Synology®

RackStation RS3614xs+

Synology RackStation RS3614xs+ provides the reliable, superior-performance network attached storage solution for enterprises seeking uninterrupted service with comprehensive business applications. Scalable up to 216TB, Synology RackStation RS3614xs+ simplifies data management, optimizes virtualization environments, and rapidly expands storage capacity with minimal time investment in setup and maintenance. Synology RS3614xs+ is backed with Synology's 5-year limited warranty.

Highlights

- Blazing performance at over 3,200 MB/s throughput and 620,000 IOPS[1]
- Superior encryption acceleration with AES New Instructions at over 3,200 MB/s[1]
- Scale up to 36 HDDs with Synology RX1214/RX1214RP
- SATA III 6Gb/s interface support
- Dual PCIe slots for dual 10GbE NIC support
- Easy fan replacement and easy installation with optional screwless rail kit
- VMware®, Citrix®, and Microsoft® Hyper-V® certified
- SSD Cache Technology boosts throughput
- High Availability and Disaster Recovery solutions
- Running on Synology DiskStation Manager (DSM)

Blazing Performance

RS3614xs+ delivers blazing performance at over 3,200 MB/s throughput and 620,000 IOPS under RAID 5 configuration with VLAN[1]. Through advanced flash technology, the combination of hard drives and read-optimized SSD cache boosts throughput efficiently while minimizing cost per gigabyte. In addition, RS3614xs+ comes with native SATA III 6Gb/s support that unleashes the full potential of blazing fast SSDs, ensuring the optimum data process under heavy system loading.
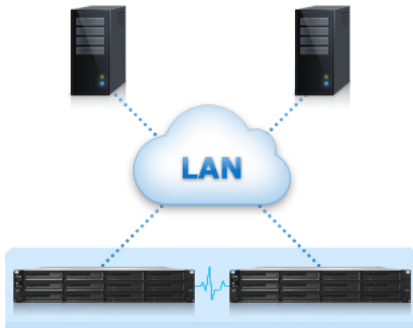
In addition to default 4 Gigabit ports, RS3614xs+ comes with dual PCI Express Gen3 x8 slots, allowing installation of dual 10GbE Network Interface Cards (NIC)for maximized bandwidth, bringing you the superior performance that data-intensive applications demand of your storage system.

Equipped with 8GB RAM and up to 32GB ECC RAM expansion support, RS3614xs+ ensures data accuracy as well as superior performance to provide a rigorous foundation for the mission-critical tasks of your business.

Comprehensive Business Applications

Powered by the innovative Synology DiskStation Manager (DSM), RS3614xs+ 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 RS3614xs+ 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 3,200MB/s in reading.

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.

Robust Scalability

With 12 HDD trays and up to 216TB of total storage capacity[2], RS3614xs+ is designed to grow with businesses and provides the ability to seamlessly expand a single volume up to 108TB on the fly.

RS3614xs+ 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 RS3614xs+ nears it limit, expansion is easily accomplished with Synology RX1214/RX1214RP via specially-designed connection cables to maximize data transmission throughput between main server and expansion units.

Management of the large storage space on RS3614xs+ 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. RS3614xs+ 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 data paths, 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.
- 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. With the brand-new screwless rail kit sliding: Synology RKS1314 (optional), system installation and maintenance is fast and easy.
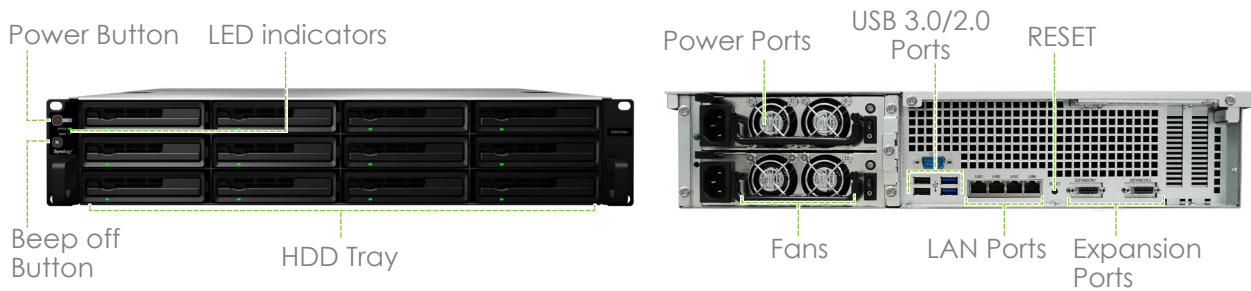
Unified Storage System

By integrating file-level (NAS) and block-level (SAN) storage into one unified storage system, RS3614xs+ enables businesses to cost-effectively manage multi-protocol data and reduce total cost of ownership:

- Comprehensive network protocol support (CIFS/SMB, AFP and NFS) ensures seamless file sharing across Windows, Mac®, and Linux® platforms.
- Affordable and cost-effective iSCSI allows large scale business to consolidate storage into data center storage arrays.
- Thin provisioning, available for file-level iSCSI LUN, maximizes storage utilization by enabling administrators to oversubscribe provision and grow storage space as needed.

