FlashStation FS3600

Brand: Synology
Product Code: FS3600
Availability: 10
Weight: 14.90kg
Dimensions: 88.00mm x 482.00mm x 724.00mm
Call for Price:

Short Description

Synology 24 Bay FlashStation FS3600 (Diskless), 24-Bay; 16GB DDR4

Description

Fast and scalable all-flash NAS

FS3600 is a 24-bay all-flash Synology NAS for enterprise use that boosts the performance of I/O sensitive applications, such as databases, virtual machines, or online transaction processing (OLTP). Featuring a 12-core CPU and high-speed network connection, FS3600 delivers over 195,000 iSCSI 4K random write IOPS[1] to satisfy enterprise demand for high-speed infrastructure.

CPU

Intel® Xeon® D-1567 12-core 2.1 GHz

Memory

16 GB DDR4 ECC RDIMM, up to 128 GB

Scalability

Up to 72 x SAS/SATA drives

PCIe expansion

High-performance NIC support

Who is using Synology?

Watch how our solutions empower businesses around the world with limitless possibilities.

The storage array has been proven to be more than capable of going toe-to-toe with what would be classed as an enterprise-class all flash array for a fraction of the cost.Mark Pearce, IT Infrastructure Manager, Mantra Group

By using Synology systems within our hospital networks, we can enjoy secure, fast, and stable solutions for backup, file, and cloud services as well as virtual server

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.

Real-time collaboration on your private cloud

Synology Office is a collaboration package combining the convenience and usability of the public cloud with private cloud privacy and security. It enables seamless collaboration on documents and spreadsheets in a protected environment.

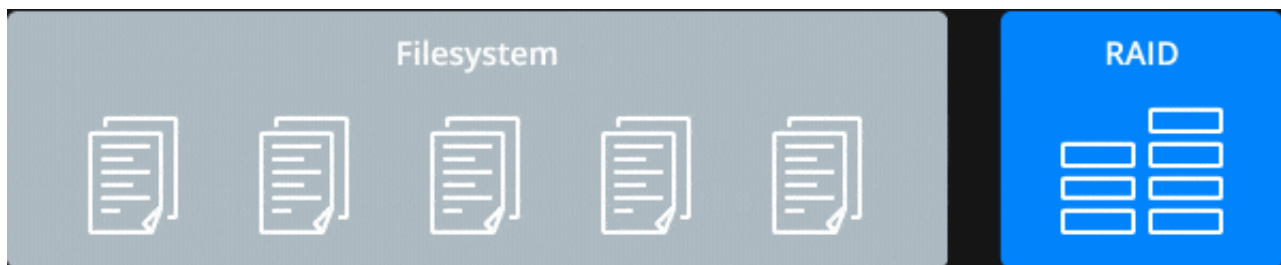# Next-generation file system for better data protection

The Btrfs file system introduces advanced storage technologies and optimized snapshots to prevent data corruption and reduce maintenance overheads. It offers flexible, efficient data protection and recovery tools while ensuring high-level data integrity.

Flexible Shared Folder/User Quota System provides comprehensive quota control on all user accounts and shared folders

Snapshot Replication provides schedulable and storage capacity-saving data protection with 1,024 shared folder backups and 65,000 system-wide snapshots
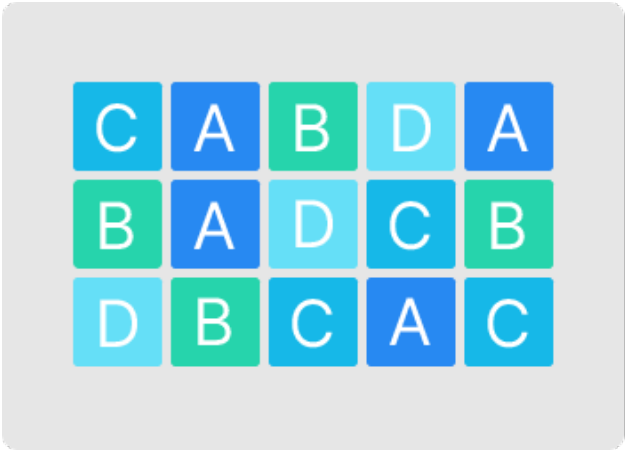
File- or folder-level data restoration accelerates data recovery and provides more flexibility for businesses

Automatic file self-healing detects and recovers corrupted files without user intervention

Flash volume deduplication

Remove duplicate data on all-flash arrays with volume-wide deduplication to greatly increase storage efficiency. Eliminate redundant data to save up to 65% in storage space use in applications like virtual desktop infrastructure, and virtual machine.

