

SA3200D



Brand: Synology
Product Code: SA3200D
Availability: 10
Weight: 19.70kg
Dimensions: 88.00mm x 482.00mm x
724.00mm
Call for Price:

Short Description

Synology 12bay Dual Controller SAS NAS SA3200D (Diskless)

Description

Maximizing availability has never been this easy

Simplify and centralize your data management infrastructure with Synology SA3200D.

Storage controller redundancy powered by Synology High Availability automatically minimizes downtime to under a minute, delivering outstanding cost effectiveness in just a 2U footprint.



High Availability

Dual storage controllers



Cost-effective

Shared storage design



Effortless

Automatic system-level protection



Scalable

Up to 36 drives for 576 TB

Scales up with you

SA3200D supports two RXD1219sas expansion units for up to 36 SAS 3.5"/2.5" bays.
Scale up to 576 TB without downtime to quickly meet new demands.

Redundant power supply

Modularized and swappable 500W power supply prevents service downtime in the event of a power supply failure.

Active-passive controller modules

Automatic system failover to the secondary controller, maximizing service uptime.

PCIe 3.0 slot

Supports 10GbE/25GbE network interface cards for higher throughput.

Mini-SAS HD port

Connect up to 2 x RXD1219sas for flexible plug-and-play volume expansion.

2 x 1GbE & 1 x 10GbE

Cost-effective RJ45 networking interface options built-in.



Processor

The Intel® Xeon® D-1521 processor on each controller provides enterprise-class reliability, availability, and serviceability.

4 x DDR4 memory slots

8 GB ECC UDIMM, expandable up to 64 GB for more demanding workloads.

Modularized cooling

Dual fan modules per controller allow for easy maintenance and replacement.

SATA DOM

Operating system files are isolated from the stored data, providing higher throughput and stability.

Non-Transparent Bridge (NTB)

Faster and lower-latency connectivity between controllers.



Ultimate Backup Solution

SA3200D integrates various backup applications into an intuitive user interface, offering durable storage technologies to safeguard your valuable data on any device.



Active Backup for Business

Centralize backup tasks for VMware, Windows, and file servers. Restore whatever you want fast and reliably when needed.



Hyper Backup

Comprehensively back up your data to a local shared folder, an external device, another Synology NAS, an rsync server, or a public cloud to ensure data safety.



Drive Package

Safeguard your computer with Synology Drive Client. Effortlessly perform real-time data backups and point-in-time file recovery.



Active Backup for Microsoft 365 / Google Workspace

Protect corporate data stored on the cloud. On-premise backup solution with a centralized dashboard. Optimize storage efficiency with single instancing and block-level deduplication technology.

[Google Workspace](#)

[office365](#)

Fully certified storage virtualization solutions

Synology iSCSI storage fully supports most virtualization solutions to enhance work efficiency with easy management interface. VMware vSphere 6 and VAAI integration helps offload storage operations and optimizes computation efficiency. Windows Offloaded Data Transfer (ODX) speeds up data transfer and migration rate. OpenStack Cinder support turns your Synology NAS into a block-based storage component.



Virtual Machine Manager

Sandbox new software , manage resources using a single interface, and increase deployment flexibility with Synology Virtual Machine Manager. Run Windows, Linux, and Virtual DSM instances on your Synology NAS in just a few steps.

[Learn more about Virtual Machine Manager](#)



Snapshots for virtual machines

Clone and restore complete virtual machines within seconds.



Multi-tenant environment

Create multiple isolated virtual machines for business units or departments.



5-year warranty

At Synology, we are committed to product innovation and quality. Synology guarantees a robust and reliable data management experience with a 5-year limited warranty, providing responsive technical support and hardware replacement services to maximize your return on investment.

Powered by Synology DiskStation Manager

Synology High Availability

Real-time system-level protection with automatic failover mechanism to maximize service availability.

Snapshot Replication

Schedulable and instantaneous data protection of shared folders and iSCSI LUNs for quick disaster recovery.

Central Management System

Conveniently manage your fleet of Synology NAS from a centralized console.

Hyper Backup

Store multiple backup versions with block-level incremental data backup and cross-version deduplication.

Active Backup Suite

Integrated, modern, and license-free backup & instant recovery solution for VMware, Windows, Microsoft 365, and Google Workspace.

Virtual Machine Manager

Run various operating systems in isolated sandboxes. Seamlessly clone and restore virtual machines.

Software

DSM Specifications

Storage Management

Maximum Single Volume Size		<ul style="list-style-type: none">• 200 TB (32 GB memory required)• 108 TB
Maximum Internal Volume Number	64	
SSD Read/Write Cache		(Determining cache size)
SSD TRIM		
RAID Group Supported RAID Type		<ul style="list-style-type: none">• RAID F1• Basic• JBOD• RAID 0• RAID 1• RAID 5• RAID 6• RAID 10
RAID Migration		<ul style="list-style-type: none">• Basic to RAID 1• Basic to RAID 5• RAID 1 to RAID 5
Volume Expansion with Larger HDDs		<ul style="list-style-type: none">• RAID F1• RAID 1• RAID 5• RAID 6• RAID 10
Volume Expansion by Adding a HDD		<ul style="list-style-type: none">• RAID F1• JBOD• RAID 5• RAID 6
Global Hot Spare Supported RAID Type		<ul style="list-style-type: none">• RAID F1• RAID 1• RAID 5• RAID 6• RAID 10
Notes		<ul style="list-style-type: none">• 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.

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

[File System](#)

Internal Drives

- Btrfs
- ext4

[File Services](#)

File Protocol

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

Maximum Concurrent SMB/AFP/FTP Connections 1,200

Maximum Concurrent SMB/AFP/FTP Connections 6,000

(with RAM expansion)

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	30	
Hyper Backup	Folder and Package Backup		
	Entire System Backup		
	Notes		Full-system backup requires DSM 7.2 or later.
High Availability	Synology High Availability		
	Notes		Synology High Availability is a built-in package for SA3200D to maximize service uptime. SA3200D does not support forming a high-availability cluster with another server unit.
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,
český, ???????, ???, ???,
????, ????

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.

[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

4,000

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](#)

[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: 100 channels, 2600 FPS
- 3M: 100 channels, 1500 FPS
- 5M: 90 channels, 900 FPS

Suggested Maximum IP
Cameras and Total FPS
(H.265)

Notes

- 4K: 55 channels, 550 FPS
- 1080p: 100 channels, 3000 FPS
- 3M: 100 channels, 2400 FPS
- 5M: 100 channels, 1500 FPS
- 4K: 100 channels, 1080 FPS
- 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

7,000

Notes

- 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	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	60

Specification

NAS	
RJ-45 10GbE LAN Port	1 (per controller)
CPU Architecture	64-bit
CPU Core	4
CPU Frequency	2.4 (base) / 2.7 (turbo) GHz
CPU Model	Intel Xeon D-1521
CPU Quantity	1 (per controller)
Drive Bays	12
Expansion Port	1 (per controller)

Form Factor (RU)	2U
Hardware Encryption Engine	Yes
Hot Swappable Drive	Yes
Maximum Memory Capacity	64 GB (16 GB x 4) (per controller)
Memory	8 GB DDR4 ECC UDIMM (per controller)
PCIe Expansion	1 x Gen3 x8 slot (x8 link) (per controller)
Power Supply Unit / Adapter	500 watts
Redundant Power Supply	Yes
RJ-45 1GbE LAN Port	2 (per controller)
System Fan	60 mm x 60 mm x 2 pcs
Total Memory Slots	4 (per controller)

Product Gallery