

# SA3400D



**Brand:** Synology  
**Product Code:** SA3400D  
**Availability:** 10  
**Weight:** 19.70kg  
**Dimensions:** 88.00mm x 482.00mm x  
724.00mm  
**Call for Price:**

## Short Description

Synology 12-Bay Active-Passive Dual Controller NAS SA3400D (Diskless)

## Description

### High-availability file and block storage solution



**Accessible and convenient**

Maintain data availability with an active-passive high availability dual-controller module



## **Versatile applications**

Manage, distribute, and protect data, back up endpoints, and guard physical premises



## **Fast and efficient**

Over 3,500/2,900 MB/s seq. read/write throughput and over 500 TB maximum storage capacity.

## **Built-in High Availability**

Keep file sharing services, block storage, backups, and other office applications online with automatic minute-level failover. Defend against operational disruptions with two independent and hot-swappable controllers operating in an active-passive configuration.

## **Made for demanding environments**

The SA3400D is engineered to provide outstanding performance in both NAS and SAN storage roles. Its throughput and random I/O performance support efficient SMB and NFS file serving as well as a range of iSCSI and Fibre Channel block storage applications.

## **Consolidate your data infrastructure**

Manage, protect, and share data with versatile business solutions. Empower team collaboration, sandbox applications, and provide VM storage on a unified platform.

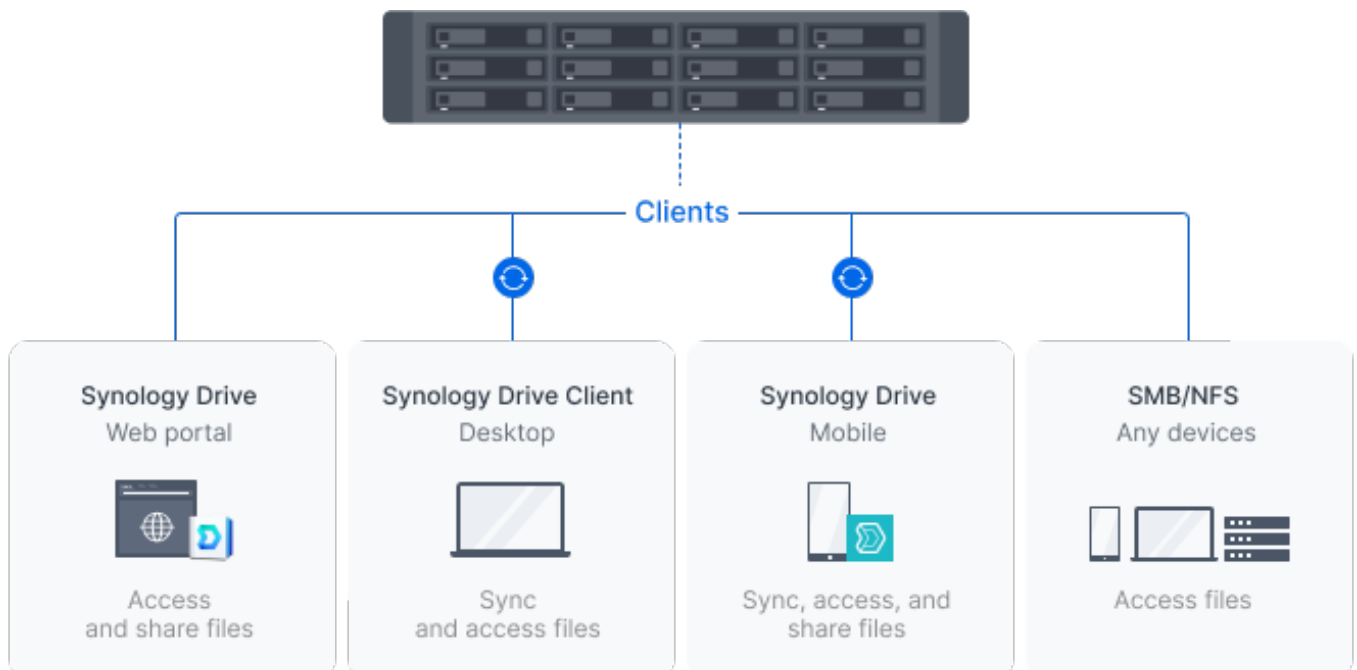
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**Private cloud management**

## Efficient and secure folder sharing

View, edit, and share data through desktop, mobile, and web-based applications. Enable user access to shared folders over SMB or NFS and leverage Microsoft AD or LDAP integration for efficient user access and permissions management.

