

# RackStation RS3621RPxs



**Brand:** Synology  
**Product Code:** RS3621RPxs  
**Availability:** 10  
**Weight:** 14.50kg  
**Dimensions:** 88.00mm x 482.00mm x 724.00mm  
**Call for Price:**

## Short Description

Synology 12 bay RackStation RS3621RPxs (Diskless)

## Description

### Safeguard your business assets

Synology RS3621RPxs is a powerful 12-bay storage server. Its 6-core processor enables compute-intensive services while its redundant power, ECC memory, and Btrfs file system safeguard mission-critical data. Capable of delivering 189,098 4K random read IOPS and 4,718 MB/s sequential read throughput<sup>1</sup>, it is ideal for small businesses.



Intel® Xeon® D-1531 6-core 2.2 GHz



## **Throughput**

4,718 MB/s seq. read 189,098 4K random read IOPS<sup>1</sup>



## **Expandability**

Dual PCIe slots for 10GbE or NVMe cache



## **Scalability**

Up to 36 drive bays with RX1217RP/RX1217

## **Reliability first**

Service continuity is at the core of the RS3621RPxs design.

## **Redundant power**

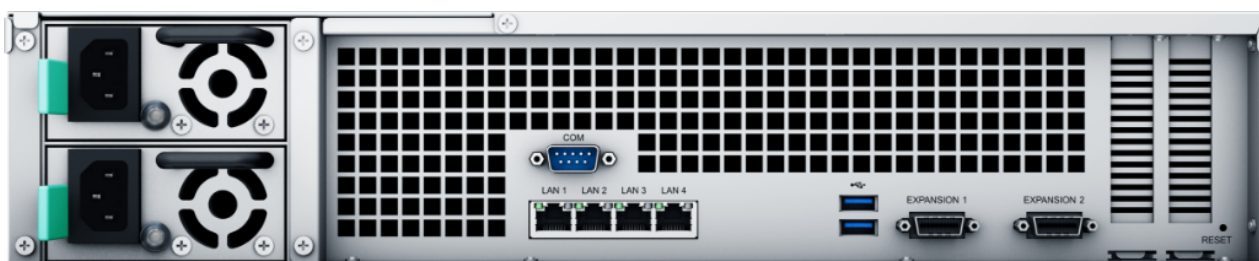
Dual PSUs provide protection against a PSU failure or accidental cord removal while hot-swappable fans can be replaced without powering down the system.

## **Near-zero downtime**

Synology High Availability (SHA) pairs two identical units together creating an active-passive cluster with minute-level failover.

## **Next-generation file system**

Btrfs prevents data corruption and reduces maintenance overheads with advanced storage technologies and optimized snapshots.



