Synology RackStation RS3411xs/RS3411RPxs

Ultra-High performance NAS Server Scales up to 100TB for Large Scale Business

Synology® RackStation RS3411xs/RS3411RPxs offers an ultra-high performance, scalable, and full-featured network attached storage solution for large scale businesses that require an efficient way to centralize data protection, simplify data management, deploy virtualization solutions, and rapidly expand storage capacity with minimal time spent on setup and management. The Synology RS3411xs/RS3411RPxs is backed with Synology's 3-year limited warranty.

Highlights

- Ultra-high performance of 1000+ MB/sec throughput and 100,000+ IOPS[1]
- Scale up to 100TB with Synology RX1211/RX1211RP[2]
- Dual 10GbE or additional 4 Gigabit ports support (with add-on card)
- Compatible with VMWare, Citrix, and Microsoft Hyper-V
- Expandable ECC RAM module (up to 8GB)
- Running on Synology DiskStation Manager (DSM) with various business features

Ultra-High Performance and Data Availability

With Link Aggregation, Synology RS3411xs/RS3411RPxs delivers the high performance of over 1000 MB/sec throughput and 100,000 IOPS under RAID 5 configuration[1]. In addition to the default 4 Gigabit ports, dual 10GbE or 4 Gigabit ports on the add-on Network Interface Card are supported to maximize the system bandwidth. The network ports with failover support combining with hot-swappable drives will ensure continual service uptime during drives replacement or unexpected LAN failure.

The ECC RAM module on RS3411xs/RS3411RPxs will detect and correct errors that occur during data transmission. RS3411xs/RS3411RPxs supports up to 8GB RAM, providing ultra-high performance.

Businesses need a strong foundation to face mission-critical tasks. With high-performance, secure data protection, and high data availability, Synology RS3411xs/RS3411RPxs meets exactly what businesses need.

Robust & Affordable Scalability Up to 100 TB

Synology RS3411xs/RS3411RPxs is also designed to grow with your business and provides the ability to seamlessly expand a single volume up to 100TB on the fly. When the storage capacity of the Synology RS3411xs/RS3411RPxs is nearing its limits, it can easily be expanded by the Synology RX1211 or RX1211RP[3]. The Synology RX1211 or RX1211RP connects to the Synology RS3411xs/RS3411RPxs via an Infiniband cable that carries 12 Gb/s SATA signal to ensure maximum throughput.

Flexible Storage Management

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 arises to expand the volumes, simply allocate more storage space on the UI and DSM does the rest for you without any service disruption.

iSCSI and Virtualization Ready

With the iSCSI support in DSM, the Synology RS3411xs/RS3411RPxs provides a seamless storage solution for virtualization servers, such as VMware, Citrix and Hyper-V. It is the ideal alternative to SAN solution for businesses. Affordable and cost-effective iSCSI allows large scale business to consolidate storage into data center storage arrays while providing hosts with the illusion of locally-attached disks.

Thin Provisioning is available for file-level iSCSI, enabling administrators to oversubscribe provision and then grow storage space as needed in safety. With Thin Provisioning users are able to maximize the storage utilization to reduce the total cost of ownership for the storage system.

Complete Backup Solutions

The Synology RS3411xs/RS3411RPxs offers a centralized backup target to consolidate fragmented and unstructured data across the network. Integrating easily into a current network structure and compatible with Windows®, Mac®, and Linux systems, the RS3411xs/RS3411RPxs provides the entire office data redundancy and protection. PC Users can back up their data to the Synology RS3411xs/RS3411RPxs using the free Synology Data Replicator software, while Mac OS X users enjoy native Apple® Time Machine® integration. A backup wizard is also provided for backing up data in the RS3411xs/RS3411RPxs to another Synology DiskStation, expansion unit, any rsync server via an encrypted transmission, or to an external hard drive via USB connection. Furthering options, the wizard also makes it easy to backup to the cloud via Amazon® S3.

Fit to Business Environment

Windows ADS integration allows the Synology RS3411xs/RS3411RPxs to quickly and easily fit in an existing Windows ADS environment.

Moreover, Windows ACL support on RS3411xs/RS3411RPxs provides much finer-grained access control and efficient privilege settings, allowing IT staffs to set up privileges to files and folders on RS3411xs/RS3411RPxs through their familiar Windows user interface.

Full-featured Business Applications

The Synology RS3411xs/RS3411RPxs runs on the renowned operating system, Synology DSM, offering comprehensive applications and features designed specifically for large scale business. Comprehensive network protocol support assures seamless file sharing across Windows, Mac, and Linux platforms.

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 at a high security level.