## Efficient cross-site file syncing



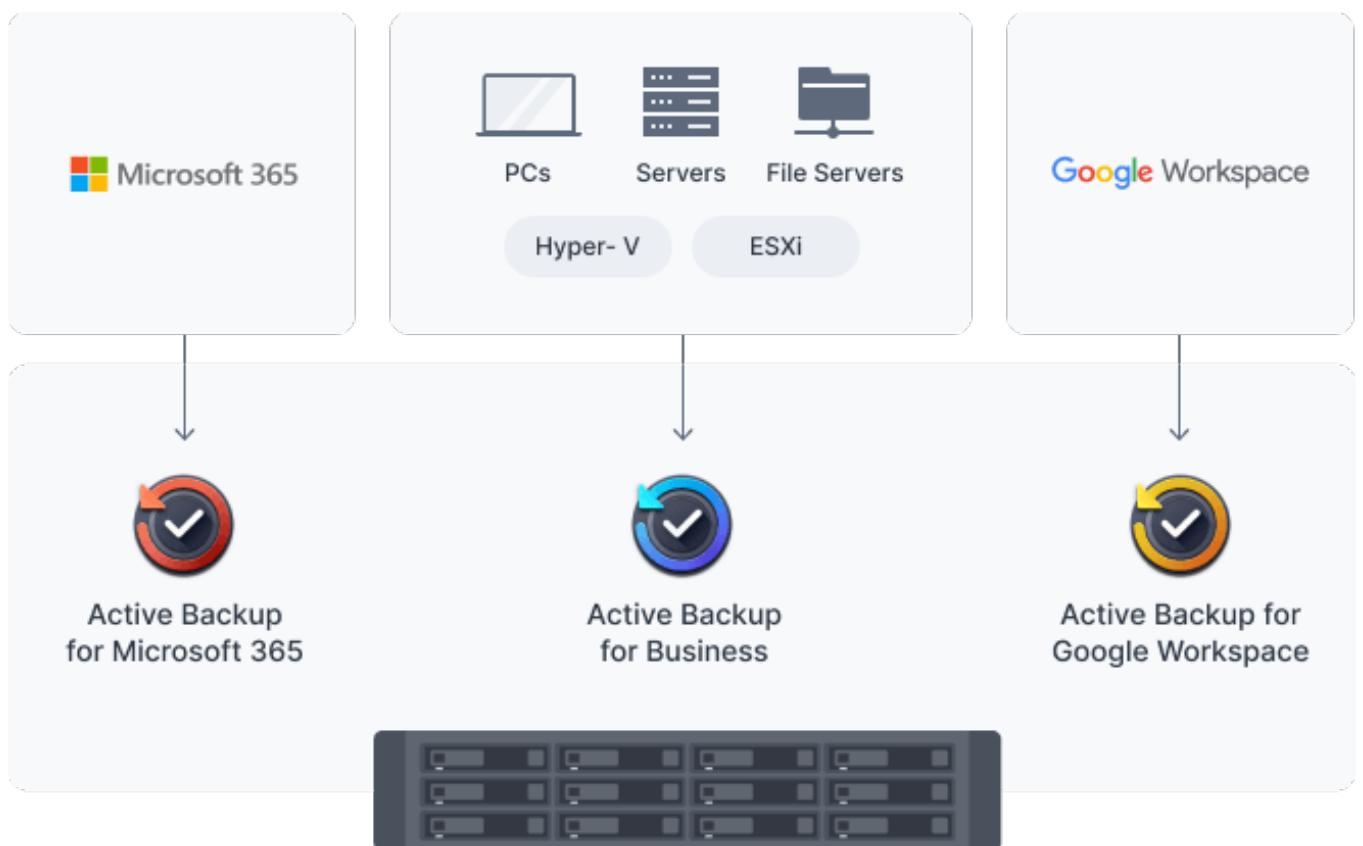
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## **Built-in data protection**

### **Back up PCs, servers, SaaS accounts, and VMs**

Consolidate and automate backup tasks for PCs, servers, VMs, SaaS applications, and more with Active Backup Suite. Manage all backup tasks from a central console and quickly restore specific files, entire devices, virtual services, and employee SaaS accounts to keep your business running.

