Datasheet

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RackStation

RS3621RPxs

RS3621RPxs

Accelerating Business Workloads with Enterprise-Grade Data Protection

The Synology RackStation RS3621RPxs is a powerful 12-bay 2U storage solution with built-in redundant power. Engineered to deliver high throughput and robust data protection, its 6-core processor enables it to handle the demanding workloads of modern business environments. DiskStation Manager (DSM) provides comprehensive software solutions covering file management, data protection, surveillance, collaboration, virtualization and more.

- **Powerful Performance**
  Over 315,000 random read IOPS and 4,600 MB/s sequential read performance[1]

- **Powerful Compute**
  Host multiple compute-intensive services with its 6-core Intel® processor

- **Upgradability**
  Two PCIe expansion slots allow for M.2 NVMe cache adapters and high-bandwidth network cards[2]

- **Redundant Power**
  Ensure business continuity with two redundant power supplies

- **On-demand Scalability**
  Supports up to 36 drive bays using two RX1217RP/RX1217[3]

- **Warranty**
  Comes with Synology's 5-year warranty[4]

Built to Handle Intensive Workloads

Synology RackStation RS3621RPxs is built to deliver exceptional performance, flexibility, and scalability to meet the requirements of businesses.

- Over **315,000** 4K random read IOPS and **4,600 MB/s** sequential read performance for demanding workloads[1]
- Featuring 12 drive bays supporting both SATA HDD/SSD 2.5/3.5" drives[5], expandable to 36 bays using two Synology RX1217RP/RX1217 expansion units[3]

Optimized for Data Protection and Integrity

Powered by Synology DSM, our unified data management operating system, and built upon the Btrfs file system, data stored on the RS3621RPxs is safely guarded by modern data protection technologies.

- **Advanced snapshots technology** provides schedulable and near-instantaneous data protection of shared folders and LUNs
- **File and folder-level data restoration** enables restoration of specific files or folders
- **Flexible storage quota system** helps admins effortlessly manage available space by specifying storage limits for shared folders
- **File self-healing** detects and recovers corrupted files using mirrored metadata and RAID configurations
- **Inline compression** compresses data before writing it to the drive, reducing write commands and optimizing storage space

Virtualization and Certified Storage

DSM streamlines the provisioning and management of storage for virtual machines (VM). Certified for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack, it integrates with your virtualization platform of choice through iSCSI or NFS protocols. Install Synology Storage Console on VMware or Windows platforms for additional management convenience and functionality right in the hypervisor.

Synology Virtual Machine Manager (VMM) is a hosted hypervisor for virtual machines running Windows®, Linux®, or virtualized versions of DSM with recovery mechanisms that ensure data protection on each VM[6].

Data Backup Solutions for IT Infrastructure

- **Synology Active Backup Suite** is a collection of license-free backup solutions built to protect Windows PCs and servers, VMs, other file servers, and cloud-based storage.
- **Active Backup for Business (ABB)** consolidates backup tasks for physical and virtual environments and enables rapid restoration of files, entire physical machines, and VMs.
- **Active Backup for Google Workspace** enables backup of Google Workspace data including Gmail, Contacts, Calendar, and Drive.
- **Active Backup for Microsoft 365** enables backup of Microsoft 365 data including OneDrive for Business, SharePoint Online, emails, contacts, and calendar.

On-Premises Collaboration

Synology's collaboration suite is a private SaaS for file sharing, concurrent document editing, emails, instant messaging, and more. By leveraging a private cloud infrastructure, it ensures data ownership while multilayered security enables secure multi-platform access.

- **Synology Drive** allows data access, synchronization, on-demand file restoration, and backup.
- **Synology MailPlus**[7] provides a secure, reliable, and private email server.
- **Synology Chat** brings teams together through instant multi-platform communication.
- **Synology Calendar** helps teams keep track of what is most important with convenient calendar sharing and scheduling.
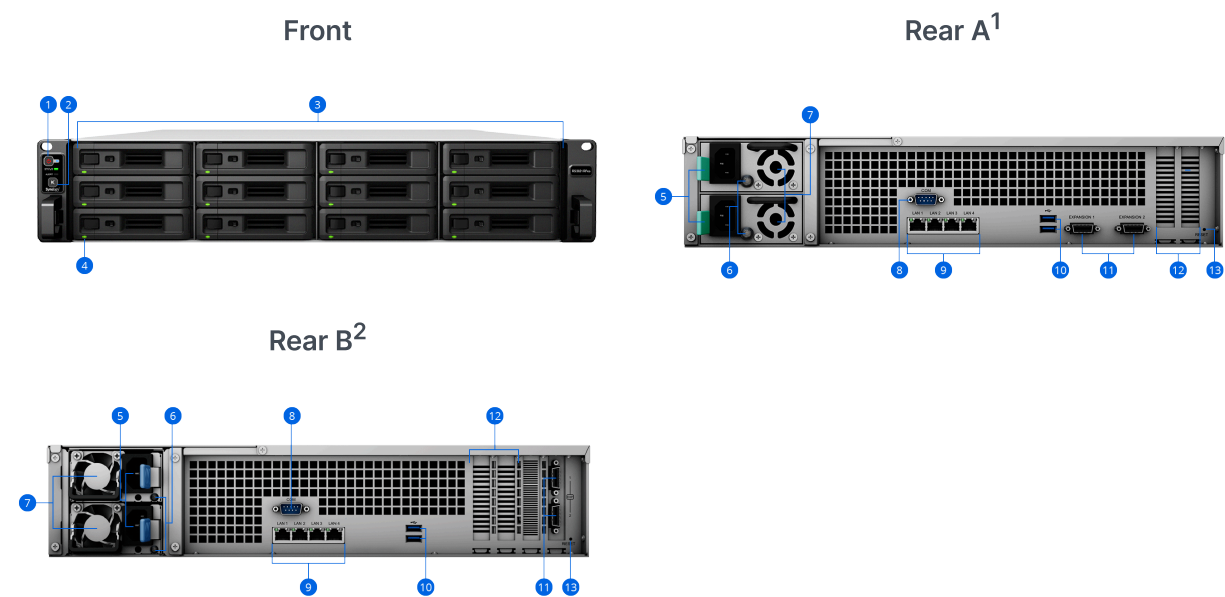
Private Video Surveillance

With Synology Surveillance Station, the RS3621RPxs becomes a powerful Network Video Recorder solution with support for up to 75 IP cameras[8].