Virtualization Certified

RS3614xs+ provides seamless storage solutions for virtualization environments, including VMware, Citrix, and Hyper-V. With VMware vSphere 5 and VAAI integration certified, RS3614xs+ 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, RS3614xs+ 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 extremely improves the efficiency on massive data transfer and migration.

Connections & Buttons

Power Button   LED indicators   Power Ports   USB 3.0/2.0 Ports   RESET

Beep off Button   HDD Tray   Fans   LAN Ports   Expansion Ports

Technical Specifications

Hardware

CPU	Intel Xeon E3 Quad Core 3.3GHz
Hardware Encryption Engine	Yes (AES-NI)
Floating Point	Yes
Memory	8GB ECC RAM(Expandable, up to 32GB)
Internal HDD/SSD	3.5" or 2.5" SATA(III) / SATA(II) X 12 (hard drives not included)
Max Internal Capacity	72TB (12 X 6TB HDD) (The actual capacity will differ according to volume types)
External Ports	USB 3.0 X 2, USB 2.0 X 2, Expansion Port X 2
Size (HxWxD) (mm)	88 X 445 X 570
Weight	15.5 Kg
LAN	Gigabit X 4 (optional 10GbE add-on card X 2 is supported)
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°C to 35°C (40°F to 95°F)
Storage Temperature	-10°C to 70°C (15 to 155°F)
Relative Humidity	5% to 95% RH

General

Networking Protocols	CIFS, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
File System	Internal: EXT4 External: EXT4, EXT3, FAT, NTFS, HFS+
Storage Management	Max File System Size: 108TB, Max Internal Volume #: 1024, Max iSCSI Target #: 128, Max iSCSI LUN#: 512, RAID Clone/Snapshot support; Supported RAID Type : Synology Hybrid RAID, Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10; Synology Expansion Unit Support: RX1214 & RX1214RP
File Sharing Capability	Max User Account: 16000, Max Group: 512, Max Shared Folder: 512, Max Concurrent CIFS/AFP/FTP 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 (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 Assistant, Synology Data Replicator 3
Supported Clients	Windows XP onward, Mac OS X® 10.5 onward, Ubuntu 9.04 onward
Supported Browsers	Chrome®, Firefox® Internet Explorer®: 8 or later, Safari® 5 or later, Safari (iOS 5 or later on iPad®), Chrome (Android™ 4.0 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

Add-on Packages

Surveillance Station	Default IP cam #: 2, MAX IP cam # (licenses required): 90 (with two free licenses to install two IP cameras. Additional licenses can be purchased to expand the license quota.)
Directory Server	LDAP Directory Server, Backup and Restore LDAP Database
VPN Server	Maximum Connections: 30, VPN Method: PPTP, OpenVPN, L2TP
DHCP Server	Independent DHCP Server on Different Network Interfaces, Multiple Subnets Support, Address Reservation
Syslog Server	SSL Connection, Log Rotation: 6 months, 1 year, 2 years, 3 years, Email Notification
Mail Station	Webmail Interface for Mail Server, Receiving Mails from Multiple POP3 Mailboxes, Customizable SMTP Server
Antivirus Essential	Full System Scan, Scheduled Scan, White List Customization, Virus Definition Auto Update
Time Backup	Maximum Task Number: 16, Multiple File Versions Retained, Instant File Restoration
Cloud Station	Maximum Concurrent File Transfers: 1024, Retain Historical and Deleted File Versions
Download Station	Supported Download Protocols: BT/HTTP/FTP/NZB/eMule Maximum Concurrent Download Tasks : 80
Other Packages	Photo Station, Audio Station, iTunes® Server, 3rd-party packages

Applications

File Station	Virtual Drive, Remote Folder
Backup Solutions	Network Backup, Local Backup, Desktop Backup (Window: Synology Data Replicator; Mac: Apple® Time Machine® backup application); Shared Folder Sync - Max Task Number : 32, Configuration Backup
Mail Server	Supported Mail Server Protocols: POP3, SMTP, IMAP
FTP Server	Bandwidth Control, Custom FTP Passive Port Range, Anonymous FTP, Transfer Log
Web Station	Virtual Host (up to 30 websites), PHP/MySQL®, 3rd-Party Applications Support
Printer Server	Max Printer #: 2, Printing Protocols: LPR, CIFS, IPP, Apple iOS Printing, Google Cloud Print™, Multi Functional Print Server (MFP functions are for Windows PC only)
iOS/Android Applications	DS audio, DS cam, DS cloud, DS download, DS file, DS finder, DS photo+, DS video
Windows Phone Applications	DS audio, DS finder, DS photo+, DS video, DS file

Environment and Packaging

Environment	RoHS Compliant
Package Content	RS3614xs+ Main Unit, Welcome Note, Accessory Pack, AC Power Cord x 2
Optional Accessories	Remote, Camera License Pack, Synology RKS1314 - Rail Kit Sliding, 4GB and 8GB ECC RAM Module, Expansion Unit (RX1214/RX1214RP X 2)
Warranty	5 years

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

1. Tested with 4 X 10 GbE connections using VLAN and fully loaded with Intel 520 Series 240GB 2.5" SSD. Performance may vary depending on the environment.
2. RS3614xs+ supports up to two Synology RX1214/RX1214RP, purchased separately.

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