## Create off-site backups for shared folders, LUNs, and more



## **Business productivity solutions**

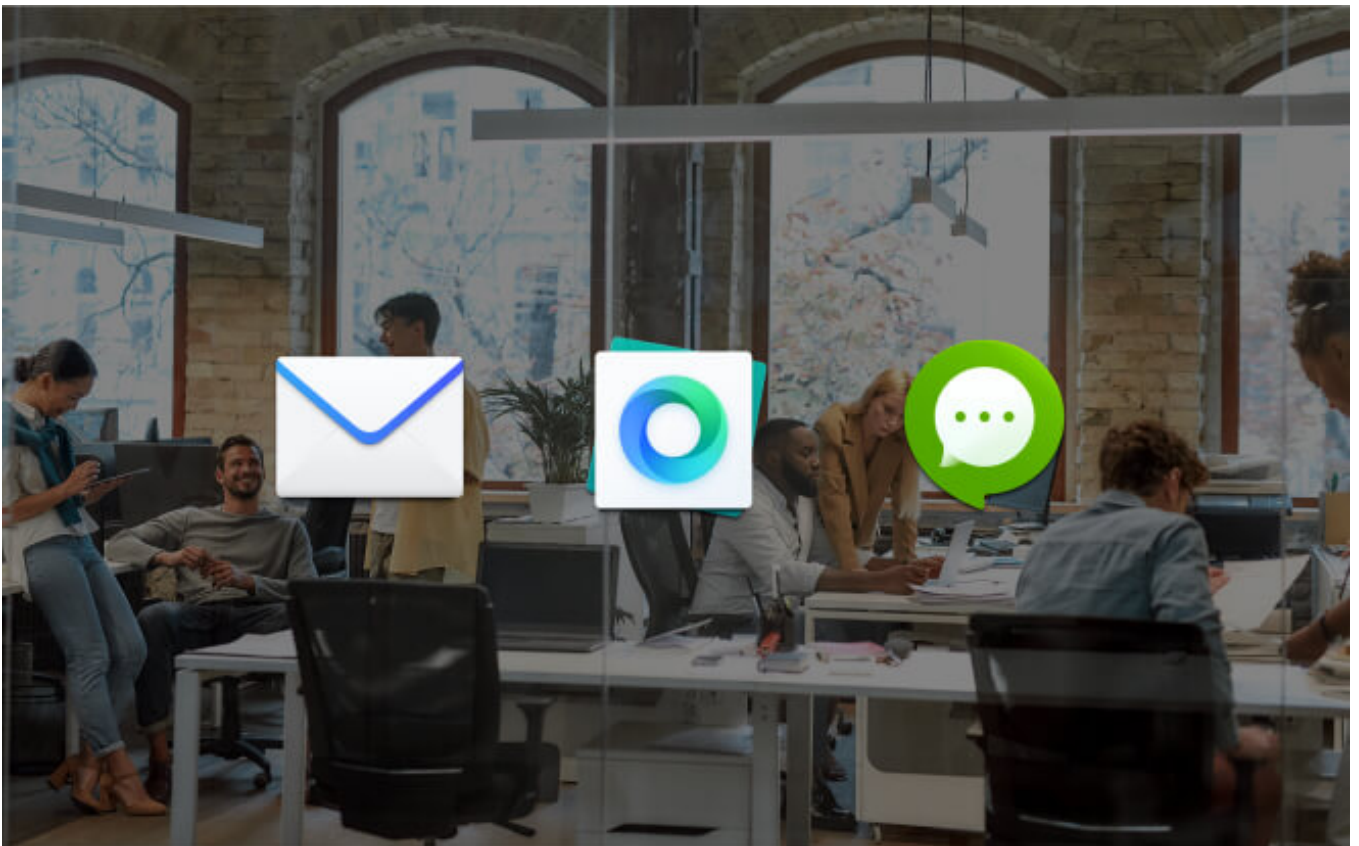
### **Boost team productivity with collaborative tools**

Improve collaboration in the workplace with Synology productivity solutions. Create, edit, and share documents across teams in real time with Synology Office. Host an on-premises mail server with MailPlus, providing web-based email access while retaining full data ownership. And stay connected via secure one-on-one chats, public channels, encrypted private channels, and group conversations in Synology Chat.

### **Sandbox and instantly restore critical services**



## Supports industry-leading virtualization platforms



## **Flexible options to meet changing needs**

Flexibly scale storage capacity, optimize I/O performance, and meet different network needs with a range of expansion options.

