Synology NAS
SA3400

Highly-Scalable Storage For Large-Scale Businesses

Synology SA3400 is a 12-bay rackmount NAS designed for large and extensive scaling of data storage. Its comprehensive data protection technologies, including High Availability, hybrid cloud backup, and server or virtual machine backup approaches, make it a reliable server for massive storage deployment. SA3400 is backed by Synology's 5-year limited warranty.

Highlights

- A highly scalable rackmount NAS to aptly accommodate large businesses' needs for scalability, suitable for video post-production and massive surveillance deployment
- TCO-optimized storage companion, offering various and flexible support for both SAS and SATA drives
- Scale up to 180/96 drives when connected with 7 RX2417sas/RX1217sas[1]
- Built-in dual 10GbE and quad 1GbE ports with failover and Link Aggregation support
- Elastic expandability with dual PCIe 3.0 x8 slots for installing additional 10/25GbE network interface cards
- Effortless data protection for your physical server, virtual machines, and cloud services through Synology Active Backup Suite
- Advanced iSCSI storage supports various virtualization deployment, including VMware vSphere®, Windows Hyper-V®, Citrix XenServer®, and OpenStack Cinder®
- Backed by Synology's 5-year limited warranty[2]

Scalable Storage with Outstanding Performance

With the ability to scale up 180 storage drives and deliver more than 1 petabyte of raw capacity, SA3400 can easily fulfill the need for video post-production and massive surveillance deployment. Offering **dual built-in 10GBASE-T Ethernet** for fast data transmission, **PCIe 3.0 slots** for expansion of 10G/25GbE network interface cards, and **supporting various SAS and SATA drives** without vendor lock-in, SA3400 provides an elastic and expandable storage solution with optimized total cost of ownership (TCO).

SA3400 is equipped with an **Intel® Xeon® D-1541 8-core CPU** and **16GB ECC RDIMM memory (upgradable to 128GB)** to ensure system performance and data integrity, delivering over **5,520 MB/s sequential throughput** via aggregated 10Gb Ethernet.[3] With **5-year warranty**, SA3400 guarantees a reliable server, maximizes service uptime, and mitigates business loss caused by unexpected hardware failure.

Next-Generation File System

A modern file system designed to address obstacles often encountered in enterprise storage systems, and safeguards data integrity through metadata mirroring, self-healing, and snapshot replication.

Btrfs: Next Generation Storage Efficiency

SA3400 introduces the **Btrfs file system**, which brings the most advanced storage technologies to meet the management needs of modern businesses:

- **Advanced snapshot technology** provides schedulable, near-instantaneous data protection of share folders and iSCSI LUNs.
- **File- and folder-level data restoration** brings time-saving conveniences for users who wish to restore only a specific file or folder.
- **Flexible Shared Folder and User Quota System** provides comprehensive quota control on all user accounts and shared folders.
- **File self-healing**: Btrfs file system is able to detect corrupted files automatically with mirrored metadata, and can recover broken data using the supported RAID volumes, which include RAID1, 5, 6, and 10.

Synology Active Backup Suite

Integrated, modern, and license-free backup & instant recovery solution for business workloads in physical, virtual, and cloud environments.

Ultimate Backup Solution

SA3400 integrates various backup applications to safeguard your important data on any device with an intuitive user interface and durable storage technologies.

- Workstation /Server/Virtual Machine Backup: **Active Backup for Business** centralizes backup tasks for virtual machines, Windows PC, servers, and rsync/SMB file servers. Fast and reliable recovery options ensure running services, VMs, and files can be instantly available when needed.

- SaaS backup: **Active Backup for Office 365/G Suite** is an on-premise backup solution for public clouds with a centralized dashboard, optimizing storage efficiency through the single instancing and block-level deduplication technology.

- NAS backup: **Hyper Backup** comprehensively backs up your data to a local shared folder, an external device, another Synology NAS, an rsync server, or a public cloud service to ensure data safety.

- Computer backup: **Synology Drive Client** backs up your Windows, Mac, and Linux desktop devices to safeguard important computer files. SA3400 is also compatible with Time Machine, allowing you to effortlessly back up your Mac to Synology NAS.

- Highly integrated backup solution: **Synology C2 Backup** is a public cloud service powered by Synology. By using Hyper Backup to back up your data on Synology Cloud2 (Synology C2), data safety and availability can be ensured when a disaster happens.

Virtual Machine Manager

Virtual Machine Manager implements various virtualization solutions, allowing you to manage multiple virtual machines on your SA3400, including Windows, Linux, and Virtual DSM.

