RackStation RS3621RPxs

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

Price: $260,118.00

Short Description
Synology 12 Bay RackStation RS3621RPxs

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[1], it is ideal for small businesses.

Compute

Intel® Xeon® D-1531 6-core 2.2 GHz

Throughput

4,718 MB/s seq. read 189,098 4K random read IOPS[1]

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.
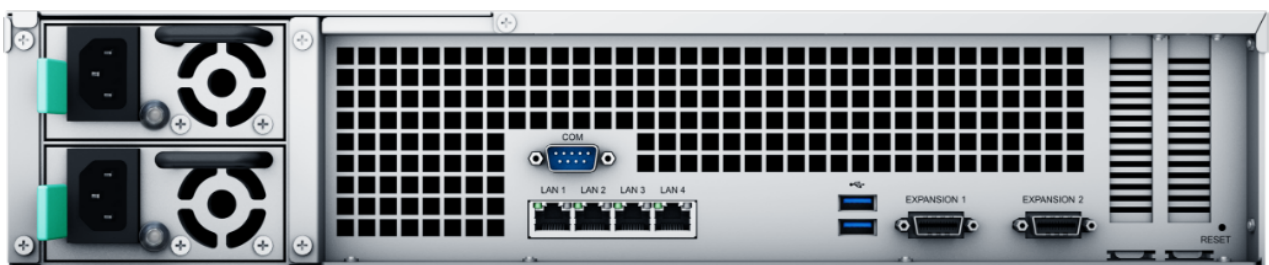
Redundant power

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.
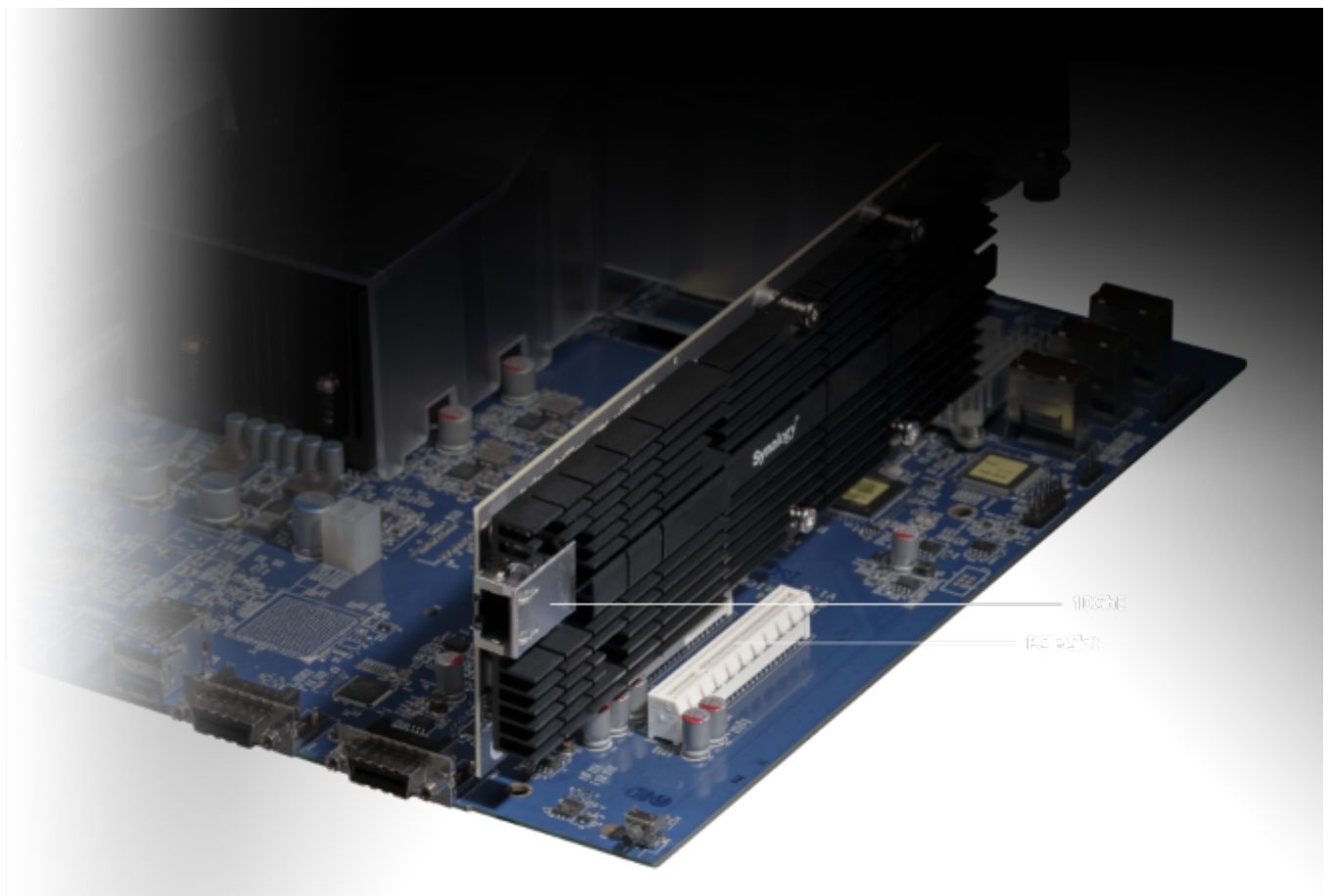
Customize to suit

