

# RackStation RS1221+

**Brand:** Synology  
**Product Code:** RS1221+  
**Availability:** 10  
**Weight:** 6.90kg  
**Dimensions:** 88.00mm x 482.00mm x  
306.60mm

**Price: \$89,351.00**

## Short Description

Synology 8 Bay RackStation RS1221+

## Description

### Compact and reliable

The RS1221RP+/RS1221+, at only 30 to 38 centimeters deep, is built for space-sensitive deployments. Boasting over 100K 4K random read IOPS and 2,315 MB/s sequential read<sup>1</sup>, the RS1221RP+/RS1221+ is equipped to handle heavy workloads in data-intensive environments. The RS1221RP+ additionally features an extra level of protection with redundant power supplies.



## Compute

AMD Ryzen™ V1500B quad-core 2.2 GHz



## Throughput

2,300 MB/s seq. read 100K 4K random read IOPS<sup>[1](#)</sup>



## Memory

4 GB ECC DDR4 Up to 32 GB



## Compact

30cm depth (38cm for RP model)

## **A compact design for space efficiency**

The RS1221+ and its RX418 expansion units are designed to help you save space in compact deployments. At only 30 centimeters, half the length of a typical 2U unit, it fits perfectly snug onto 2-post or shallow rackmount enclosures. The RS1221RP+ with dual power supplies comes in at 38 cm, also fitting most shallow depth enclosures.<sup>2</sup>

Fits into shallow rackmount enclosures

Easy-to-install on 2-post racks

## **Built for reliability**

### **Redundant power**

Reduce the chance that power disruptions on a single distribution channel or PDU causes data and service availability degradation.

### **Maximize service availability**

When paired with another identical unit, Synology High Availability enables automatic minute-level failover between two clustered servers in the event of a server failure to minimize service downtime

### **Data integrity and protection**

ECC memory and the Btrfs file system bring higher reliability and snapshot capabilities to help prevent data corruption and simplify data protection.

## **High performance storage for anything**

Up to 2,315/1,147 MB/s sequential read and write throughput and over 100K/54K random read/write IOPS ensures ample performance for demanding workloads.<sup>[1](#)</sup>

## **With room to grow with you**

Easily upgrade the RS1221RP+/RS1221+ to match your usage environment, whether it's for performance, faster networking, or higher storage capacity.<sup>[3](#)</sup>

## **SSD cache**

Boost read/write IOPS over HDD-only arrays by 16X or more with NVMe or SATA SSD Cache<sup>[4](#)</sup>

**10GbE ready**

**Storage expansion**

**Data protection solutions, built-in**

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## **Maximize data availability**

### **Hyper Backup**

A comprehensive backup and recovery solution for added data protection. Create backup destinations locally, on another Synology device, rsync servers, or cloud-based destinations, such as Google Drive, Dropbox, S3-compatible destinations, and Synology C2 Storage, a dedicated backup destination for Synology devices. Deduplication, integrity checks, and incremental transfer technology reduce bandwidth and storage use.

### **Snapshot Replication**

Easily schedule flexible point-in-time backups of shared folders and 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

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## **Protect your entire IT infrastructure**

### **Protect your entire office with Active Backup**

The Active Backup suite enables administrators to easily secure their entire IT infrastructure by backing up mission-critical data to their NAS, including Windows & Linux workstations and servers, file servers, VMware and Hyper-V virtual machines, and Microsoft 365 and Google Workspace accounts. Benefit from deduplication, multiversioning to quickly jump back in time, and additional data efficiency optimizations for reduced bandwidth and storage use



## Software

DSM Specifications		RS1221+
<a href="#">Storage Management</a>	Maximum Single Volume Size	108 TB
	Maximum Internal Volume Number	64
	SSD Read/Write Cache ( <a href="#">Determining cache size</a> )	
	SSD TRIM	
	Supported RAID Type	<ul style="list-style-type: none"> <li>• Synology Hybrid RAID</li> <li>• Basic</li> <li>• JBOD</li> <li>• RAID 0</li> <li>• RAID 1</li> <li>• RAID 5</li> <li>• RAID 6</li> <li>• RAID 10</li> </ul>
	RAID Migration	<ul style="list-style-type: none"> <li>• Basic to RAID 1</li> <li>• Basic to RAID 5</li> <li>• RAID 1 to RAID 5</li> <li>• RAID 5 to RAID 6</li> </ul>
	Volume Expansion with Larger HDDs	<ul style="list-style-type: none"> <li>• Synology Hybrid RAID</li> <li>• RAID 1</li> <li>• RAID 5</li> <li>• RAID 6</li> <li>• RAID 10</li> </ul>
	Volume Expansion by Adding a HDD	<ul style="list-style-type: none"> <li>• Synology Hybrid RAID</li> <li>• JBOD</li> <li>• RAID 5</li> <li>• RAID 6</li> </ul>
	Global Hot Spare Supported RAID Type	<ul style="list-style-type: none"> <li>• Synology Hybrid RAID</li> <li>• RAID 1</li> <li>• RAID 5</li> <li>• RAID 6</li> <li>• RAID 10</li> </ul>
	Notes	

