

RackStation RS2825RP+



Brand: Synology

Product Code: RS2825RP+

Availability: 9

Weight: 17.30kg

Dimensions: 656.50mm x 482.00mm x
132.30mm

Call for Price:

Short Description

Synology 16 Bay RackStation RS2825RP+

Description

Versatile and scalable storage

[Download Datasheet](#)



Flexible storage with redundancy

Over 3,519/1,790 MB/s seq. read/write², built-in 10GbE, and up to 560 TB raw storage after expansion^{3,4}



Flexible configuration

Add 12 extra drive bays, 10/25GbE ports, and SSD cache volumes whenever needed



Versatile applications

Hardware Specifications

Hardware Specifications

CPU	CPU Model	AMD Ryzen V1780B
	CPU Quantity	1
	CPU Core	4
	CPU Architecture	64-bit
	CPU Frequency	3.35 (base) / 3.6 (turbo) GHz
	Hardware Encryption Engine	
Memory	System Memory	8 GB DDR4 ECC UDIMM
	Memory Module Pre-installed	8 GB (8 GB x 1)
	Total Memory Slots	2
	Maximum Memory Capacity	32 GB (16 GB x 2)
	Notes	• Synology reserves the right to replace memory modules with the same or higher frequency based on supplier's product life cycle status. Rest assured that the compatibility and stability have been strictly verified with the same benchmark to ensure identical performance. • 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.

- For multi-module memory configurations, all modules must be identical and share the same model number. Check the [Product Manual](#) of your Synology product for recommended memory configurations.

Storage	Drive Bays	16	
	Maximum Drive Bays with Expansion Unit	28 (RX1225RP x 1)	
	Drive Type	(See all supported drives)	• 3.5" SATA HDD • 2.5" SATA SSD
	Hot Swappable Drive*		
	Notes	Compatible drives are mandatory. Please consult our compatibility list before purchasing hard drives. For more details, please refer to this article .	
External Ports	RJ-45 1GbE LAN Port	2	
	RJ-45 10GbE LAN Port	1	
	USB 3.2 Gen 1 Port	2	
	Expansion Port	1	
	Expansion Port Type	Mini-SAS HD	
PCIe Appearance	Notes	This device's 1GbE LAN ports have a maximum transmission unit (MTU) size of 1,500 bytes.	
	PCIe Expansion	1 x Gen3 x8 slot (x4 link)	
	Form Factor (RU)	3U	
	Size (Height x Width x Depth)	132.3 mm x 482 mm x 656.5 mm	
	Weight	17.3 kg	
Others	Rack Installation Support*	4-post 19" rack (Synology Rail Kit - RKS-02)	
	Notes	The rail kit is sold separately	
	System Fan	80 mm x 80 mm x 3 pcs	
	Fan Speed Mode	• Full-Speed Mode • Cool Mode • Quiet Mode	
	Easy Replacement		

System Fan		
Power Recovery		
Noise Level*		49.6 dB(A)
Scheduled Power On / Off		
Wake on LAN / WAN		
Power Supply Unit / 550 watts Adapter		
Redundant Power Supply		
AC Input Power		100 V to 240 V AC
Voltage		
Power Frequency		50/60 Hz, Single Phase
Power Consumption*		134.48 watts (Access)
		50.81 watts (HDD Hibernation)
British Thermal Unit		459.17 BTU/hr (Access)
		173.49 BTU/hr (HDD Hibernation)
Notes		• For more information on how power consumption is measured, refer to this article. • Noise testing was conducted with the Synology system fully installed with Synology SATA SSDs and in an idle state. Two G.R.A.S. type 40AE microphones were placed at a 1 m distance from the front and rear of the device. Background noise: 16.49-17.51 dB(A); Temperature: 24.25-25.75°C; Humidity: 58.2-61.8%.
Temperature	Operating	0°C to 35°C (32°F to 95°F)
	Temperature	
	Storage Temperature	-20°C to 60°C (-5°F to 140°F)
	Operating Humidity	8% to 80% RH
Certification	Storage Humidity	5% to 95% RH
		• FCC • CE • BSMI • VCCI • RCM • UKCA

- EAC
- CCC
- UL

Warranty	3-year hardware warranty, extendable to 5 years with EW202 or Extended Warranty Plus
Notes	• The warranty period starts from the purchase date as stated on your purchase receipt. (Learn more) • Extended Warranty Plus is only available in Europe and North America. EW201/EW202 is only available in Asia, Africa, and Oceania. For exact availability information please visit their respective websites.