## **Customize to suit**

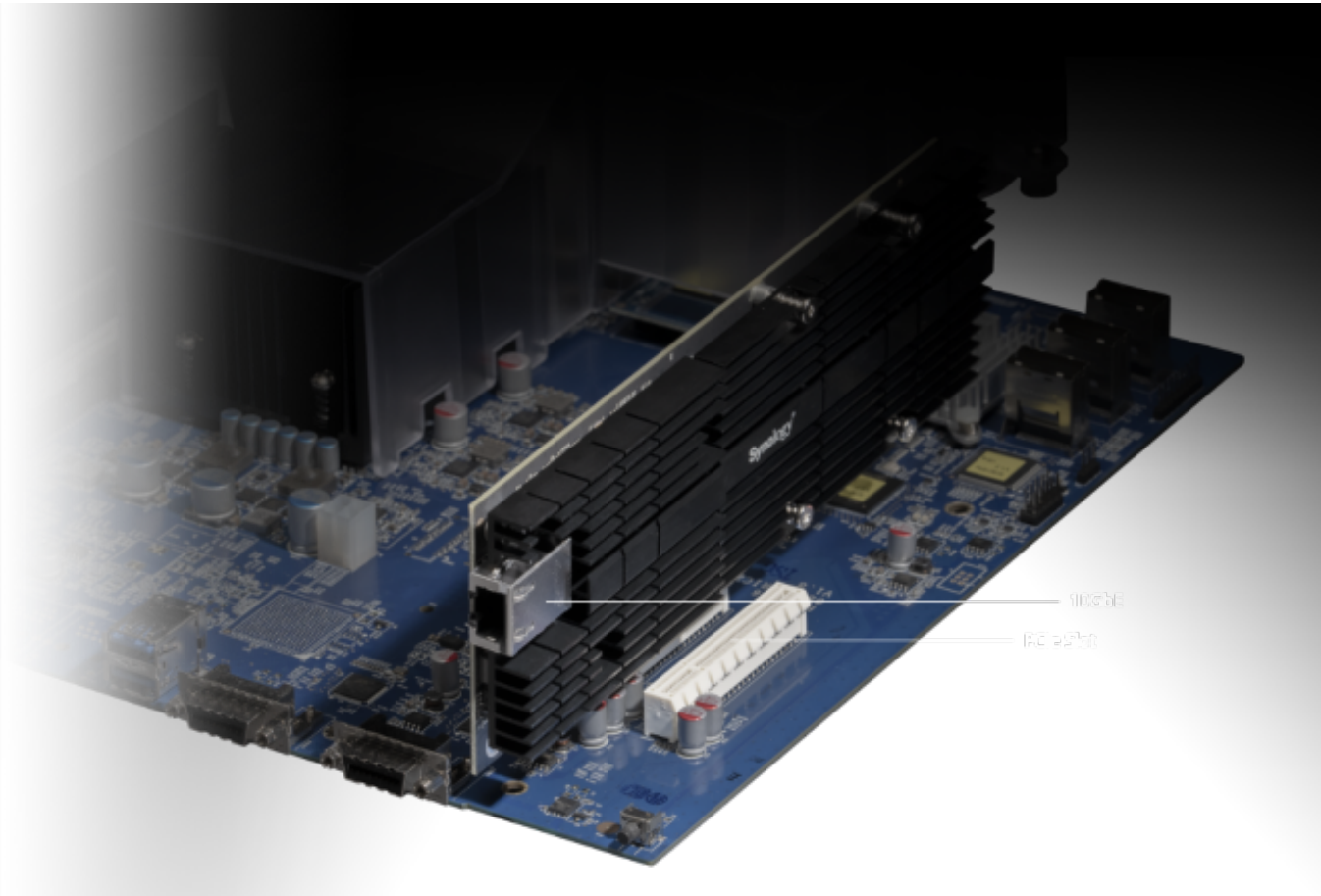
The two built-in PCIe slots allow users to customize the RS3621RPs to satisfy unique performance, networking, and storage requirements.

## **10GbE ready**

Support for 10GbE NICs expands the throughput of the unit by up to 5x times using link aggregation.

## **SSD cache**

# On-demand drive bays



## License-free backup solutions

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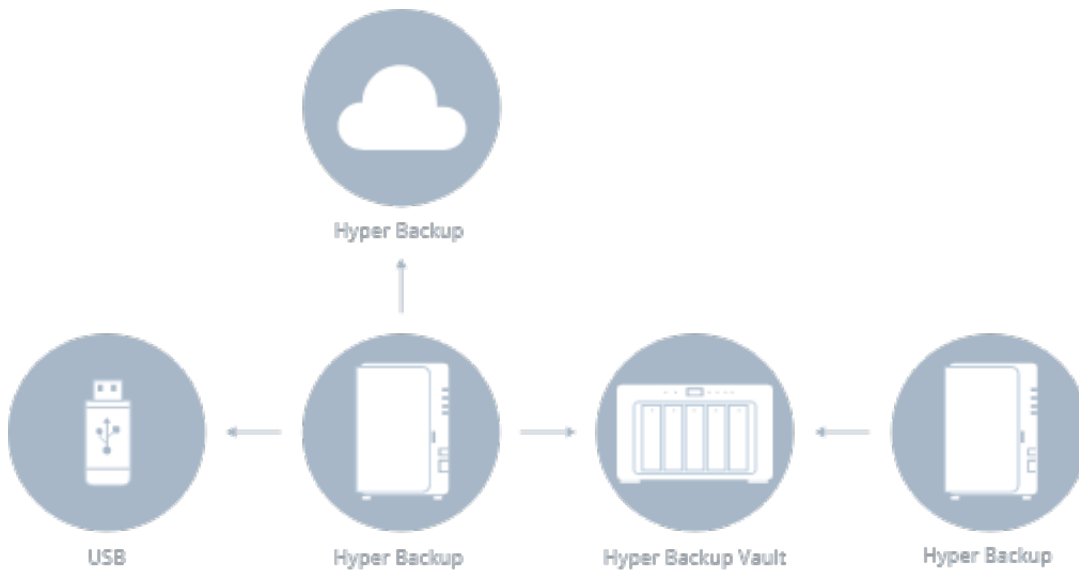
### Keep disaster at bay

#### Hyper Backup

A comprehensive backup and recovery solution for securing data stored on Synology servers. Backup data locally, to another Synology device, rsync server, or cloud-based storage such as Google Drive, Dropbox, S3-compatible destinations, and [Synology C2](#). Deduplication<sup>4</sup>, integrity checks, and incremental transfer technology reduce bandwidth and storage used.

