

# RackStation

# RS3618xs



Synology RackStation RS3618xs is a reliable, superior-performance network-attached storage solution for large-scale enterprises with demanding business applications. RS3618xs simplifies data management, optimizes virtualization environments, and rapidly expands storage capacity with minimal time investment in setup and maintenance. Synology RS3618xs is backed by Synology's 5-year limited warranty.

## High-speed Scalable Storage Server

Synology RS3618xs is a 2U 12-bay rackmount network-attached storage solution equipped with a **quad-core** processor and **8GB DDR4 memory (expandable up to 64GB)**, meeting the needs for large-scale businesses. With 10GbE Link Aggregation enabled, RS3618xs delivers great performance at over **3,900 MB/s** sequential reading throughput and **143,500 iSCSI random IOPS<sup>1</sup>** under a RAID 5 configuration. Encrypted data throughput can reach over **2,300 MB/s in reading** and **1,177 MB/s in writing<sup>1</sup>**.

RS3618xs provides great flexibility to easily scale up to **36 drives** when connected to two Synology **RX1217 or RX1217RP<sup>2</sup>** expansion units. Storage capacity can be expanded according to your business needs with minimal effort.

## Btrfs: Next Generation Storage Efficiency

RS3618xs 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 up to **1,024 copies** of shared folder backups in a minimum **5-minute interval** without occupying huge storage capacity and system resources.
- **File or 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/User Quota System** provides comprehensive quota control over 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, 10 and RAID F1.

## Highlights

- Reliable centralized storage solution for large scale businesses
- Quad-core CPU with AES-NI and 8GB (up to 64GB) DDR4 ECC UDIMM
- Ultra-high performance of over 3,900 MB/s sequential reading and 143,500 iSCSI random read IOPS<sup>1</sup>, capable of installing optional 10GbE/40GbE NICs
- Scalable up to 36 drives with Synology RX1217/RX1217RP<sup>2</sup>
- Complete virtualization solution with Synology Virtual Machine Manager
- Dynamic iSCSI/NFS storage for VMware, Windows Hyper-V, Citrix, and OpenStack
- Backed by Synology's 5-year limited warranty & Synology Replacement Service (SRS)<sup>3</sup>

## Comprehensive Business Applications

Powered by the innovative Synology DiskStation Manager (DSM), RS3618xs 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 without recreating user accounts.
- **Windows ACL** support provides fine-grained access control and efficient privilege settings, allowing RS3618xs to fit seamlessly into current 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 ensure 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.
- **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.

## Effortless Virtualization Environment

Synology iSCSI storage fully supports most virtualization solutions to enhance work efficiency with a simple management interface. **VMware vSphere™ 6.5** and **VAAI** integration helps offload storage operations and optimizes computation efficiency. **Windows Offloaded Data Transfer (ODX)** speeds up data transfer and migration rates, while **OpenStack Cinder** support turns your Synology NAS into a block-based storage component.

Synology's **Virtual Machine Manager** adds unlimited capabilities to your NAS. Set up and run various virtual machines, including **Windows, Linux, and Virtual DSM** so that you can test new software versions in a sandbox environment, isolate your customers' machines, and increase the flexibility of your RS3618xs with reduced hardware deployment and maintenance costs.

## Running on Synology DiskStation Manager (DSM)

Synology DiskStation Manager (DSM) is a web-based operating system tailor-made for every Synology NAS. Featuring an intuitive multitasking user interface, DSM provides simple desktop-like experience to minimize effort in exploring and managing your Synology NAS.

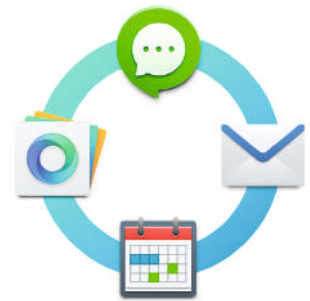
The built-in **Package Center** allows you to download and install a variety of packages designed specifically for your unique needs, ranging from file backup, virtualization, productivity, safeguard security and utilities.

With all the built-in and add-on features, DSM provides comprehensive and fine-grained controls over your RS3618xs, helping you maximize productivity and make the best out of your digital assets. All will happen with just a few clicks.



### 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.



### Synology Collaboration Suite

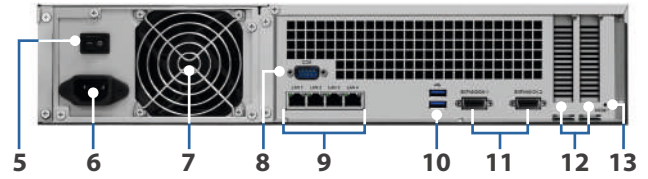
A powerful and secure private cloud solution for business collaboration and organization, offering intuitive yet effective management options.