Environment	RoHS Compliant
Packaging Content	• Main Unit X 1 • Accessory Pack X 1 • AC Power Cord X 2
Optional Accessories	• DDR4 ECC UDIMM: D4EU02-8G/D4EU02-16G • Expansion Units: RX1225RP • Enterprise Series 3.5" SATA HDD: HAT5300 Series • Plus Series 3.5" SATA HDD: HAT3300 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	For multi-module memory configurations, all modules must be identical and share the same model number. Check the Product Manual of your Synology product for recommended memory configurations.

software specs

DSM Specifications	
Storage Management	
Maximum Single Volume Size	• 200 TB (32 GB memory required) • 108 TB
Maximum Internal Volume Number	32

SSD Read/Write
Cache [\(Determining
cache size\)](#)

SSD TRIM

Supported RAID
Type

- Synology Hybrid RAID
- 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

- Synology Hybrid RAID
- RAID 1
- RAID 5
- RAID 6
- RAID 10

Volume Expansion by
Adding a HDD

- Synology Hybrid RAID
- JBOD
- RAID 5
- RAID 6

Global Hot Spare
Supported RAID
Type

- Synology Hybrid RAID
- 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.

File System

Internal Drives
External Drives

- Btrfs
- Btrfs
- ext4
- ext3
- FAT32
- NTFS
- HFS+
- exFAT

File Services

File Protocol

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

Maximum Number of 560

SMB Connections

(FSCT-Based)

Windows Access

Control List (ACL)

Integration

NFS Kerberos

Authentication

Notes

- Connection value of this model is tested with Synology SATA HDD fully populated and all onboard network ports
- Models with expandable memory are tested with the maximum supported quantity installed.
- SMB performance was evaluated using Microsoft File Server Capacity Tool (FSCT) version 1.3, with the following configuration:
 - Test workload: HomeFolder scenario provided by the FSCT tool
 - Test duration: 600 seconds
 - Domain controller & FSCT controller: Windows Server 2022
 - FSCT clients: 8 × Windows 10 machines

- SMB feature: Directory leasing enabled

Account & Shared Folder	Maximum Local User Accounts	1,024
	Maximum Local Groups	256
	Maximum Shared Folder	256
	Maximum Shared Folder Sync Tasks	12
Hybrid Share	Maximum Hybrid Share Folders	10
Hyper Backup	Folder and Package Backup	
	Entire System Backup	
High Availability	Synology High Availability	
Log Center	Syslog Events per Second	1,000
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
	Citrix XenServer	XenServer 8, Citrix Hypervisor 8.2 LTSR CU1
	OpenStack	Cinder
General Specifications	Supported Protocols	SMB1 (CIFS), SMB2, SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, 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 AI Console Third-Party AI Model

Integration

Maximum De-

500 words per second

Identification Rate

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 Chat](#)

Maximum Number of 300

Users

Notes

- Measured with simulated users, each with an average record of 20,000 messages, emojis, or stickers. The required server response time is below ten seconds.
- Models with expandable memory are tested with the maximum supported quantity installed.

Download Station

Maximum Concurrent 80

Download Tasks

[SAN Manager](#)

Maximum iSCSI

64

Target Number

Maximum LUN

128

LUN Clone/Snapshot,

Windows ODX

[Synology MailPlus / MailPlus Server](#)

Free Email Accounts 5 ([Additional accounts require purchase of licenses](#))

Maximum Number of 1,100

Users

Notes

- The suggested maximum number of

users is based on the following workload: 20% of users with a 20,000 item mailbox randomly performing actions and receiving 240 emails per day, and 80% of users receiving 20 emails per day. [Learn more](#)

- Models with SSD support are tested with a single SSD volume.
- Models with expandable memory are tested with the maximum supported quantity installed. [Learn more about memory requirements](#).
- Operating in high-availability mode will incur additional overhead.
- Features enabled during evaluation: anti-spam, anti-virus, DNSBL, greylist, content scanning, and full-text search (English).

[Media Server](#)
[Synology Photos](#)

DLNA Compliance
Facial Recognition
Object Recognition

[Snapshot Replication](#)

Maximum Snapshots 256
per Shared Folder
Maximum of System 4,096
Snapshots

[Surveillance Station](#)

Default Licenses 2 [\(Additional cameras require purchase of licenses\)](#)

Maximum IP
Cameras and Total
FPS (H.264)

- 1080p: 90 channels, 2250 FPS
- 3M: 90 channels, 1500 FPS
- 5M: 90 channels, 900 FPS
- 4K: 55 channels, 550 FPS

Maximum IP
Cameras and Total
FPS (H.265)

- 1080p: 90 channels, 2700 FPS
- 3M: 90 channels, 2250 FPS
- 5M: 90 channels, 1500 FPS
- 4K: 90 channels, 1080 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 video channels that can be viewed simultaneously is double the maximum number of cameras for the same codec and resolution.