The two built-in PCIe slots allow users to customize the RS3621RPxs 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
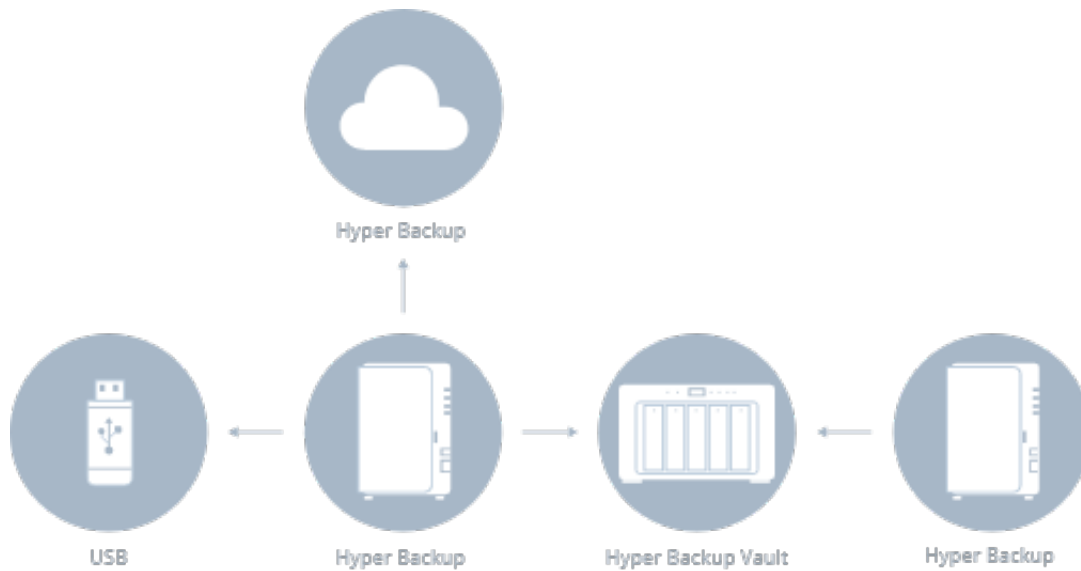
License-free backup solutions

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[4], 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.

Hyper Backup

USB   Hyper Backup   Hyper Backup Vault   Hyper Backup

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 Number	128	
	SSD Read/Write Cache (Determining cache size)		
	SSD TRIM		
	RAID Group		
	Supported RAID Type		• RAID F1 • Basic

	- JBOD
	- RAID 0
	- RAID 1
	- RAID 5
	- RAID 6
	- RAID 10
RAID Migration	- Basic to RAID 1
	- Basic to RAID 5
	- RAID 1 to RAID 5
	- RAID 5 to RAID 6
Volume Expansion with Larger HDDs	- RAID F1
	- RAID 1
	- RAID 5
	- RAID 6
	- RAID 10
Volume Expansion by Adding a HDD	- RAID F1
	- JBOD
	- RAID 5
	- RAID 6
Global Hot Spare Supported RAID Type	- RAID F1
	- RAID 1
	- RAID 5
	- RAID 6
	- RAID 10
Notes	- 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
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
Virtualization	VMware ESXi 6.5 and VAAI	
	Windows Server 2016	

		Windows Server 2019 Windows Server 2022 Citrix Ready OpenStack
[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, ???????, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, ?eský, ???????, ???, ???, ????, ????
	Notes	For an updated list of supported browser versions, check the [DSM Technical Specifications](#).

Add-on Packages [view the complete package list](#)
[Central Management System](#)

[Synology Chat](#)	Suggested Users	500
	Notes	Models with expandable memory are tested with their maximum supported memory.
Download Station	Maximum Concurrent Download Tasks	80
[SAN Manager](#)	Maximum iSCSI Target Number	256
	Maximum LUN	512
	LUN Clone/Snapshot, Windows ODX	
	Notes	iSCSI Manager has been

		renamed to SAN Manager in DSM 7.0.
[Synology MailPlus / MailPlus Server](#)	Free Email Accounts	[5 (Additional accounts require purchase of licenses)](#)
	Suggested Users	7,000
	Notes	- 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 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	8 GB DDR4 ECC UDIMM
Drive Bays	12
Hot Swappable Drive	Yes
RJ-45 1GbE LAN Port	4
USB 3.2 Gen 1 Port	2
System Fan	80 mm x 80 mm x 4 pcs
Power Supply Unit / Adapter	500 watts 550 watts*
Total Memory Slots	4
Maximum Memory Capacity	64 GB (16 GB x 4)
Expansion Port	2
PCIe Expansion	2 x Gen3 x8 slots (x8 link)
Form Factor (RU)	2U
Redundant Power Supply	Yes

Product Gallery