFP / FTP / File Station, LDAP integration
Security	FTP over SSL / TLS, IP auto-block, firewall, encrypted network backup over Rsync, HTTPS connection
Utilities	Synology Web Assistant, Cloud Station Drive, Cloud Station Backup, Cloud Sync Decryption Tool, Evidence Integrity Authenticator, Photo Station Uploader, Snapshot Manager for VMware, Snapshot Manager for Windows, NFS Plug-in for VMware VAAI
Supported clients	Windows 7 onward, Mac OS X® 10.10 onward
Supported browsers	Chrome®, Firefox®, Internet Explorer® 9 onwards, Safari® 8 onwards; Safari (iOS 7 onwards), Chrome (Android™ 4.0 onwards) on tablets
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

## Applications

File Station	Virtual drive, remote folder, Windows ACL editor, compress / extract archived files, bandwidth control for specific users or groups, creating sharing links, transfer logs
Backup solutions	Network backup; local backup; desktop backup; configuration backup; OS X Time Machine; backup data to public cloud; shared folder sync - maximum task number: 32
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
High Availability Manager	Combines two RS4017xs+ into one high-availability cluster
Security Advisor	Malware detection / removal, user account / password, network, system-related security scan
iOS / Android™ applications	DS cloud, DS file, DS finder, DS cam, DS note, MailPlus, Chat
Windows Phone® applications	DS file, DS finder

## Add-on Packages

Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Chat	Messaging service that runs locally, ensuring sensitive corporate information remains safely stored on company premises while providing users usability equivalent of public cloud services. Built to work with Office and Calendar seamlessly.
Cloud Station Suite	Default concurrent file transfers: 2,000, retain historical and deleted file versions
Cloud Sync	One or two-way synchronization with public cloud storage providers including Amazon Cloud Drive, Amazon S3-compatible storage, Baiduyun, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, Megafon Disk, Microsoft OneDrive, OpenStack Swift-compatible storage, WebDAV servers, Yandex Disk
Log Center	SSL connection, log rotation: 6 months, 1 year, 2 years, 3 years, email notification
MailPlus	Intuitive webmail interface for MailPlus Server; customizable mail labels, filters and user interface
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)
Note Station	Rich-text note organization and versioning, encryption, sharing, media embedding and attachments
Office	Real-time collaboration on your private cloud. Work seamlessly together on documents and spreadsheets on your secured company network while combining the convenience and usability of a public cloud service.
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
Surveillance Station	Maximum IP camera: 90 (total of 2,700 FPS at 720p, H.264) (Includes two free camera licenses, additional cameras require the purchasing of additional licenses)
VPN Server	Maximum connections: 30; supported VPN protocol: PPTP, OpenVPN™, L2TP
Web Station	Virtual host (up to 30 websites), PHP / MariaDB®, 3rd-party applications support
Other packages	Additional 3rd-party packages are available on Package Center

## Environment and Packaging

Environment safety	RoHS compliant
Package content	<ul style="list-style-type: none"><li>• RS4017xs+ main unit</li><li>• Quick Installation Guide</li><li>• Accessory pack</li><li>• 2 x AC power cord</li></ul>
Optional accessories	<ul style="list-style-type: none"><li>• 8GB / 16GB DDR4-2133 ECC UDIMM (RAMEC2133DDR4-8G / RAMEC2133DDR4-16G)</li><li>• Synology E10G17-F2 / E10G15-F1 10Gbps Ethernet adapters</li><li>• Synology Expansion Unit RX1217/RX1217RP</li><li>• Synology RKS1317-Rail Kit Sliding</li><li>• Synology Surveillance Video Decoder VS360HD</li><li>• Surveillance Device License Pack</li><li>• MailPlus License Pack</li><li>• Docker DSM License Pack</li></ul>
Warranty	5 years

\*Model specifications are subject to change without notice. Please refer to [www.synology.com](http://www.synology.com) for the latest information.

1. Performance figures may vary depending on environment, usage and configuration.
2. RS4017xs+ supports up to 2 Synology Expansion Unit RX1217/RX1217RP, sold separately.
3. exFAT Access 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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RS4017xs+-2017-ENU-REV001

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