[Synology Drive](#)

Maximum Number of 1,000

Users

Maximum Number of 15,000,000 (applies to files indexed or

Hosted Files

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

Notes

- The suggested maximum number of users is based on the following workload: 20% of users randomly perform file operations (upload, download, move, and delete), and 80% of users are logged in but idle. [Learn more](#)
- Models with SSD support are tested with a single SSD volume.
- Models with expandable memory are tested with the maximum supported quantity installed.
- Exceeding the recommended numbers above will not block application operations, but may result in longer response time.
- Btrfs file system and non-encrypted shared folders were used during the aforementioned testing.

[Synology Office](#)

Maximum Number of 900

Users

Notes

- The suggested maximum number of users is based on the following workload: 20% of users are

executing random actions at an average of 30-second intervals, and 80% of users are logged in and viewing a file. [Learn more](#)

- Models with SSD support are tested with a single SSD volume.
- Models with expandable memory are tested with the maximum supported quantity installed.
- 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

8 [\(Learn more\)](#)

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

8 (including 1 Free License)

Notes

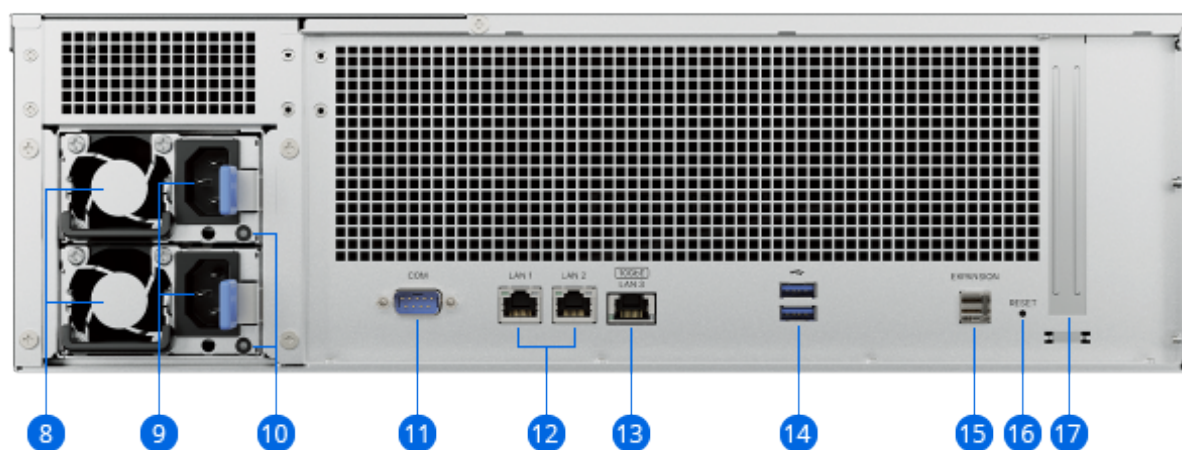
The specifications vary depending on system configuration and memory size.

[VPN Server](#)

Maximum
Connections

12

Hardware Overview



- 1Power button and indicator
- 2Status indicator
- 3Alert indicator
- 4Alarm silence button
- 5Drive status indicator

- 6Drive trays
 - 7Rail kit release tabs
 - 8PSU fans
 - 9Power ports
 - 10PSU indicators
-
- 11Console port
 - 121GbE RJ-45 ports
 - 1310GbE RJ-45 port
 - 14USB 3.2 Gen 1 ports
 - 15Expansion port
-
- 16Reset button
 - 17PCI Express expansion slot

Specification

NAS	
CPU Model	AMD Ryzen V1780B
CPU Quantity	1
CPU Core	4
CPU Architecture	64-bit
CPU Frequency	3.35 (base) / 3.6 (turbo) GHz
Hardware Encryption Engine	yes
Memory	8 GB DDR4 ECC UDIMM
Drive Bays	16
Compatible Drive Type	3.5
Hot Swappable Drive	yes
RJ-45 1GbE LAN Port	2
USB 3.2 Gen 1 Port	2
System Fan	80 mm x 80 mm x 3 pcs
Power Supply Unit / Adapter	550 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)	3U
Redundant Power Supply	yes
RJ-45 10GbE LAN Port	1

Product Gallery

