Synology®

Datasheet

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RackStation

RS3618xs

RS3618xs

Accelerating Business Workloads with Enterprise-Grade Data Protection

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.

- 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 4,700 MB/s sequential reading and 229,000 iSCSI random read IOPS[1], capable of installing optional 10GbE/40GbE NICs
- Scalable up to 36 drives with Synology RX1217RP/RX1217[2]
- 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[3]

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.

Notes:

1. Performance figures may vary depending on environment, usage, and configuration.

2. RS3618xs supports two Synology Expansion Unit RX1217RP/RX1217, sold separately.

3. The warranty period starts from the purchase date as stated on your purchase receipt.

Hardware Overview

Front

Rear A[1]
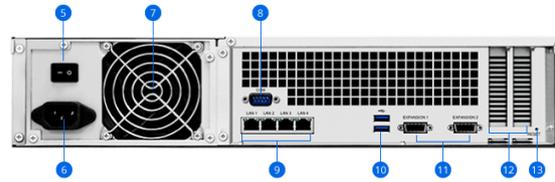
Rear B[1]
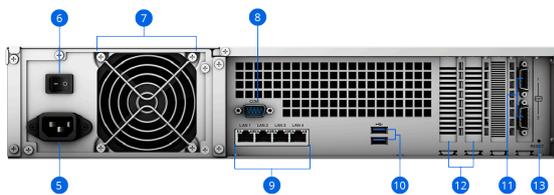
No.	Name	No.	Name
1.	Power button and indicator	8.	Console port
2.	Beep off Button	9.	1GbE RJ-45 Port
3.	Drive status indicator	10.	USB 3.2 Ports
4.	Drive tray	11.	Expansion port
5.	Power Port	12.	PCIe expansion slot
6.	PSU on/off switch	13.	Reset button
7.	PSU fan		

Notes:

1. Refer to the Product Change Notification for more information.

Technical Specifications

Hardware

CPU

CPU Model	Intel Xeon D-1521
CPU Quantity	1
CPU Core	4
CPU Architecture	64-bit
CPU Frequency	2.4 (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	12
Maximum Drive Bays with Expansion Unit	36 (RX1217 × 2)
Drive Type	• 3.5" SATA HDD • 2.5" SATA HDD • 2.5" SATA SSD
Hot Swappable Drive	Yes

External Ports

RJ-45 1GbE LAN Port	4

USB 3.2 Gen 1 Port	2
Expansion Port	2

PCIe

PCIe Expansion	2 x Gen3 ×8 slots (x8 link)

Appearance

Form Factor (RU)	2U
Size (Height x Width x Depth)	88 mm x 482 mm x 724 mm
Weight	14.5 kg
Rack Installation Support	4-post 19" rack (Synology Rail Kit - RKS-02)
Notes	The rail kit is sold separately

Others

System Fan	80 mm x 80 mm x 32 mm x 4 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)
Relative Humidity	5% to 95% RH
Maximum Operating Altitude	5,000 m

General 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	128

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	• 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) with RAM Expansion	500
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 ESXi 6.5 and VAAI	Yes
Citrix Ready	Yes
OpenStack	Yes

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 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	900
Maximum Number of Hosted Files	15,000,000 (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

Efficiently synchronizes files across sites by keeping shared data on Synology C2 Storage and streaming files to Synology NAS worldwide on request. Frequently requested files are cached at each site for low-latency access C2 Storage for Hyper Backup and Hybrid Share requires purchase of an annual or monthly subscription. A free trial is available for each newly registered device.

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	500

Synology Office

Maximum Number of Users	900

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	1,100

Surveillance Station

Default Licenses	2 (Additional cameras require purchase of licenses)
Suggested Maximum IP Cameras and Total FPS (H.264)	• 1080p: 75 channels, 2100 FPS • 3M: 75 channels, 1500 FPS • 5M: 75 channels, 900 FPS • 4K: 55 channels, 550 FPS
Suggested Maximum IP Cameras and Total FPS (H.265)	• 1080p: 75 channels, 2250 FPS • 3M: 75 channels, 2250 FPS • 5M: 75 channels, 1500 FPS • 4K: 75 channels, 900 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 1
- 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

- M.2 SSD & 10GbE Combo Adapter Card: E10M20-T1

- M.2 SSD Adapter Card: M2D20/M2D18

- 25GbE Network Interface Card: E25G30-F2

- 10GbE Network Interface Card: E10G30-F2/E10G30-T2/E10G18-T1

- Rail Kit Sliding: RKS-02

| Notes | 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) |