Save **65%**

5-YEAR
WARRANTY

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

Seamless transition between clustered servers in the event of a server failure to minimize the impact on applications.

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, store, and migrate virtual machines.

Synology MailPlus

Secure, reliable, and private mail server solution with an intuitive and modern mail client.

Security

Shield your Synology NAS from the most sophisticated threats with industry-leading security solutions.

Snapshot Replication

Schedulable and instantaneous data protection of shared folders and iSCSI LUNs for quick disaster recovery.

Software
DSM Specifications

Storage Management	Maximum Single Volume Size	1 PB (64 GB memory required, for RAID 6 groups only) 200 TB (32 GB memory required) 108 TB
	Maximum Internal Volume Number	256

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 • RAID 5 to RAID 6
Volume Expansion with Larger HDDs	• RAID F1 • RAID 1 • RAID 5 • RAID 6 • RAID 10
Volume Expansion by Adding a HDD	• RAID F1 • 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. • When Peta Volume is enabled, validated services and packages

		are required. Please refer to <u>this article</u> for more information on limitations. • Actual maximum storage pool and volume sizes depend on drive sizes used, the number of drive bays available, and the RAID configuration. • Volumes over 108 TB require 32 GB of memory or more.
File System	Internal Drives	• Btrfs • ext4
	External Drives	• Btrfs • ext4 • ext3 • FAT • NTFS • HFS+ • exFAT
	Notes	exFAT Access can be installed for free from Package Center in DSM 7.0. In DSM 6.2 or earlier versions, exFAT Access needs to be purchased in Package Center.
File Services	File Protocol	• SMB • AFP • NFS • FTP • WebDAV • Rsync
	Maximum Concurrent SMB/AFP/FTP Connections	4,000
	Maximum Concurrent SMB/AFP/FTP Connections (with RAM expansion)	10,000

	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 Accounts	16,000	
	Maximum Local Groups	512	
	Maximum Shared Folder	512	
	Maximum Shared Folder Sync Tasks	32	
[Hybrid Share](#)	Maximum Hybrid Share Folders	30	
[Hyper Backup](#)	Folder and Package Backup		

	Entire System Backup Notes	Full-system backup requires DSM 7.2 or later.
[High Availability](#)	Synology High Availability	
[Log Center](#)	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
	Supported Browsers	• 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 [DSM Technical Specifications](#).

Add-on Packages [view the complete package list](#)

[Central Management System](#)		
[Synology Chat](#)	Suggested Users	600
	Notes	Models with expandable memory are tested with their maximum supported memory.
[SAN Manager](#)	Maximum iSCSI Target	256

	Number Maximum LUN	512
	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	12,000
	Notes	- 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, 3840 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 the same specification at the same time.
[Synology Drive](#)	Recommended Number of Concurrent Sync Clients	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	15,000
	Notes	- 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
[Virtual Machine Manager](#)	Recommended Virtual Machine Instances	24 [(Learn more)](#)
	Recommended Virtual DSM Number [(Licenses required)](#)	24 (including 1 Free License)
	Notes	The specifications vary depending on system configuration and memory size.
[VPN Server](#)	Maximum Connections	60

Specification

NAS	
CPU Model	Intel Xeon D-1567
CPU Quantity	1
CPU Core	12
CPU Architecture	64-bit
CPU Frequency	2.1 (base) / 2.7 (turbo) GHz
Hardware Encryption Engine	Yes
Memory	16 GB DDR4 ECC RDIMM
Drive Bays	24
Hot Swappable Drive	Yes
RJ-45 1GbE LAN Port	4
USB 3.2 Gen 1 Port	2
System Fan	80 mm x 80 mm x 4 pcs
Power Supply Unit / Adapter	500 watts
Total Memory Slots	4
Maximum Memory Capacity	128 GB (32 GB x 4)
Expansion Port	1
PCIe Expansion	1 x Gen3 x8 slot (x8 link)
Form Factor (RU)	2U
Redundant Power Supply	Yes
RJ-45 10GbE LAN Port	2

Product Gallery