Synology®

High Scalability

SA3600 & SA3400 Series



Scalability-First Storage for Growing Businesses

The Synology SA3600 and SA3400 Series is designed to provide large enterprises and studios with scalable, reliable data storage. Accommodating up to 1.728 PB[1] of raw storage capacity and different network configurations, these 12-bay rackmount servers are perfect for businesses that need to store large volumes of data without sacrificing performance and dependability. Advanced management, high-availability, and data protection solutions are available in the Synology DiskStation Manager (DSM) operating system.

Highlights

- **Supercharged Performance**
  Efficient handling of data-intensive applications with over 6,200/3,000 MB/s sequential read/write throughput[2]
- **Petabyte-Scale Flexibility**
  Attach up to 7 additional Synology RX1222sas Expansion Units for up to 96 drive bays[3]
- **Flexible Networking Options**
  Leverage built-in 10GbE RJ-45 ports or boost network bandwidth with optional 10/25/40GbE and Fibre Channel adapters[4]
- **High Service Availability**
  Minimize downtime with Synology High Availability active-passive clustering and out-of-band (OOB) management
- **Long-Term Support**
  Backed by Synology's 5-year limited hardware warranty[5]

Dependable Platform for Scalable Data Management

The extensive scaling capabilities of the SA3600 and SA3400 Series enable enterprise data centers, large production studios, and growing businesses to meet their increasing data storage needs by accessing over 1 PB of raw storage capacity on demand.

SA3610 and SA3410 deliver stable high throughput, perfect for smooth ingestion of large data volumes, including backups, and video recording or serving tasks. Hardware and software safeguards ensure maximum data and service availability, as well as reliable recovery options in case of disaster or attack.

- An **out-of-band (OOB) management port** facilitates remote troubleshooting and maintenance, while **redundant power supply units and system fans** reduce single points of hardware failure
- Built-in **dual 10GbE RJ-45 ports** make it easy to fit the SA3600 and SA3400 Series into existing fast networks, while **two PCIe 3.0 expansion slots** support expansion with 10/25/40GbE and Fibre Channel cards[4] for bandwidth-consuming applications
- Support for **hybrid storage arrays** allows combining the speed of SSD and efficiency of HDD by designating **SATA and NVMe SSD volumes as read/write cache for HDD volumes** to cut down I/O speeds and latency[6]

Designed to Keep Data Available and Services Online

Built-in solutions help maintain high system availability and facilitate fast recovery if a disaster or major outage occurs.

- Synology High Availability provides fast failover between two identical units to keep services online when disaster strikes
- Snapshot Replication provides schedulable, near-instantaneous data protection with version control, ensuring that documents in shared folders and LUNs remain safe and available[1]
- Hyper Backup protects your Synology system by backing up data and configurations to multiple destinations, including the secure C2 Storage public cloud,[7] with efficiency delivered by built-in deduplication, integrity checks, compression, and versioning

- Synology Active Backup Suite lets you consolidate protection of Windows clients and servers, Linux endpoints, Synology systems, VMware® and Hyper-V® VMs, and SaaS applications, maximizing storage efficiency with data deduplication technology

Powerful Sharing and Collaboration Tools for Teams

Synology's collaboration suite provides a private cloud solution for on-site and remote workers to concurrently edit documents, share files, manage emails, send instant messages, and more.

- Synology Drive supports file sharing, remote data access, cross-device and cross-site synchronization, on-demand file restoration, and backup
- The Synology Office extension lets users collaborate on documents, spreadsheets, and presentation slides in real time, supported by convenient options such as file versioning for easy restoration and password protection of shared files
- Synology Chat brings teams together with one-on-one chats, group chats, and encrypted private channels over multiple platforms
- Synology MailPlus[8] provides a secure, reliable, and private email server
- Synology Calendar helps teams keep track of priorities with convenient calendar sharing and scheduling
- Synology Hybrid Share combines reliable on-premises storage with efficient syncing of shared folders in the cloud to enable seamless cross-site synchronization and local file access at LAN speed[7]

Certified Storage for Virtualization and Containerization

SA3000 Series units can serve as virtual machine storage, VM backup servers, and alternartive container or VM hosts. They are fully certified as storage for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack environments.