Synology Surveillance Station offers a centralized interface to safeguard the office environments by deploying up to 40 IP cameras throughout the network. There are several features to customize your surveillance solution including video live-view, video recording, event playback, intelligent event search, and PTZ. The AJAX-based web interface provides the ability to observe your environment anytime and anywhere.
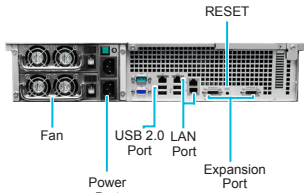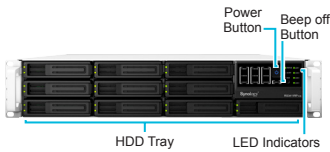
RS3411xs/RS3411RPxs   RX1211/RX1211RP

CONNECTIONS & BUTTONS

Power Button
Beep off Button

HDD Tray
LED Indicators

RESET

Fan
USB 2.0 Port
LAN Port
Expansion Port

Power Port

Technical Specifications

Hardware

- CPU: Dual Core 3.1GHz, with floating point
- RAM Size: ECC RAM 2GB
- Internal HDD[4]: 10X 3.5" SATA(II) or 10X 2.5" SATA/SSD
- External HDD Interface: 4X USB ports
- Expansion Interface: 2X Expansion port
- Size: (H X W X D)
  - RS3411xs: 88mm X 445mm X 570mm
  - RS3411RPxs: 88mm X 445mm X 570mm

- Weight:
  - RS3411xs: 12.77kg
  - RS3411RPxs: 14.87kg
- LAN: 4X Gigabit (10GbE X2 or Gigabit X4 add-on card is supported)
- Wireless Support[5]
- Fan: 4X (80mm X 80mm)
- Wake on LAN
- Power Recovery
- AC Input Power Voltage: 100V to 240V

- Power Frequency: 50Hz to 60Hz, Single Phase
- Max Internal Capacity: 30TB (10X 3TB hard drives)[6]
- Operating Temperature: 5°C to 35°C (40°F to 95°F)
- Storage Temperature: -10°C to 70°C (15°F to 155°F)
- Relative Humidity: 5% to 95% RH
- Max Operating Altitude: 10,000 feet
- Power Consumption[7]: 128W (Access); 78W (HDD Hibernation)
- Certification: FCC Class A, CE Class A

Applications

File Station

FTP Server
- Bandwidth Control
- Custom FTP Passive Port Range
- Anonymous FTP
- Transfer Log

Mail Server
- Supported Mail Server Protocol : POP3, SMTP, IMAP

Web Station
- Virtual Host (up to 30 websites)
- PHP/MySQL
- Alternative HTTP Error Page
- 3rd-Party Applications Support

Surveillance Station
- Default IP cam #: 1
- MAX IP cam # (licenses required): 40[8]

Photo Station
- Supported Image Format: BMP, JPG (jpe, jpeg), GIF, RAW (arw, srf, sr2, dcr, k25, kdc, cr2, crw, nef, mrw, ptx, pef, raf, 3fr, erf, mef, mos, orf, rw2, dng, x3f)
- Supported Video Format[9]: 3G2, 3GP, ASF, AVI, DAT, DivX, FLV, M4V, MOV, MP4, MPEG, MPG, QT, WMV, XviD, RM, RMVB, VOB, RV30, RV40, AC3, AMR, WMA3

Download Station
- Supported Download Protocols: BT/HTTP/FTP/NZB/eMule
- Custom BitTorrent Port Range
- BitTorrent / eMule Bandwidth Control

Audio Station
- Supported Audio Format: (USB Mode) AAC, FLAC, M4A, MP3, Ogg Vorbis, WMA, WMA VBR; (Streaming Mode) MP3, M4A, M4B
- Supported Playlist Format: M3U, WPL
- Internet Radio: SHOUTcast, Radioio

DLNA/UPnP Media Server
- PS3/Xbox 360 Support
- Supported Audio Format: AAC, FLAC, M4A, MP3, Ogg, Vorbis, PCM, WAV, WMA, WMA VBR, WMA PRO, WMA Lossless
- Supported Video Format: 3GP, 3G2, ASF, AVI, DAT, DivX, DVR-MS, ISO, M2T, M2TS, M4V, MKV, MP4, MPEG1, MPEG2, MPEG4, MTS, MOV, QT, SWF, TP, TRP, TS, VOB, WMV, XviD, RV30, RV40, AC3, AMR, WMA3
- Supported Image Format: BMP, JPG (jpe, jpeg), GIF, ICO, PNG, PSD, TIF (tiff), UFO, RAW (arw, srf, sr2, dcr, k25, kdc, cr2, crw, nef, mrw, ptx, pef, raf, 3fr, erf, mef, mos, orf, rw2, dng, x3f)

Supported Subtitles Format: srt, psb, smi, ass, ssa, sub, idx, ifo

iTunes Server
- Supported Audio Format[10]: MP3, M4A, M4P, WAV, AIF
- Supported Video Format: M4V, MOV, MP4
- Supported Playlist Format: M3U, WPL