## Effortless Virtualization Deployment

Synology's **Virtual Machine Manager** adds boundless capabilities to your NAS. You can set up and run various virtual machines including **Windows, Linux**, and **Virtual DSM** on your NAS to test new software versions in a sandbox environment, isolate your customers' machines, and increase the flexibility of your SA3400 with reduced hardware deployment and maintenance costs. **Synology iSCSI storage** fully supports most virtualization solutions to enhance work efficiency with a simple management interface. **VMware vSphere™ 6.5 and VAAI integration** helps offload storage operations and optimizes computational efficiency. While **Windows Offloaded Data Transfer (ODX)** speeds up data transfer and migration rates, the support for **OpenStack Cinder** transforms your SA3400 into a block-based storage component.
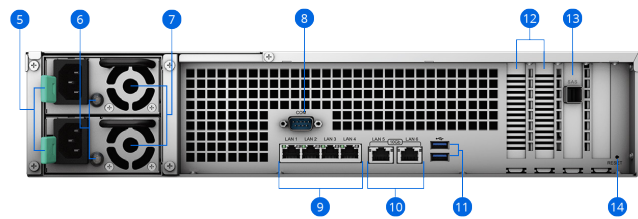
Hardware Overview

Front

Rear A
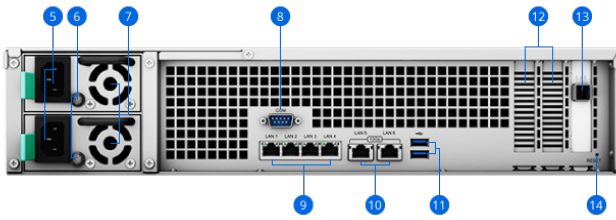
Rear B

1	Power button and indicator	2	Beep off button	3	Drive tray	4	Drive status indicator
5	Power port	6	PSU indicator and beep off button	7	PSU fan	8	Console port
9	1GbE RJ-45 port	10	10GbE RJ-45 (10GBase-T) port	11	USB 3.0 port	12	PCIe expansion slot
13	Expansion port	14	Reset button					

Technical Specifications

Hardware

CPU	Intel® Xeon® D-1541 8-core 2.1GHz, Turbo Boost up to 2.7GHz
Hardware encryption engine	Yes (AES-NI)
Memory	16 GB DDR4 ECC RDIMM (expandable up to 128 GB)
Compatible drive type	12 x 3.5" or 2.5" SAS/SATA HDD/SSD (drives not included)
Hot swappable drive	Yes
External port	• 2 x USB 3.0 port • 1 x Expansion port
Dimensions (HxWxD)	• 88 x 430.5 x 692 mm • 88 x 482 x 724 mm (with server ears)
Weight	14.5 kg
LAN	• 2 x 10Gbe RJ-45 (10GBASE-T) • 4 x Gigabit RJ-45
Wake on LAN/WAN	Yes
PCIe 3.0 slot	• 2 x 8-lane x8 slot • High-performance network interface card support
Scheduled power on/off	Yes
System fan	4 (80 x 80 x 32 mm)
AC input power voltage	100V to 240V AC
Power frequency	50/60Hz, single phase
Operating temperature	0°C to 35°C (32°F to 95°F)
Storage temperature	-20°C to 60°C (-5°F to 140°F)
Relative humidity	5% to 95% RH
Maximum operating altitude	5,000 m (16,400 ft)

General DSM Specification

Networking protocol	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™ , L2TP)
File system	• Internal: Btrfs, ext4 • External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT[4]
Supported RAID type	Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, Synology RAID F1
Storage management	• Maximum single volume size: 108TB/200TB (at least 32 GB RAM required, for RAID 5 or RAID 6 groups only) • Maximum system snapshots: 65,536[5] • Maximum internal volume: 256
SSD cache	Read/write cache support
File sharing capability	• Maximum local user accounts: 16,000 • Maximum local groups: 512 • Maximum shared folders: 512 • Maximum concurrent SMB/NFS/AFP/FTP connections: 4,000
Privilege	Windows Access Control List (ACL), application privilege
Directory service	Windows® AD integration: Domain users login via SMB/NFS/AFP/FTP/File Station, LDAP integration
Virtualization	VMware vSphere® 6.5, Microsoft Hyper-V® , Citrix®, OpenStack®
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)
Supported client	Windows 7 onwards, Mac OS X® 10.11 onwards
Supported browser	Chrome®, Firefox®, Edge®, Internet Explorer® 10 onwards, Safari® 10 onwards; Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards) on tablets
Interface language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文

Packages and Applications

File Server & Synchronization	
Synology Drive	Provides a universal portal to synchronize files across various platforms, including Windows, macOS, Linux, Android and iOS. • Maximum number of hosted files: 5,000,000 • Maximum number of concurrent connections for PC clients: 2,000
File Station	Virtual drive, remote folder, Windows ACL editor, compressing/extracting archived files, bandwidth control for specific users or groups, creating sharing links, transfer logs
FTP Server	Bandwidth control for TCP connections, custom FTP passive port range, anonymous FTP, FTP SSL/TLS and SFTP protocol, boot over the network with TFTP and PXE support, transfer logs
Presto File Server[6]	High-speed data transfer over WAN with exclusive SITA technology between Synology NAS and desktop
Cloud Sync	One or two-way synchronization with public cloud storage providers, including Alibaba Cloud OSS, Amazon Drive, Amazon S3-compatible storage, Backblaze B2, Baidu Cloud, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, MegaDisk, Microsoft OneDrive, OpenStack Swift-compatible storage, Tencent COS, WebDAV servers, Yandex Disk
Universal Search	Offers global searches for applications and files

iSCSI Storage & Virtualization	
iSCSI Manager	• Maximum iSCSI targets: 256 • Maximum iSCSI LUNs: 512 • Supports iSCSI LUN clone/snapshot
Virtual Machine Manager	Multiple virtual machines deployable, including Windows, Linux, or Virtual DSM