- **Synology Storage Console** for VMware or Windows platforms lets you manage VM storage components directly from your hypervisor. VMware VAAI

integration and Windows ODX help offload storage operations and speed up data transfers

- **Host lightweight containers and VMs** for testing, sandboxing, and emergency recovery purposes with Docker and Synology Virtual Machine Manager, a native hypervisor that supports Windows, Linux, and virtual versions of DSM[9]

Backed by Synology's 5-Year Limited Warranty

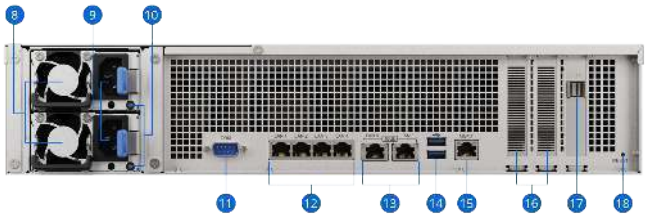
Maximize your return on investment with the comprehensive hardware replacement and premium technical support services offered under Synology's 5-year limited hardware warranty.[5]

Hardware Overview

Front



Rear



1	Power Button and Indicator	2	Status Indicator	3	Alert Indicator	4	Mute Button
5	Drive Status Indicators	6	Drive Trays	7	Rail Kit Release Tabs	8	PSU Fans
9	Power Ports	10	PSU Indicators	11	Console Port	12	1GbE RJ-45 Ports
13	10GbE RJ-45 Ports	14	USB 3.2 Gen 1 Ports	15	Management Port	16	PCI Express Expansion Slots
17	Expansion Port	18	Reset Button				

Technical Specifications

Hardware

	SA3610	SA3410
CPU	Intel® Xeon® D-1567	Intel® Xeon® D-1541
Memory	16 GB DDR4 ECC RDIMM (expandable up to 128 GB)	
Compatible drive types	• 12 × 3.5" Synology SAS/SATA HDD, 2.5" Synology SATA SSD, or 2.5" SAS SSD (drives not included) • Synology only guarantees full functionality, reliability, and performance for Synology drives listed on the compatibility list. The use of non-validated components may limit certain functionality and result in data loss and system instability[10]	
Hot swappable drives	Yes	
External ports	• 2 x USB 3.2 Gen 1 ports • 1 x Expansion ports (Mini-SAS HD)	
Form factor	Rackmount 2U	
Size (HxWxD)	• 88 × 430.5 × 692 mm • 88 × 482 × 724 mm (with server handles)	
Weight	14.5 kg	
LAN ports	• 1 × 1GbE RJ-45 (out-of-band management and data transfer) • 4 × 1GbE RJ-45 (data transfer) • 2 × 10GbE RJ-45	
Wake on LAN/WAN	Yes (only on 1GbE ports)	
PCIe expansion	• 2 × 8 width slot, Gen 3.0 ×8 lanes • Supports network interface cards[4]	
Scheduled power on/off	Yes	
System fans	4 x (80 × 80 × 32 mm)	
AC input power voltage	100 V to 240 V AC	
Power frequency	50/60 Hz, single phase	
Operating environment	• Temperature: 0°C to 35°C (32°F to 95°F) • Relative humidity: 8% to 80% RH	
Storage environment	• 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 Specifications

Networking protocols	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, and VPN (PPTP, OpenVPN™, L2TP)
File systems	• Internal: Btrfs, ext4 • External: Btrfs, ext4, ext3, FAT32, NTFS, HFS+, exFAT
Supported RAID types	Synology RAID F1, Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, and RAID 10
Storage management	• Max. single volume size: 108 TB/200 TB/1 PB[1] • Max. number of system snapshots: 65,536[11] • Max. number of internal volumes: 256
SSD cache[6]	• Read/write cache support • M.2 NVMe and 2.5" SATA SSD support
Out-of-band (OOB) management	Power on, shutdown, force shutdown, force reboot, reset system, view DSM logs, monitor DSM logs, view OOB logs
File sharing capabilities	• Max. number of local user accounts: 16,000 • Max. number of local groups: 512 • Max. number of shared folders: 512 • Max. number of concurrent SMB/NFS/AFP/FTP connections: 4,000 (10,000 with RAM expansion)[12]
Privileges	Windows® Access Control List (ACL) and application privileges
Directory services	Connects with Windows® AD/LDAP servers enabling domain users to login via SMB/NFS/AFP/FTP/File Station using their existing credentials
Virtualization	VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, OpenStack, and Kubernetes
Security	Firewall, shared folder encryption, SMB encryption, FTP over SSL/TLS, SFTP, rsync over SSH, login auto block, Let's Encrypt support, and HTTPS (customizable cipher suite)
Supported browsers	Google Chrome®, Firefox®, Microsoft Edge®, Safari® 13 and later, and Safari (iOS 13.0 and later) on iPad, Chrome (Android™ 11.0 and later) on tablets
Interface languages	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

