

Datasheet



High Scalability

SA3200D

Synology

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Maximize Service Availability, Minimize Downtime

Synology SA3200D features a dual controller architecture to ensure operations and core business functions are not severely impacted by a disaster or unplanned incident that take critical systems offline. The hardware redundancy mechanism leverages controllers, power supplies, and fans to prevent a single point of failure. Powered by the intuitive and feature-rich operating system DiskStation Manager (DSM), SA3200D provides comprehensive protection for network, file services, and applications.

- Active-passive dual controller design in a single chassis, maximizing service availability with minute-level failover time¹
- Highly available infrastructure with a competitive price-performance ratio of US\$0.05 per gigabyte²
- A scalable shared storage architecture of more than 500 TB raw capacity with minimal performance impact³
- Automatic failover mechanism, protecting services in real-time and prevent a single point of failure
- Easy to deploy and manage data services intuitively with DiskStation Manager (DSM), providing a unified experience across Synology platforms and support comprehensive software applications
- Certified virtualization solution with license-free workload protection

Designed with High Availability and Scalability

Synology SA3200D is a cost-effective yet highly available data management solution for enterprises, with a competitive price-performance ratio of \$0.05 per gigabyte². Underneath the 2U chassis are dual controller modules in an **active-passive architecture**, each connected to the other by the reliable, high-speed **Non-Transparent Bridge (NTB)** with low latency. Service continuity is also backed up by the hardware redundancy mechanism of modularized power supplies and fans to prevent a single point of failure.

With SA3200D, you can start small and grow in the future. It supports up to 12 × 3.5"/2.5" **SAS interface** drive slots by default, and the capacity can be further scaled up to 576 TB using two RXD1219sas⁴ expansion units, with minimal performance impact³. Data replication is not needed for the shared storage design, saving valuable rack space and network bandwidth when compared with two devices using Synology High Availability.

Real-Time Protection with Automatic Failover

With an active-passive design consisting of dual controller modules and the built-in **Synology High Availability (SHA)** service, SA3200D is built to provide a real-time, system-level protection to maximize service availability. It actively monitors network status and critical file services of CIFS, iSCSI, AFP, FTP, NFS, and Synology Directory Server. Once a controller module or the service is unavailable, the system will fail over automatically within a minute¹ to minimize system interruption and ensure service continuity.

Easy to Deploy, Easy to Manage

SA3200D is designed to help IT administrators easily deploy and manage a highly available data management infrastructure. The system features straightforward, wizard-based GUI setup processes that allow you to build up a highly available service environment within minutes. Service status monitoring is made easy and intuitive.

Powered by **DiskStation Manager (DSM)**, an intuitive, user-friendly web-based operating system across Synology hardware platforms, SA3200D provides IT administrators a unified user experience without the need to adapt to different user interfaces and complex configuration settings. With a full suite of software applications supported in the **Package Center**, you can download and install a variety of packages including backup, data protection, and virtualization.

Built for Your SAN Storage Needs

Synology SA3200D provides a fully certified virtualization solution with **VMware® vSphere™**, **Microsoft® Hyper-V®**, **Citrix® XenServer™**, and **OpenStack Cinder**. It supports both **iSCSI** and **NFS** protocols and integrates with **VMware VAAI** and **Microsoft ODX**, allowing IT administrators to effectively deploy and facilitate storage operations in various virtualization environments. IT administrators can efficiently manage virtualized workloads through built-in DSM features and add-on plugins for VMware and Windows environments. Features including **fast clone**, **NFS v4.1**, and **thin provisioning** delivers more flexibility to accommodate to administration needs.

With no additional license fees required, your virtualized workload can be further protected by a complete suite of data protection applications including **Synology Snapshot Replication**, **Hyper Backup**, and **Active Backup for Business** to cover various protection scenarios.

