



# RackStation RS3617RPxs

Synology RackStation RS3617RPxs provides reliable, superior-performance network attached storage solution for large scale businesses with comprehensive business applications. RS3617RPxs simplifies data management, optimizes virtualization environments, and rapidly expands storage capacity with minimal time investment in setup and maintenance. Synology RS3617RPxs is backed with Synology's 5-year limited warranty.

## Highlights

- **Reliable centralized storage solution for large scale businesses**
- **Blazing performance at over 3,829 MB/s throughput and 433,873 IOPS<sup>1</sup>**
- **Intel Xeon D-1521 Quad-Core 2.4GHz turbo boost to 2.7GHz**
- **8GB DDR4-2133 ECC UDIMM, expandable up to 64GB**
- **Optional 10GbE network capability**
- **Scale up to 36 drives with Synology RX1217/RX1217RP**
- **Complete virtualization solution for VMware, Windows Hyper-V, and Citrix**
- **OpenStack Cinder support**
- **Advanced Btrfs file system offering 65,000 system-wide snapshots and 1,024 snapshots per shared folder**
- **Redundant power supplies and redesigned chassis for stronger durability and reliability**
- **Backed with Synology's 5-year limited warranty & Synology Replacement Service (SRS)**

## Blazing Performance

RS3617RPxs delivers blazing performance at over **3,829 MB/s sequential throughput** and **433,873 IOPS** under a RAID 5 configuration with 10GbE Link Aggregation enabled<sup>1</sup>. 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, RS3617RPxs comes with dual PCIe 3.0 x8 slots, allowing installation of two 10GbE Network Interface Cards (NIC) to fulfill the demand of data-intensive applications.

Equipped with **8GB DDR4 ECC UDIMM** and **up to 64GB expansion** support, RS3617RPxs 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

RS3617RPxs 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 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 Ready

RS3617RPxs provides seamless storage solutions for virtualization environments, including **VMware, Citrix, Hyper-V, and OpenStack Cinder**. With **VMware vSphere 6 and VAAI** integration certified, RS3617RPxs 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, RS3617RPxs 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. With **OpenStack Cinder** support, RS3617RPxs can be used as a block-based storage component for servers complying with the Cinder API.



### 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), RS3617RPxs comes fully-equipped 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 RS3617RPxs 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

RS3617RPxs is designed to grow with businesses and provides the ability to seamlessly expand a single volume up to **108TB** (default) / **200TB** (with at least 32GB RAM installed) on the fly.

RS3617RPxs 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 RS3617RPxs nears its 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 RS3617RPxs 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.

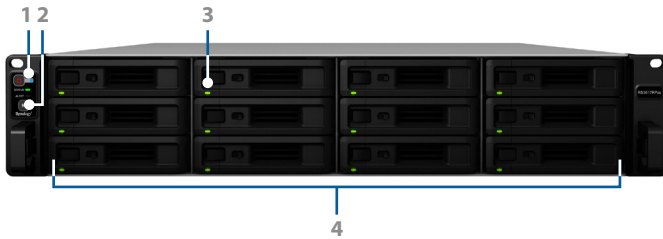
## Reliability, Availability & Disaster Recovery

System reliability is of paramount importance to businesses which depend upon their commercial servers every day. RS3617RPxs responds to these concerns with wide-ranging availability and redundancy features:

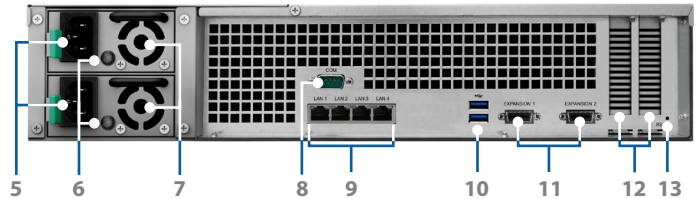
- **Synology High Availability** ensures seamless transition between clustered servers in the event of server failure with minimal impact to applications.
- **Snapshot Replication** provides schedulable, near-instantaneous data protection, ensuring business documents in shared folders, virtual machines in iSCSI LUNs, or Docker DSM data remain safe and available in the event of disaster.
- **Redundant power supplies, 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.
- **DDR4 ECC UDIMMs** reduces power consumption and detect and correct errors during data transmission.
- Tool-free system fan design allows hot swap and easy exchange of malfunctioned system fans.

# Connections & Buttons

Front



Rear



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

## Technical Specifications

### Hardware

CPU	Intel Xeon D-1521 quad-core 2.4GHz burst up to 2.7GHz
Hardware encryption engine	Yes (AES-NI)
Memory	8GB DDR4-2133 ECC UDIMM (expandable up to 64GB)
Compatible drive type	12 x 3.5" or 2.5" SATA (hard drives not included)
Maximum internal raw capacity	120TB (12 x 10TB HDD) (The actual capacity will differ according to volume types)
External ports	USB 3.0 x 2, Expansion port (Infiniband) x 2
Size (HxWxD)	88 mm x 430.5 mm x 692 mm
Weight	14.5 kg
LAN	1GbE (RJ-45) x 4
PCIe 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 <sup>3</sup>
Storage management	Maximum single volume size: 108TB/200TB (at least 32GB RAM required, for RAID 5 or RAID 6 groups only); maximum internal volume: 1,024, 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: 16,000; maximum group: 512; maximum shared folder: 512; maximum concurrent SMB/AFP/FTP/File Station connections : 2,048
Privilege	Windows Access Control List (ACL)
Virtualization ready	VMware vSphere 6, Microsoft Hyper-V, Citrix, OpenStack Cinder
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, Česky, 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 RS3617RPxs 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 get, DS photo, DS video
Windows Phone® applications	DS file, DS finder, DS audio, DS get, 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: 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
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 2,250 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	RS3617RPxs main unit, Quick Installation Guide, accessory pack, AC power cord x 2
Optional accessories	Camera License Pack, VS360HD, Synology RKS1317 - Rail Kit Sliding, 8GB and 16GB DDR4-2133 ECC UDIMM 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](http://www.synology.com) for the latest information.

1. Performance figures may vary depending on environment, usage and configuration.
2. RS3617RPxs 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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