## Snapshot Replication

Easily schedule flexible point-in-time backups of shared folders and iSCSI LUNs with an RPO as low as 5 minutes and recovery in seconds. Set up replication and failover to other Synology storage systems for fast RTOs and minimal service disruption.



**Backup your entire IT infrastructure**

## Active Backup Suite

Enables administrators to easily backup the entire IT infrastructure to their NAS, including Windows & Linux workstations and servers, file servers, VMware and Hyper-V virtual machines, and Microsoft 365 and Google Workspace accounts. Backups benefit from deduplication, multiversioning, and optimizations to reduce bandwidth and storage used.





## Storage for virtualization

Synology iSCSI storage supports mainstream virtualization solutions with an easy management interface to enhance usability. VMware vSphere 6.5 and VAAI integration helps offload storage operations. Windows Offloaded Data Transfer (ODX) speeds up data transfer. OpenStack Cinder support turns your Synology NAS into a block-based storage component. Additionally, Synology Storage Console enables even more simplified storage provisioning and management options in VMware and Windows environments.





## **Powerful built-in surveillance functionality**

Synology Surveillance Station transforms the RS3621RPxs into a feature-packed Network Video Recorder solution. Support for up to 75 IP cameras and video analytics such as motion detection, no idle zone, foreign object detection, and anomaly detection cater to the most common surveillance scenarios.

## **Secure and private**

AES-256 encryption keeps locally-stored footage secure.

## **Access from anywhere, anytime**

Access recordings and live streams whenever you want using a web browser, desktop client, or the DS cam mobile app.

## **Real-time alerts**

Email, SMS, or push notifications alert you when incidents occur or predefined conditions are met.



## Software

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    128  
Number

SSD Read/Write

Cache ([Determining cache  
size](#))

SSD TRIM

RAID Group

Supported RAID Type

- RAID F1
- Basic

## RAID Migration

## Volume Expansion with Larger HDDs

## Volume Expansion by Adding a HDD

## Global Hot Spare Supported RAID Type

## Notes

- JBOD
- RAID 0
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- Basic to RAID 1
- Basic to RAID 5
- RAID 1 to RAID 5
- RAID 5 to RAID 6
- RAID F1
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- RAID F1
- JBOD
- RAID 5
- RAID 6
- RAID F1
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- 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.
- Actual maximum storage pool and volume sizes depend

on drive sizes used, the number of drive bays available, and the RAID configuration.

- Volumes over 108 TB require 32 GB of memory or more.

## File System

Internal Drives

- Btrfs
- ext4

External Drives

- Btrfs
- ext4
- ext3
- FAT
- NTFS
- HFS+
- exFAT

Notes

exFAT Access can be installed for free from Package Center in DSM 7.0. In DSM 6.2 or earlier versions, exFAT Access needs to be purchased in Package Center.

## File Services

File Protocol

- SMB
- AFP
- NFS
- FTP
- WebDAV
- Rsync

Maximum Concurrent SMB/AFP/FTP Connections 2,000

Maximum Concurrent SMB/AFP/FTP Connections (with RAM expansion) 10,000

Windows Access Control List (ACL) Integration

NFS Kerberos Authentication

Notes

- Regarding data concerning tests with RAM expansion, all memory slots are

installed with the maximum capacity of supported RAM.

- During testing, the maximum number of SSDs supported by this model is installed in a RAID 5 configuration.
- The testing standard was based on the maximum number of concurrent connections supported by this model. During the testing, 25% of the connections were used to transfer files concurrently. The transfer process guaranteed that the connections were not interrupted; the minimum transfer speed was not guaranteed.

[Account & Shared Folder](#)

Maximum Local User Accounts	16,000
Maximum Local Groups	512
Maximum Shared Folder	512
Maximum Shared Folder Sync Tasks	32

[Hybrid Share](#)

Maximum Hybrid Share Folders	15
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[Hyper Backup](#)

Folder and Package Backup	
Entire System Backup	
Notes	Full-system backup requires DSM 7.2 or later.