Drive
File Station
Hybrid Share[7]
Presto File Server[13]
Cloud Sync
Universal Search
Migration Assistant

Multimedia

Synology Photos
Video Station
Audio Station
iTunes® Server

SAN Storage

SAN Manager

Surveillance

Surveillance Station[14]

Data Protection & Backup Solutions

Hyper Backup
Snapshot Replication
Synology High Availability
Active Backup for Business
Active Backup for Google Workspace
Active Backup for Microsoft 365

Office Productivity

Synology Office
Synology Calendar
Note Station

Management & Administration

Synology Directory Server
Central Management System
VPN Server
Active Insight[15]
Storage Analyzer
Antivirus Essential
Web Station
DNS Server
RADIUS Server
Log Center

Others

iOS/Android™ applications

Scan the QR code to download the detailed Product Specification sheet
https://sy.to/sa3610dspsqr / https://sy.to/sa3410dspsqr

Environment and Packaging

Environmental safety	RoHS compliant	
	SA3610	**SA3410**
Package contents	• 1 x SA3610 main unit • 1 x Quick Installation Guide • 1 x Accessory pack • 2 x AC power cord	• 1 x SA3410 main unit • 1 x Quick Installation Guide • 1 x Accessory pack • 2 x AC power cord
Optional accessories[16]	• DDR4 RDIMM: D4ER01-16G / D4ER01-32G • Expansion Unit: RX1222sas • 10GbE Network Interface Card: E10G21-F2 / E10G18-T1 / E10G18-T2 • 25GbE Network Interface Card: E25G21-F2 • M.2 SSD & 10GbE Combo Adapter Card: E10M20-T1 • M.2 SSD Adapter Card: M2D20 • NVMe SSD: SNV3500 Series • 2.5" SATA SSD: SAT5200 Series • 3.5" SATA HDD: HAT5300 Series • 3.5” SAS HDD: HAS5300 Series • Sliding Rail Kit: RKS-02 • MailPlus License Pack[8] • Surveillance Device License Pack[14] • Virtual DSM License Pack[9]	
Warranty	5 years[5]	

Note: Specifications are subject to change without notice. Please refer to the SA3600 and SA3400 Series specifications pages for the most up to date information.

1. Volumes between 200 TB and 1 PB make use of the Btrfs (Peta Volume) file system and support a limited selection of applications, services, and configurations. Snapshot Replication, shared folder encryption, file compression, and other functions are not available for volumes over 200 TB. For more information and restrictions, refer to this article.
2. Performance figures obtained through internal testing by Synology using a RAID 6 configuration. Actual performance may vary depending on the testing environment, usage, and configuration. See performance charts for more information.
3. SA3000 Series units support up to 96 drives with seven Synology RX1222sas expansion units, sold separately.
4. For the most up-to-date list of compatible NICs and HBAs, please check our compatibility list.
5. The warranty period starts from the date of purchase as stated on your purchase receipt. Learn more about our limited product warranty policy.
6. SSD cache can be enabled by using Synology SAT5200 Series 2.5" SSDs in standard drive bays or without occupying drive bays by installing Synology SNV3500 Series NVMe SSDs using M2D20 or E10M20-T1 adapter cards, sold separately.
7. C2 Storage for Hyper Backup and Hybrid Share requires purchase of an annual or monthly subscription. A free trial is available for each newly registered device.
8. Five MailPlus email accounts are included. Additional email accounts can be added with the purchase of Synology MailPlus License Packs. Learn more
9. Certain advanced features require Virtual Machine Manager Pro. One Virtual DSM license is included. Additional Virtual DSM instances require the purchase of Virtual DSM Licenses.
10. Check the SA3410 or SA3610 compatibility list for supported drives.
11. System snapshots include snapshots taken by SAN Manager, Snapshot Replication, and Virtual Machine Manager.
12. Maximum concurrent connections can be increased to 10,000 with maximum installed memory of 128 GB RAM.
13. Presto File Server license can be purchased separately through the application.
14. Surveillance Station includes two free licenses. Connecting more cameras and devices requires additional licenses. Learn more.
15. Synology Active Insight requires purchase of an annual or monthly subscription. A free trial is available for each newly registered device.

16. Please refer to the SA3410 and SA3610 compatibility lists, respectively, for the latest optional accessories lists.

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