Virtualize Workloads Flexibly in a Protected Environment

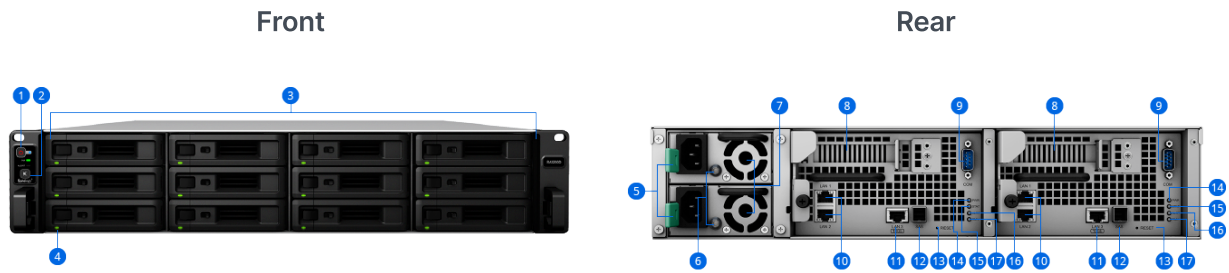
Synology Virtual Machine Manager (VMM) is an intuitive hypervisor software application allowing you to easily set up virtual machines and run various operating systems, including **Windows**, **Linux**, and **Virtual DSM**. By integrating the computing and the storage nodes into one system, single vendor support experience is achieved to lower the management cost.

With VMM, each virtual machine can be fully protected by a set of disaster recovery features including instant snapshot, replication, clone, and restore, safeguarding your virtual machines without additional cost.

Notes:

1. The result is based on drives fully loaded in RAID 5 configuration with two volumes created, packages including Replication Service, Snapshot Replication, SMI-S Provider, MariaDB 5, MariaDB 10, Web Station and Hyper Backup are installed. It may vary depending different configurations or environments.
2. The price-performance ratio is estimated based on one SA3200D with two RXD1219sas and 36 × 12TB SAS drives. The cost of the drives may vary depending on the manufacturer or the reseller.
3. Performance figures may vary depending on the environment, usage, and configuration.
4. SA3200D can scale up to 36 drives with 2 x RXD1219sas, sold separately.

Hardware Overview



No.	Name	No.	Name
1.	Power button and indicator	10.	1GbE RJ-45 port
2.	Beep off button	11.	10GbE RJ-45 (10GBASE-T) port
3.	Drive tray	12.	Expansion port
4.	Drive status indicator	13.	Reset button
5.	Power port	14.	Power Indicator
6.	PSU indicator and beep off button	15.	Status Indicator
7.	PSU fan	16.	Alert Indicator
8.	PCIe expansion slot	17.	Remove Indicator
9.	Console port		

Technical Specifications

Hardware

Controller	
Number of Controller Module	2

CPU	
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 Engine	Yes

Memory	
System Memory	8 GB DDR4 ECC UDIMM (per controller)
Memory Module Pre-installed	8 GB (8 GB x 1) (per controller)
Total Memory Slots	4 (per controller)
Maximum Memory Capacity	64 GB (16 GB x 4) (per controller)
Notes	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.

Storage	
Drive Bays	12
Maximum Drive Bays with Expansion Unit	36 (RXD1219sas x 2)
Drive Type	<ul style="list-style-type: none"> • 2.5" dual-port SAS SSD • 2.5" dual-port SAS HDD • 3.5" dual-port SAS HDD
Hot Swappable Drive	Yes

External Ports	
RJ-45 1GbE LAN Port	2 (per controller)
RJ-45 10GbE LAN Port	1 (per controller)
Expansion Port	1 (per controller)

PCIe	
PCIe Expansion	1 x Gen3 x8 slot (x8 link) (per controller)

Appearance	
Form Factor (RU)	2U
Size (Height x Width x Depth)	88 mm x 482 mm x 724 mm
Weight	19.7 kg
Rack Installation Support	4-post 19" rack (Synology Rail Kit - RKS-02)
Notes	The rail kit is sold separately

Others	
System Fan	60 mm x 60 mm x 51 mm x 2 pcs
AC Input Power Voltage	100V to 240V AC
Power Frequency	50/60 Hz, Single Phase

Temperature	
Operating Temperature	0°C to 35°C (32°F to 95°F)
Storage Temperature	-20°C to 60°C (-5°F to 140°F)
Operating Humidity	8% to 80% RH
Storage Humidity	5% to 95% RH
Maximum Operating Altitude	5,000 m

General 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)	Yes
Supported RAID Type	RAID F1,Basic,JBOD,RAID 0,RAID 1,RAID 5,RAID 6,RAID 10
Notes	<ul style="list-style-type: none"> • 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	Btrfs,ext4