### **Add storage capacity on demand**

Scale server capacity up to 576 TB when your data storage needs increase by adding two 12-bay [RXD1219sas](#) expansion units.

### **Boost network and I/O performance**

Add 10/25GbE connectivity with optional add-in cards. Create all-flash storage volumes with SAS SSD for lightening-fast I/O, or boost IOPS and cut down latency on HDD volumes by creating SAS SSD read/write cache volumes.



## Synology has you covered

The SA3400D is backed by Synology's 5-year limited warranty, including technical support and hardware replacement services to maximize your return on investment and ensure continuous, high-quality performance.

### Software

DSM Specifications

[Storage Management](#)

Maximum Single Volume Size		<ul style="list-style-type: none"><li>• 200 TB (32 GB memory required)</li><li>• 108 TB</li></ul>
Maximum Internal Volume Number	64	
SSD Read/Write Cache	<a href="#">(Determining cache size)</a>	
SSD TRIM		
RAID Group Supported RAID Type		<ul style="list-style-type: none"><li>• RAID F1</li><li>• Basic</li></ul>

RAID Migration

Volume Expansion with  
Larger HDDs

Volume Expansion by  
Adding a HDD

Global Hot Spare Supported  
RAID Type

Notes

- JBOD
- RAID 0
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- Basic to RAID 1
- Basic to RAID 5
- RAID 1 to RAID 5
- RAID F1
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- RAID F1
- JBOD
- RAID 5
- RAID 6
- RAID F1
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- 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

[File System](#)

Internal Drives

[File Services](#)

File Protocol

Maximum Concurrent 1,200

SMB/AFP/FTP Connections

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 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 Sync Tasks	32
<a href="#">Hybrid Share</a>	Maximum Hybrid Share Folders	30
<a href="#">Hyper Backup</a>	Folder and Package Backup Entire System Backup Notes	Full-system backup requires DSM 7.2 or later.
<a href="#">High Availability</a>	Synology High Availability Notes	Synology High Availability is a built-in package for SA3400D to maximize service uptime. SA3400D does not support forming a high-availability cluster with another server unit.
<a href="#">Log Center</a>	Syslog Events per Second	3,000
Virtualization	VMware ESXi 6.5 and VAAI Windows Server 2022 Citrix Ready OpenStack	
<a href="#">General Specifications</a>	Supported Protocols	SMB1 (CIFS), SMB2, SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, Fibre Channel, HTTP, HTTPs, FTP, SNMP, LDAP, CalDAV
	Supported Browsers	<ul style="list-style-type: none"> <li>• Chrome</li> <li>• Firefox</li> <li>• Edge</li> <li>• Safari</li> </ul>
	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 Chat](#)

Suggested Users  
Notes

500

- 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 their maximum supported memory.

[SAN Manager](#)

Maximum iSCSI Target  
Number

256

Maximum LUN  
LUN Clone/Snapshot,  
Windows ODX

512

[Synology MailPlus /  
MailPlus Server](#)

Free Email Accounts

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

Suggested Users  
Notes

10,000

- 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: 160 channels, 2800 FPS
- 3M: 160 channels, 1600 FPS
- 5M: 120 channels, 1200 FPS
- 4K: 80 channels, 800 FPS

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

- 1080p: 200 channels, 6000 FPS
- 3M: 160 channels, 2800 FPS
- 5M: 160 channels, 1600 FPS
- 4K: 120 channels, 1200 FPS



## Notes

- Surveillance Station 9.1.3 or above is required to support the maximum IP cameras and FPS figures listed.
- 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

## [Synology Drive](#)

Recommended Number of Concurrent Sync Clients

the same specification at the same time.

2,000 (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  
Notes

12,500

- 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

<a href="#">Virtual Machine Manager</a>	Recommended Virtual Machine Instances	16 ( <a href="#">Learn more</a> )
	Recommended Virtual DSM Number ( <a href="#">Licenses required</a> )	16 (including 1 Free License)
	Notes	The specifications vary depending on system configuration and memory size.
<a href="#">VPN Server</a>	Maximum Connections	60

## Specification

NAS	
RJ-45 10GbE LAN Port	1 (per controller)
CPU Architecture	64-bit
CPU Core	8
CPU Frequency	2.1 (base) / 2.7 (turbo) GHz
CPU Model	Intel Xeon D-1541
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**