<a href="#">File System</a>	<b>Internal Drives</b>	<ul style="list-style-type: none"> <li>• Btrfs</li> <li>• ext4</li> </ul>
	<b>External Drives</b>	<ul style="list-style-type: none"> <li>• Btrfs</li> <li>• ext4</li> <li>• ext3</li> <li>• FAT</li> <li>• NTFS</li> <li>• HFS+</li> <li>• exFAT</li> </ul>
	<b>Notes</b>	
<a href="#">File Services</a>	<b>File Protocol</b>	<ul style="list-style-type: none"> <li>• SMB</li> <li>• AFP</li> <li>• NFS</li> <li>• FTP</li> <li>• WebDAV</li> <li>• Rsync</li> </ul>
	<b>Maximum Concurrent SMB/AFP/FTP Connections</b>	1,000
	<b>Maximum Concurrent SMB/AFP/FTP Connections (with RAM expansion)</b>	2,000
	<b>Windows Access Control List (ACL) Integration</b>	
	<b>NFS Kerberos Authentication</b>	
	<b>Notes</b>	
<a href="#">Account &amp; Shared Folder</a>	<b>Maximum Local User Accounts</b>	2,048
	<b>Maximum Local Groups</b>	256
	<b>Maximum Shared Folder</b>	512
	<b>Maximum Shared Folder Sync Tasks</b>	16
<a href="#">Hybrid Share</a>	<b>Maximum Hybrid Share Folders</b>	10
<a href="#">Hyper Backup</a>	<b>Folder and Package Backup</b>	
	<b>Entire System Backup</b>	
	<b>Notes</b>	
<a href="#">High Availability</a>	<b>Synology High Availability</b>	
<a href="#">Log Center</a>		

	<b>Syslog Events per Second</b>	1,000
<b>Virtualization</b>	<b>VMware ESXi 6.5 and VAAI</b>	
	<b>Windows Server 2016</b>	
	<b>Windows Server 2019</b>	
	<b>Windows Server 2022</b>	
	<b>Citrix Ready</b>	
	<b>OpenStack</b>	
<a href="#">General Specifications</a>	<b>Supported Protocols</b>	SMB1 (CIFS), SMB2, SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, HTTP, HTTPs, FTP, SNMP, LDAP, CalDAV
	<b>Supported Browsers</b>	<ul style="list-style-type: none"> <li>• Chrome</li> <li>• Firefox</li> <li>• Edge</li> <li>• Safari</li> </ul>
	<b>Supported Language</b>	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svenska, Nederlands, ???????, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, ?eský, ???????, ???, ???, ?????, ?????
	<b>Notes</b>	
<a href="#">Central Management System</a>		
<a href="#">Synology Chat</a>		
	<b>Suggested Users</b>	150
	<b>Notes</b>	
<b>Download Station</b>		
	<b>Maximum Concurrent Download Tasks</b>	80
<a href="#">SAN Manager</a>		
	<b>Maximum iSCSI Target Number</b>	128
	<b>Maximum LUN</b>	256
	<b>LUN Clone/Snapshot, Windows ODX</b>	
	<b>Notes</b>	
<a href="#">Synology MailPlus /</a>		

<a href="#">MailPlus Server</a>	<b>Free Email Accounts</b>	5 ( <a href="#">Additional accounts require purchase of licenses</a> )
	<b>Suggested Users</b>	750
	<b>Notes</b>	
<a href="#">Media Server</a>		
	<b>DLNA Compliance</b>	
<a href="#">Synology Photos</a>		
	<b>Facial Recognition</b>	
	<b>Object Recognition</b>	
<a href="#">Snapshot Replication</a>		
	<b>Maximum Snapshots per Shared Folder</b>	1,024
	<b>Maximum of System Snapshots</b>	65,536
<a href="#">Surveillance Station</a>		
	<b>Default Licenses</b>	2 ( <a href="#">Additional cameras require purchase of licenses</a> )
	<b>Suggested Maximum IP Cameras and Total FPS (H.264)</b>	<ul style="list-style-type: none"> <li>• 1080p: 40 channels, 1050 FPS</li> <li>• 3M: 40 channels, 600 FPS</li> <li>• 5M: 40 channels, 440 FPS</li> <li>• 4K: 32 channels, 320 FPS</li> </ul>
	<b>Suggested Maximum IP Cameras and Total FPS (H.265)</b>	<ul style="list-style-type: none"> <li>• 1080p: 40 channels, 1200 FPS</li> <li>• 3M: 40 channels, 1120 FPS</li> <li>• 5M: 40 channels, 600 FPS</li> <li>• 4K: 40 channels, 480 FPS</li> </ul>
	<b>Notes</b>	
<a href="#">Synology Drive</a>		
	<b>Recommended Number of Concurrent Sync Clients</b>	550 (the number of connections that can be maintained when the recommended number of hosted files was reached)
	<b>Recommended Number of Hosted Files</b>	50,000,000 (applies to files indexed or hosted)

		by <a href="#">Synology Drive</a> . For file access through other standard protocols, refer to the File Services section above)
	<b>Notes</b>	
<a href="#">Synology Office</a>		
	<b>Suggested Users</b>	4,500
	<b>Notes</b>	
<a href="#">Virtual Machine Manager</a>		
	<b>Recommended Virtual Machine Instances</b>	8 ( <a href="#">Learn more</a> )
	<b>Recommended Virtual DSM Number</b> ( <a href="#">Licenses required</a> )	8 (including 1 Free License)
	<b>Notes</b>	
<a href="#">VPN Server</a>		
	<b>Maximum Connections</b>	40

## Specification

NAS	
CPU Model	AMD Ryzen V1500B
CPU Quantity	1
CPU Core	4
CPU Architecture	64-bit
CPU Frequency	2.2 GHz
Hardware Encryption Engine	Yes
Memory	4 GB DDR4 ECC SODIMM
Drive Bays	8
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 2 pcs
Power Supply Unit / Adapter	250 watts
Total Memory Slots	2
Maximum Memory Capacity	32 GB (16 GB x 2)
Expansion Port	1
PCIe Expansion	1 x Gen3 x8 slot (x4 link)
Form Factor (RU)	2U

## Product Gallery