- 7,900+ supported camera models
- ONVIF support to prevent vendor lock-in
- Private, subscription-free storage of the recordings
- Access through web browser, dedicated desktop clients, or mobile app
- Event-based rules to trigger specific actions
- Email, SMS, or push notification systems

Notes:

1. Performance figures obtained through internal testing by Synology. Actual performance may vary depending on the testing environment, usage, and configuration.

2. For the most up-to-date list of compatible NICs, please check our compatibility (http://sy.to/rs3621xspdscn) list.

3. RS3621RPxs supports up to 36 drives with two Synology RX1217RP/RX1217 (http://sy.to/rs3621xspdseu) expansion units, sold separately.

4. The warranty period starts from the purchase date as stated on your purchase receipt. Learn more (http://sy.to/rs3621xspw) about our limited product warranty policy.

5. Check our compatibility list (http://sy.to/rs3621xsphdc) for supported drives.

6. Certain advanced features require Virtual Machine Manager Pro (http://sy.to/rs3621xspvmmp) . One Virtual DSM license (http://sy.to/rs3621xspvdsml) is included, licenses are required for running additional instances.

7. Five MailPlus licenses are included, licenses required for additional user accounts. Learn more (http://sy.to/rs3621xspdsmplp) about licenses.

8. Surveillance Station includes two free licenses. Connecting more cameras and devices requires additional licenses (http://sy.to/rs3621xspssl) .

Hardware Overview

Front

Rear A[1]

Rear B[2]

No.	Name	No.	Name
1.	Power button and indicator	8.	Console port
2.	Alert Off Button	9.	1GbE RJ-45 Port
3.	Drive tray	10.	USB 3.2 Ports
4.	Drive status Indicator	11.	Expansion port
5.	Power Port	12.	PCIe expansion slot
6.	PSU Indicators & Alert Off Buttons	13.	Reset button
7.	PSU fan		

Notes:

1. On models with the 5th to 7th digits of serial number being SYR. Refer to the Product Change Notification for more information.

2. On models with the 5th to 7th digits of serial number being UTR. Refer to the Product Change Notification for more information.

Technical Specifications

Hardware

CPU	
CPU Model	Intel Xeon D-1531
CPU Quantity	1
CPU Core	6
CPU Architecture	64-bit
CPU Frequency	2.2 (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 SSD
Hot Swappable Drive	Yes
Notes	Synology only guarantees full functionality, reliability, and performance for Synology drives listed on the compatibility list. The use of non-validated components may limit certain functionality and result in data loss and system instability.

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	100 V to 240 V AC
Power Frequency	50/60 Hz, Single Phase

Temperature

Operating Temperature	0°C to 35°C (32°F to 95°F)
Storage Temperature	-20°C to 60°C (-5°F to 140°F)
Operating Humidity	8% to 80% RH
Storage 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)	1,000
Windows Access Control List (ACL) Integration	Yes
NFS Kerberos Authentication	Yes

Account & Shared Folder

Maximum Local User Accounts	5,120
Maximum Local Groups	512
Maximum Shared Folder	512
Maximum Shared Folder Sync Tasks	16

Virtualization

VMware vSphere	ESXi 8.0 U2, ESXi 8.0 U1, ESXi 8.0, ESXi 7.0 U3, ESXi 7.0 U2, ESXi 7.0 U1, ESXi 7.0, ESXi 6.7 U3, ESXi 6.7 U2, ESXi 6.7 U1, ESXi 6.7, ESXi 6.5 U3, ESXi 6.5 U2, ESXi 6.5 U1, ESXi 6.5
Microsoft Hyper-V	Windows Server 2022, Windows Server 2019, Windows Server 2016
Citrix XenServer	XenServer 8, Citrix Hypervisor 8.2 LTSR CU1
OpenStack	Cinder

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 AI Console	
Centralize AI management with flexible configurations for AI model integration, user access control, data privacy, usage policies, and resource allocation	
Third-Party AI Model Integration	v
Maximum De-Identification Rate	1,000 words per second
Notes	• De-identification performance measurement: Filters for Credit Card Numbers, IBAN, Individual Taxpayer Identification Number, SSN, and Names applied to a 4,355-word English text. • To enable de-identification, your device must have at least 8 GB of memory and Container Manager installed.

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	1,900
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

Synchronize data across multiple sites for fast and efficient multi-site teamwork. Powered by Synology C2 Storage, Hybrid Share requires purchase of a monthly or annual subscription

SAN Manager

Maximum iSCSI Target Number	128
Maximum LUN	256
LUN Clone/Snapshot, Windows ODX	Yes

Virtual Machine Manager

Recommended Virtual Machine Instances	12 (Learn more)
Recommended Virtual DSM Number (Licenses required)	12 (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	512
Maximum of System Snapshots	16,384

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	1,900

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	2,200

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	16

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 2 • 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 • 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)