Printer Server[11]
- Max Printer #: 2
- Printing Protocols: LPR, CIFS, AppleTalk, , AirPrint, Multi Functional Print Server

Synology Packages
- Mail Station 2
- Squeezebox Server
- Webalizer
- phpMyAdmin
- Time Backup
- HASP

iPhone/Android Applications
- DS photo+
- DS audio
- DS cam
- DS file (iPhone only)

General Specifications

Networking Protocols
- CIFS, AFP, FTP, iSCSI, Telnet, SSH, NFS, SNMP

File System
- EXT4
- EXT3 (External Disk Only)[12]
- FAT (External Disk Only)[12]
- NTFS (External Disk Read Only)[12]

Volume Management
- Synology Hybrid RAID
- Max Volume #: 1024
- Max iSCSI Target #: 64
- Max iSCSI LUN #: 512
- Volume Type: Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 5+Spare, RAID 6, RAID 10
- RAID Migration: from Basic to RAID 1, Basic to RAID 5, Basic to RAID 5+Spare, RAID 1 to RAID 5, RAID 1 to RAID 5+Spare, RAID 5 to RAID 5+Spare, RAID 5 to RAID 6
- Expand RAID 1, RAID 5, RAID 5+Spare or RAID 6 with Larger Hard Drives
- Expand RAID 5, RAID 5+Spare or RAID 6 by Adding a Hard Drive On The Fly

File Sharing Capability
- Max User Account: 4096
- Max Group: 512
- Max Shared Folder: 512
- Max Concurrent Connections (SAMBA, FTP, AFP): 1024

Windows ADS Domain Integration
- Domain Users login via Samba/AFP/FTP/File Station

Backup Solutions
- Network Backup
- Local Backup
- Desktop Backup (using Synology Data Replicator 3 or Apple Time Machine backup application)
- 3rd-Party Backup Support

Security
- FTP over SSL/TLS
- IP Auto-Block
- Firewall
- Encrypted Network Backup over Rsync
- HTTPS Connection

Management
- DSM Upgrade
- Email Notification
- SMS Notification
- Customized User Quota
- DDNS Support
- PPPoE
- Resource Monitor
- UPS Management
- Scheduled Power On/Off
- Custom Management UI HTTP/HTTPS Ports

HDD Management
- HDD Hibernation
- S.M.A.R.T.
- Dynamic Bad Sector Mapping

Utilities
- Synology Assistant
- Synology Data Replicator

Support Browsers
- Internet Explorer 7/8/9
- Firefox 3.5/3.6
- Safari 4/5 (Mac)
- Chrome

Supported Clients
- Windows 2000 onward
- Mac OS X 10.3 onward
- Ubuntu 9.04 onward

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

Environment and Packaging

Environment
- RoHS Compliant

Package Content
- RS3411xs/RS3411RPxs Main Unit
- Installation DVD

- Welcome Note
- Assembling Kit
- AC Power Cord
  - RS3411xs: x 1
  - RS3411RPxs: x 2

Optional Accessories
- Remote
- Camera License Pack
- Rail Kit
- L-type Mounting Brackets
- Expansion Unit (RX1211/RX1211RP)

1. Tested with dual 10GbE connection with Link Aggregation. The performance figures could vary on different environments.
2. Purchase separately.
3. RS3411xs/RS3411RPxs supports up to 2 Synology RX1211 or RX1211RP.
4. Hard drive not included.
5. Wireless dongles not included. Please check http://www.synology.com/ for supported wireless dongloes.

6. The actual capacity will differ according to volume types.
7. Measured with 10 Western Digital 3TB WD30EZRS hard drive. The figures could vary on different environments.
8. 1 free license to install 1 IP camera. Additional licenses can be purchased to expand the license quota.
9. User can click and download the following video formats: RM, RMVB, VOB, RV30, RV40, AC3, AMR, WMA3, but not able to play it in Photo Station as compressed Flash video.

10. The music in WAV and AIF format can be streamed, but the metadata (ex: title, album) may not be indexed on the iTunes.
11. For Mac users, RS3411xs/RS3411RPxs supports PostScript USB printers only.
12. Primary partition only.

Networking

External Disk

RS3411xs/RS3411RPxs

USB Printer

RS3411xs/RS3411RPxs

Wireless Router

Windows ADS Server

PC / Mac / Linux

PC / Mac / Linux

IP Camera

SYNOLOGY INC.

Founded in 2000, Synology is a young and energetic company dedicated to developing high-performance, reliable, versatile, and environmentally-friendly Network Attached Storage (NAS) products. Our goal is to deliver user-friendly solutions and solid customer service to satisfy the needs of businesses, home offices, individual users and families.

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