Data Protection & Backup Solution	
Hyper Backup	Supports local backup, network backup, and backup data to public clouds
Backup tools	DSM configuration backup, macOS Time Machine support, Synology Drive Client desktop application Shared Folder Sync - maximum task numbers: 32
Snapshot Replication	• Maximum shared folder snapshots: 1,024 • Maximum replications: 64
Synology High Availability	Reduces service downtime by setting up two identical NAS into one high-availability cluster
Active Backup for G Suite	Supports G Suite My Drive and Team Drive backup and restoration

Active Backup for Office 365	Supports Office 365 OneDrive for Business, mail, contacts, and calendar backup and restoration
Active Backup for Business	All-in-one backup solution designed for heterogeneous business IT environments, enabling IT admins to remotely manage and monitor protection over PC, servers, and VM on one centralized console

Productivity & Collaboration

Collaboration tools	Supports collaboration with instant message service Synology Chat, online editor Synology Office, and scheduling assistant Synology Calendar • Max. number of concurrent users for Chat: 500 • Max. number of users for Office: 3,400 • Calender: Supports CalDAV and access via mobile devices
Note Station	Rich-text note organization and versioning, encryption, sharing, media embedding and attachments
Synology MailPlus Server	Secure, reliable, and private mail solution with high-availability, load balancing, security and filtering design (Including 5 free email account licenses. Additional accounts require the purchasing of additional licenses)
Synology MailPlus	Intuitive webmail interface for MailPlus Server, customizable mail labels, filters, and user interface

Multimedia

Moments	Supports smart AI album with facial and subject recognition, photo editing and sharing features, similar photo detection, auto-editing functions such as color correction and angle adjustments, and AI selection of the best photos. Mobile applications are available on iOS and Android devices
Other packages	Video Station, Photo Station, Audio Station, iTunes® Server

Surveillance

Surveillance Station	Maximum IP cameras: 100 (total of 3,000 FPS at 720p, H.264) (Including two free camera licenses. Additional cameras require the purchasing of additional licenses)

All-in-One Server

Synology Directory Server	Provides a flexible and cost-effective domain controller solution
Central Management System	Provides a single interface to manage and monitor multiple Synology NAS models
VPN Server	Maximum connections: 40, supported VPN protocol: PPTP, OpenVPN™, L2TP/IPSec
Mail Server	Supported Mail Server Protocols: POP3, SMTP, IMAP, Support LDAP/AD account
Mail Station	Webmail interface for Mail Server to receive emails from multiple POP3 mailboxes, customizable SMTP server
Web Station	Virtual host (up to 30 websites), PHP/MariaDB®, third-party applications support
Other packages	DNS Server, RADIUS Server, Log Center

Others

Storage Analyzer	Volume and quota usage, total size of files, volume usage and trends based on past usage, size of shared folders, large files, most recently modified files, least recently accessed files
Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Security Advisor	Malware detection/removal, user account/password, network, system-related security scan
Other packages	Additional 3rd-party packages available in Package Center

Environment and Packaging

Environment safety	RoHS compliant
Package content	• SA3400 main unit x 1 • Quick Installation Guide x 1 • Accessory pack x 1 • AC power cord x 2
Optional accessories	• 16GB/32GB DDR4-2666 ECC RDIMM (D4RD-2666-16G/D4RD-2666-32G) • Synology E10G17-F2/E10G18-T1/E10G18-T2 10Gbps Ethernet adapters • Synology Expansion Unit RX1217sas/RX2417sas • VisualStation VS360HD, VS960HD • Surveillance Device License Pack • Synology MailPlus License Pack • Virtual DSM License Pack
Warranty	5 years[2]

*Model specifications are subject to change without notice. Please refer to www.synology.com for most up-to-date information.

1. SA3400 can scale up to 96 drives with 7 x RX1217sas or 180 drives with 7 x RX2417sas. The Expansion Units are sold separately.
2. The warranty period starts from the purchase date as stated on your purchase receipt. Visit https://www.synology.com/company/legal/warranty for more information.
3. Performance figures may vary depending on the environment, usage, and configuration.
4. exFAT Access is sold separately in Package Center.
5. System snapshot includes snapshots taken by iSCSI Manager, Snapshot Replication, and Virtual Machine Manager. The availability of the listed packages may vary by model.
6. Presto File Server License is sold separately in Package Center.

SYNOLOGY INC.

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