# Hardware Overview

Front



Rear



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

## Technical Specifications

### Hardware

CPU	Intel Xeon D-1521 quad-core 2.4GHz, Turbo Boost up to 2.7GHz
Hardware encryption engine	Yes (AES-NI)
Memory	8GB DDR4 ECC UDIMM (expandable up to 64GB)
Compatible drive type	12 x 3.5" or 2.5" SATA SSD/HDD (drives not included)
External port	<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>• 88 x 430.5 x 692 mm</li> <li>• 88 x 482 x 724 mm (with server ears)</li> </ul>
Weight	14.5 kg
LAN	4 x 1GbE (RJ-45)
PCIe 3.0 slot	<ul style="list-style-type: none"> <li>• x8 slot x 2 (8-lane)</li> <li>• High-performance network interface card support</li> </ul>
Wake on LAN/WAN	Yes
Scheduled power on/off	Yes
System fan	4 (80 x 80 x 32 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	<ul style="list-style-type: none"> <li>• Internal: Btrfs, ext4</li> <li>• External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT*</li> </ul>
Supported RAID type	Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, RAID F1
Storage management	<ul style="list-style-type: none"> <li>• Maximum internal volumes: 1,024</li> <li>• Maximum iSCSI targets: 64</li> <li>• Maximum iSCSI LUNs: 512</li> <li>• iSCSI LUN clone/snapshot support</li> </ul>
SSD cache	SSD read-write cache support

File sharing capability	<ul style="list-style-type: none"> <li>• Maximum local user accounts: 16,000</li> <li>• Maximum local groups: 512</li> <li>• Maximum shared folders: 512</li> <li>• Maximum concurrent SMB/NFS/AFP/FTP connections: 2,000</li> </ul>
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, encrypted 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 and 10, 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)
Interface 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

## Packages and Applications

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
Universal Search	Offer global search into applications and files
Hyper Backup	Support local backup, network backup, and backup data to public clouds
Active Backup for Server	Centralize data backup for Windows and Linux servers without client installation
Backup tools	DSM configuration backup, macOS Time Machine support, Cloud Station Backup Shared folder sync - maximum tasks: 16
Cloud Station Suite	Sync data between multiple platforms by installing the client utilities on Windows, Mac, Linux, Android and iOS devices, while retaining up to 32 historical versions of files Maximum concurrent file transfers: 2,000
Cloud Sync	One or two-way synchronization with public cloud storage providers including Amazon Drive, Amazon S3-compatible storage, Baidu cloud, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, MegaDisk, Microsoft OneDrive, OpenStack Swift-compatible storage, WebDAV servers, Yandex Disk
Surveillance Station	Maximum IP cameras: 75 (total of 2,250 FPS at 720p, H.264) (includes two free camera licenses; additional cameras require the purchasing of additional licenses)
Virtual Machine Manager	Deploy and run various virtual machines on Synology NAS, including Windows, Linux, or Virtual DSM
High Availability Manager	Reduce service downtime by setting up two identical NAS into one high-availability cluster
Snapshot Replication	<ul style="list-style-type: none"> <li>• Maximum replications: 64</li> <li>• Maximum shared folder snapshots: 1,024</li> <li>• Maximum system snapshots: 65,536</li> </ul>
Directory Server for Windows Domain	A flexible and cost-effective domain controller solution
CMS	Provide a single interface to manage and monitor multiple Synology NAS
VPN Server	Maximum connections: 30, supported VPN protocol: PPTP, OpenVPN™, L2TP/IPSec
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
Collaboration tools	<ul style="list-style-type: none"> <li>• Chat maximum users: 4,000</li> <li>• Office maximum users: 1,600, maximum simultaneous editing users: 100</li> <li>• Calendar: support CalDAV and access via mobile devices</li> </ul>
Note Station	Rich-text note organization and versioning, encryption, sharing, media embedding and attachments
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
Security Advisor	Malware detection/removal, user account/password, network, system-related security scan
Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Download Station	Supported download protocols: BT, HTTP, FTP, NZB, eMule, Thunder, FlashGet, QQDL Maximum concurrent download tasks: 80
Web Station	Virtual host (up to 30 websites), PHP/MariaDB®, 3rd-party applications support
Other packages	Video Station, Photo Station, Audio Station, DNS Server, RADIUS Server, iTunes® Server, Log Center, additional 3rd-party packages are available in Package Center

## Environment and Packaging

Environment safety	RoHS compliant
Package content	<ul style="list-style-type: none"><li>• RS3618xs main unit x 1</li><li>• Quick Installation Guide x 1</li><li>• Accessory pack x 1</li><li>• AC power cord x 1</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>• Expansion Unit RX1217/RX1217RP</li><li>• RKS1317-Rail Kit Sliding</li><li>• VisualStation VS360HD, VS960HD</li><li>• Surveillance Device License Pack</li><li>• MailPlus License Pack</li><li>• Virtual DSM License Pack</li></ul>
Warranty	5 years <sup>5</sup>

\*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. RS3618xs supports two Synology Expansion Unit 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](http://srs.synology.com).
4. exFAT Access is purchased separately in Package Center.
5. The warranty period starts from the purchase date as stated on your purchase receipt. Visit <http://www.synology.com> for more information.

## 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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