Synology



RackStation RS3617xs

Synology RackStation RS3617xs provides reliable, superior-performance network attached storage solution for large scale businesses with comprehensive business applications. RS3617xs simplifies data management, optimizes virtualization environments, and rapidly expands storage capacity with minimal time investment in setup and maintenance. Synology RS3617xs is backed with Synology's 5-year limited warranty.

Highlights

- Reliable centralized storage solution for large scale businesses
- Blazing performance at over 3,263 MB/s throughput and 333,941 IOPS¹
- Intel Xeon E3-1230v2 quad-core 3.3GHz
- Optional 10GbE network capability
- Scale up to 36 drives with Synology RX1217/RX1217RP²
- Complete virtualization solution for VMware, Windows Hyper-V, and Citirx
- Advanced Btrfs file system offering 65,000 system-wide snapshots and 1,024 snapshots per shared folder
- Backed with Synology's 5-year limited warranty & Synology Replacement Service (SRS)

Blazing Performance

RS3617xs delivers blazing performance at over **3,263 MB/s sequential throughput** and **333,941 IOPS** under a RAID 5 configuration with 10GbE Link Aggregation enabled¹. Through advanced flash technology, the combination of hard drives and SSD cache boosts throughput efficiently while minimizing cost per gigabyte.

In addition to the four 1GbE RJ-45 ports by default, RS3617xs comes with dual PCIe 3.0 x8 slots, allowing installation of two 10GbE Network Interface Cards (NIC) for maximized bandwidth, bringing you the superior performance that data-intensive applications demand of your storage system.

Equipped with **4GB DDR3 ECC RAM** and **up to 32GB expansion** support, RS3617xs ensures data accuracy as well as superior performance to provide a rigorous foundation for the mission-critical tasks of your business.

Btrfs: Next Generation Storage Efficiency

RS3617xs 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-wise 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 the specific single file or folder.
- **Cloud Station with file versioning** reduces down to half of storage consumption when compared with ext4 file system.

Virtualization Certified

RS3617xs provides seamless storage solutions for virtualization environments, including **VMware, Citrix**, and **Hyper-V**. With **VMware vSphere 6 and VAAI** integration certified, RS3617xs helps offload specific storage operations and optimizes computation power for unparalleled performance and efficiency in VMware environments. As the centralized storage of a virtual environment, RS3617xs enables virtual machine migration, allowing movement from server to server whilst eliminating service downtime and disruption to user. **Windows Offloaded Data Transfer (ODX)** and **Synology Advanced LUN** support greatly improves the efficiency on massive data transfer and migration.



Figure 1) Reliability, Availability & Disaster Recovery

Synology High Availability ensures seamless transition between clustered servers in the event of server failure with minimal impact to businesses.

Comprehensive Business Applications

Powered by the innovative Synology DiskStation Manager (DSM), RS3617xs comes fullyequipped with applications and features designed specifically for large-scale business:

- Easy integration with existing business network environments through **Windows® AD** and **LDAP** directory services without recreating user accounts.
- Windows ACL support provides fine-grained access control and efficient privilege settings, allowing RS3617xs to fit seamlessly into current infrastructure.
- Built-in backup applications protect information assets by regularly backing up files and iSCSI LUNs locally and remotely.
- Continuous data protection with snapshots of shared folders allows restoration of previous versions when the need arises.
- Advanced Encryption Standard (AES) on shared folders with hardware acceleration ensures security without compromising access performance, providing over 2,612MB/s in reading.

Robust Scalability

RS3617xs is designed to grow with businesses and provides the ability to seamlessly expand a single volume up to **200TB** (with 32GB RAM installed) / **108TB** on the fly.

RS3617xs supports up to 36 HDDs or SSDs for flexible capacity and balanced performance to meet the needs of varying applications and processes. When the storage capacity of RS3617xs nears it limit, expansion is easily accomplished with up to two Synology Expansion Unit RX1217/RX1217RP via specially-designed connection cables to maximize data transmission throughput between main server and expansion units.

Management of the large storage space on RS3617xs is simple and flexible. Multiple Volumes on RAID allows users to create more than one volume on a RAID structure, providing a flexible and efficient way to manage the storage across all hard drives. When the need for more space arises, the volume could be easily expanded without any service disruption.

Reliability, Availability & Disaster Recovery

System reliability is of paramount importance to businesses which depend upon their commercial servers every day. RS3617xs 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 to applications.
- **Shared Folder Sync** replicates data in real-time to another Synology NAS at a remote location for prompt disaster recovery to meet the Recovery Time Objective (RTO) of your business
- Redundant system fans and network ports with failover support ensure continual service uptime.
- High reliability system design including fan-less CPU heat-sink and passive cooling technology prevents single point of failure.
- ECC RAM modules detect and correct errors during data transmission.
- Tool-free system fan design allows hot swap and easy exchange of malfunctioned system fans.