File Services

File Protocol	SMB,AFP,NFS,FTP,WebDAV,Rsync
Maximum Number of SMB Connections (FSCT-Based)	600
Windows Access Control List (ACL) Integration	Yes
NFS Kerberos Authentication	Yes

Account & Shared Folder

Maximum Local User Accounts	2,048
Maximum Local Groups	512
Maximum Shared Folder	512
Maximum Shared Folder Sync Tasks	12

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, Windows Server 2019, Windows Server 2016
Citrix XenServer	XenServer 8, Citrix Hypervisor 8.2 LTSR CU1, XenServer 7
OpenStack	Cinder

Security

Firewall, encryption shared folder, SMB encryption, FTP over SSL/TLS, SFTP, rsync over SSH, login auto block, Let's Encrypt support, HTTPS (customizable cipher suite)

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, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文
Notes	For an updated list of supported browser versions, check the DSM Technical Specifications .

Packages and Applications

Synology AI Console

Centralize AI management with flexible configurations for AI model integration, user access control, data privacy, usage policies, and resource allocation

Third-Party AI Model Integration	v
Maximum De-Identification Rate	600 words per second
Notes	<ul style="list-style-type: none">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 Drive

Synchronizes files across Windows®, macOS®, Linux®, Android™ and iOS. The built-in cross-platform portal allows access to data anytime and anywhere

Maximum Number of Users	1,200
Maximum Number of Hosted Files	15,000,000 (applies to files indexed or hosted by Synology Drive . For file access through other standard protocols, refer to the File Services section above)

File Station

Provides virtual drives, remote folders, Windows® ACL editor, compression/extraction of archived files, bandwidth control for specific users/groups, creation of sharing links, and transfer logs

Hybrid Share

Synchronize data across multiple sites for fast and efficient multi-site teamwork. Powered by Synology C2 Storage, Hybrid Share requires purchase of a monthly or annual subscription

SAN Manager

Maximum iSCSI Target Number	64
Maximum LUN	128
LUN Clone/Snapshot, Windows ODX	Yes

Virtual Machine Manager

Recommended Virtual Machine Instances	8 (Learn more)
Recommended Virtual DSM Number (Licenses required)	8 (including 1 Free License)

Hyper Backup

Supports local backup, network backup, and data backup to other servers and public clouds, including C2 Storage

Snapshot Replication

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

Synology High Availability

Reduces service downtime by combining two identical NAS into a high-availability cluster

Synology Chat

Maximum Number of Users	500
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Synology Office

Maximum Number of Users	1,100
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Synology MailPlus / MailPlus Server

A secure, reliable, and private mail solution featuring high-availability, load balancing, security, and filtering options

Free Email Accounts	5 (Additional accounts require purchase of licenses)
Maximum Number of Users	1,400

Surveillance Station

Default Licenses	2 (Additional cameras require purchase of licenses)
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Suggested Maximum IP Cameras and Total FPS (H.264)	<ul style="list-style-type: none">• 1080p: 100 channels, 2600 FPS• 3M: 100 channels, 1500 FPS• 5M: 90 channels, 900 FPS• 4K: 55 channels, 550 FPS
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Suggested Maximum IP Cameras and Total FPS (H.265)	<ul style="list-style-type: none">• 1080p: 100 channels, 3000 FPS• 3M: 100 channels, 2400 FPS• 5M: 100 channels, 1500 FPS• 4K: 100 channels, 1080 FPS
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Central Management System

Provides a single interface to manage and monitor multiple Synology NAS

VPN Server

Maximum Connections

12

Other packages

Additional 3rd-party packages are available in the Package Center

Environment & Packaging

Environment safety

RoHS Compliant

Packaging Content

- Main Unit X 1
- Accessory Pack X 1
- AC Power Cord X 2
- Quick Installation Guide X 1

Optional Accessories

- DDR4 ECC UDIMM: [D4EC-2666-8G/D4EC-2666-16G](#)
- Expansion Units: [RXD1219sas](#)
- Enterprise Series 3.5" SAS HDD: [HAS5300 Series](#)
- 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.

Warranty

5 Years

Notes

The warranty period starts from the purchase date as stated on your purchase receipt. ([Learn more](#))

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