SA3200D

Brand: Synology

Product Code: SA3200D

Availability: 10 **Weight:** 19.70kg

Dimensions: 88.00mm x 482.00mm x

724.00mm

Price: 584,100.00EGP



Short Description

Synology 12 Bay Dual Controller SAS SA3200D

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.



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.

Modularized appling
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.

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



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.

Windows Server 2022

Certified







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

• 200 TB (32 GB memory required)

• 108 TB

Maximum Internal Volume 64

Number

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

Volume Expansion with

Larger HDDs

• RAID F1

- RAID 1
- RAID 5
- RAID 6
- RAID 10
- RAID F1
- Volume Expansion by

Adding a HDD

- 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.

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

• Btrfs

• ext4

• SMB

AFP

• NFS

• FTP

• WebDAV

• Rsync

Maximum Concurrent 1,200

SMB/AFP/FTP Connections

Internal Drives

File Protocol

Maximum Concurrent 6.000

SMB/AFP/FTP Connections

(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

File Services

File System

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	16,000

Accounts

Maximum Local Groups 512 Maximum Shared Folder 512 Maximum Shared Folder 32

Sync Tasks

Hybrid Share Maximum Hybrid Share 30

Folders

Hyper Backup Folder and Package Backup

Entire System Backup

Notes Full-system backup requires

DSM 7.2 or later.

<u>High Availability</u> 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.

<u>Log Center</u> 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

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 <u>DSM Technical</u>

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.

256

512

SAN Manager Maximum iSCSI Target

Number

Maximum LUN

Supported Browsers

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

Notes

4,000

• Suggested users is derived from testing in an environment with 20% heavy users (each with 20,000 prepopulated emails and

receiving 240 emails per day) and 80% light users (each receiving an average of 20 emails per day). <u>Learn more</u>

- 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: antispam, 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 Maximum of System Snapshots Default Licenses 1,024

Surveillance Station

Suggested Maximum IP Cameras and Total FPS (H.264) 65,536

2 (Additional cameras require purchase of licenses)

- 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 <u>NVR Selector</u> 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) 50,000,000 (applies to files indexed or hosted by Synology Drive. For file access through other standard protocols, refer to the File

Recommended Number of Hosted Files

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 7,000

• 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

<u>Virtual Machine Manager</u> Recommended Virtual 8 (<u>Learn more</u>)

Machine Instances

Recommended Virtual DSM 8 (including 1 Free License)

Number (Licenses required)

Notes The specifications vary

depending on system

configuration and memory

size.

<u>VPN Server</u> Maximum Connections 60

Specification

NAS	
CPU Model	Intel Xeon D-1521
CPU Quantity	1 (per controller)
CPU Core	4
CPU Architecture	64-bit
CPU Frequency	2.4 (base) / 2.7 (turbo) GHz
Hardware Encryption	Yes
Engine	
Memory	8 GB DDR4 ECC UDIMM (per controller)

Drive Bays	12
Hot Swappable Drive	Yes
RJ-45 1GbE LAN Port	2 (per controller)
System Fan	60 mm x 60 mm x 2 pcs
Power Supply Unit /	500 watts
Adapter	
Total Memory Slots	4 (per controller)
Maximum Memory	64 GB (16 GB x 4) (per controller)
Capacity	
Expansion Port	1 (per controller)
PCIe Expansion	1 x Gen3 x8 slot (x8 link) (per controller)
Form Factor (RU)	2U
Redundant Power Supply	Yes
RJ-45 10GbE LAN Port	1 (per controller)

Product Gallery