Connections & Buttons

Fro	nt			R	ear						
1 2 Vertex Detex				5	6	7		11	12	13	14
1	Power button and indicator	2	Beep off button	3	Drive status ind	licator	4	Drive 1	ray		
5	PSU on/off switch	6	Power port	7	PSU fan		8	Conso	le port		
9	USB 2.0 port	10	USB 3.0 port	11	1GbE RJ-45 por	t	12	Reset	outton		
13	Expansion port	14	PCIe 3.0 slot								

Technical Specifications

Hardware

CPU	Intel Xeon E3-1230v2 quad-core 3.3GHz
Hardware encryption engine	Yes (AES-NI)
Memory	4GB DDR3-1600 ECC RAM (expandable up to 32GB)
Compatible drive type	12 x 3.5" or 2.5" SATA 6Gb/s (hard drives not included)
Maximum internal raw capacity	96TB (12 x 8TB HDD) (The actual capacity will differ according to volume types)
External ports	USB 3.0 x 2, USB 2.0 x 2, Expansion port (Infiniband) x 2
Size (HxWxD)	88 mm x 445 mm x 570 mm
Weight	13.3 kg
LAN	1GbE (RJ-45) x 4
PCle 3.0 x8 slot	Two running at x8 mode, supports two dual-port 10GbE network interface cards
Wake on LAN/WAN	Yes
Wireless support (dongle)	Yes
AC input power voltage	100V to 240V AC
Power frequency	50 / 60Hz, single phase
Operating temperature	5 to 35°C (40 to 95°F)
Storage temperature	-20 to 60°C (-5 to 140°F)
Relative humidity	5% to 95% RH

General

Networking protocols	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN [*] , L2TP)
File system	Internal: Btrfs, ext4 External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT ³
Storage management	Maximum single volume size: 108TB/200TB (32GB RAM required, for RAID 5 or RAID 6 groups only); maximum internal volume: 1024, maximum iSCSI target: 64, maximum iSCSI LUN: 512, RAID clone/snapshot support; Synology Expansion Unit support: RX1217/RX1217RP
Supported RAID type	Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
File sharing capability	Maximum user account: 16000; maximum group: 512; maximum shared folder: 512; maximum concurrent SMB/AFP/FTP/File Station connections : 1024
Privilege	Windows Access Control List (ACL)
Virtualization	VMware vSphere 5, Microsoft Hyper-V, Citrix certified
Directory service	Windows AD integration: Domain Users login via Samba (SMB)/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 onwards and Mac OS X* 10.10 onwards
Supported browsers	Chrome [™] , Firefox®, Internet Explorer® 9 onwards, Safari® 8 onwards, Safari (iOS® 7 onwards on iPad®), 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, create 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: 16
FTP Server	Bandwidth control for TCP connections, custom FTP passive port range, anonymous FTP, FTP SSL/TLS and SFTP protocols, boot over the network with TFTP and PXE support, transfer logs
High Availability Manager	Combines two RS3617xs 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, DS audio, DS download, DS photo, DS video
Windows Phone® applications	DS file, DS finder, DS audio, DS download, DS photo, DS video

Add-on Packages

Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Cloud Station Server	Maximum concurrent file transfers: 1024, retain historical and deleted file versions
Cloud Sync	One or two-way synchronization with public cloud storage providers including Amazon Cloud Drive, Amazon 53-compatible storage, Baiduyun, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, Megafon Disk, Microsoft OneDrive, OpenStack Swift-compatible storage, WebDAV servers, Yandex Disk
DLNA/UPnP® Media Server	DLNA certified, PS3®/PS4®/Xbox 360®/Xbox One® support
Download Station	Supported download protocols: BT/HTTP/FTP/NZB/eMule; Maximum concurrent download task: 80
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 server solution with High-availability, load balancing, security and filtering design (Including free MailPlus licenses for 5 mail accounts. Procurement of additional licenses is required.)
Note Station	Rich-text note organization with 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
Surveillance Station	Maximum IP camera: 75 (total of 2250 FPS at 720p, H.264) (Including two free camera licenses. Procurement of additional licenses is required.)
VPN Server	Maximum connections: 30; supported VPN protocols: PPTP, OpenVPN™, L2TP
Web Station	Virtual host (up to 30 websites), PHP/MariaDB®, 3rd-party applications support
Other packages	Photo Station, Audio Station, iTunes® Server, 3rd-party packages

Environment and Packaging

Environment	RoHS compliant
Package content	RS3617xs main unit, Quick Installation Guide, accessory pack, AC power cord
Optional accessories	Camera License Pack, VS360HD, Synology RKS1317 - Rail Kit Sliding, 4GB and 8GB DDR3 ECC RAM module, Synology Expansion Unit (RX1217/RX1217RP x 2), 10Gbps Ethernet adapter E10G17-F2 / E10G15-F1
Certification	FCC: Class A, CE: Class A, BSMI: Class A
Warranty	5 years

*Model specifications are subject to change without notice. Please refer to www.synology.com for the latest information.

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

2. RS3617xs 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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