[High Availability](#)

Synology High Availability

[Log Center](#)

Syslog Events per Second	3,000
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[Virtualization](#)

VMware ESXi 6.5 and VAAI  
Windows Server 2016

	Windows Server 2019	
	Windows Server 2022	
	Citrix Ready	
	OpenStack	
<a href="#">General Specifications</a>	Supported Protocols	SMB1 (CIFS), SMB2, SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, Fibre Channel, HTTP, HTTPs, FTP, SNMP, LDAP, CalDAV
	Supported Browsers	<ul style="list-style-type: none"> <li>• Chrome</li> <li>• Firefox</li> <li>• Edge</li> <li>• Safari</li> </ul>
	Supported Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svenska, Nederlands, ???????, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, ?eský, ???????, ???, ???, ?????, ????
	Notes	For an updated list of supported browser versions, check the <a href="#">DSM Technical Specifications</a> .
Add-on Packages <a href="#">view the complete package list</a>		
	<a href="#">Central Management System</a>	
	<a href="#">Synology Chat</a>	
	Suggested Users	500
	Notes	Models with expandable memory are tested with their maximum supported memory.
Download Station	Maximum Concurrent Download Tasks	80
<a href="#">SAN Manager</a>	Maximum iSCSI Target Number	256
	Maximum LUN	512
	LUN Clone/Snapshot, Windows ODX	
	Notes	iSCSI Manager has been

[Synology MailPlus / MailPlus Server](#)

Free Email Accounts

Suggested Users

Notes

renamed to SAN Manager in DSM 7.0.

5 [\(Additional accounts require purchase of licenses\)](#)

7,000

- Suggested users is derived from testing in an environment with 20% heavy users (each with 20,000 pre-populated emails and receiving 240 emails per day) and 80% light users (each receiving an average of 20 emails per day). [Learn more](#)
- The performance of the mail system will slightly decrease in high-availability mode due to data synchronization between the two servers.
- Functions that were enabled in all of the tests above: anti-spam, anti-virus, DNSBL, greylist, content scan, full-text search (English only).
- Models with expandable memory are tested with their maximum supported memory. To estimate the RAM requirement for your NAS, please [read this article](#)

[Media Server](#)

DLNA Compliance



[Synology Photos](#)

Facial Recognition

Object Recognition

[Snapshot Replication](#)

Maximum Snapshots per Shared Folder 1,024

Maximum of System Snapshots 65,536

[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

Notes

- Performance figures are obtained from testing conducted with the device fully populated with drives, with their default memory configuration, and under a continuous recording setup. Actual system capabilities may vary based on configuration, drive performance, enabled features, and the presence of additional workloads.

- Use [NVR Selector](#) to quickly find a suitable model based on your requirements.
- The number of streams that can be viewed simultaneously is **twice** the suggested maximum number of cameras. For example, if the suggested maximum number of cameras for a model is 10 under H.264, 1080p, the model can support up to 20 streams of the same specification at the same time.

## [Synology Drive](#)

Recommended Number of Concurrent Sync Clients

1,800 (the number of connections that can be maintained when the recommended number of hosted files was reached)

Recommended Number of Hosted Files

50,000,000 (applies to files indexed or hosted by [Synology Drive](#). For file access through other standard protocols, refer to the File Services section above)

Notes

- Exceeding the recommended numbers above will not block application operations, but may result in longer response time.
- Utilizing SSD cache can significantly improve performance.
- Models with

expandable memory are tested with their maximum supported memory.

- Btrfs file system and non-encrypted shared folders were used during the aforementioned testing.

## [Synology Office](#)

Suggested Users  
Notes

12,500

- Suggested users is derived from testing in an environment with 60% idle users (each logging in and viewing documents) and 40% active users (each executing random actions at intervals of 20 to 40 seconds) operating within documents, each document having 30 users. [Learn more](#)
- Models with expandable memory are tested with their maximum supported memory.
- Client performance may affect maximum simultaneous editing users. Client PCs used for testing: Intel Core i3-3220 / 8GB RAM

## [Virtual Machine Manager](#)

Recommended Virtual  
Machine Instances

12 ([Learn more](#))

Recommended Virtual DSM  
Number ([Licenses required](#))

12 (including 1 Free License)

Notes

The specifications vary depending on system

configuration and memory size.

## [VPN Server](#)

Maximum Connections

60

### Specification

NAS	
CPU Architecture	64-bit
CPU Core	6
CPU Frequency	2.2 (base) / 2.7 (turbo) GHz
CPU Model	Intel Xeon D-1531
CPU Quantity	1
Drive Bays	12
Expansion Port	2
Form Factor (RU)	2U
Hardware Encryption Engine	Yes
Hot Swappable Drive	Yes
Maximum Memory Capacity	64 GB (16 GB x 4)
Memory	8 GB DDR4 ECC UDIMM
PCIe Expansion	2 x Gen3 x8 slots (x8 link)
Power Supply Unit / Adapter	500 watts 550 watts*
Redundant Power Supply	Yes
RJ-45 1GbE LAN Port	4
System Fan	80 mm x 80 mm x 4 pcs
Total Memory Slots	4
USB 3.2 Gen 1 Port	2

### Product Gallery

