

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 IOPS¹ to satisfy enterprise demand for high-speed infrastructure.



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

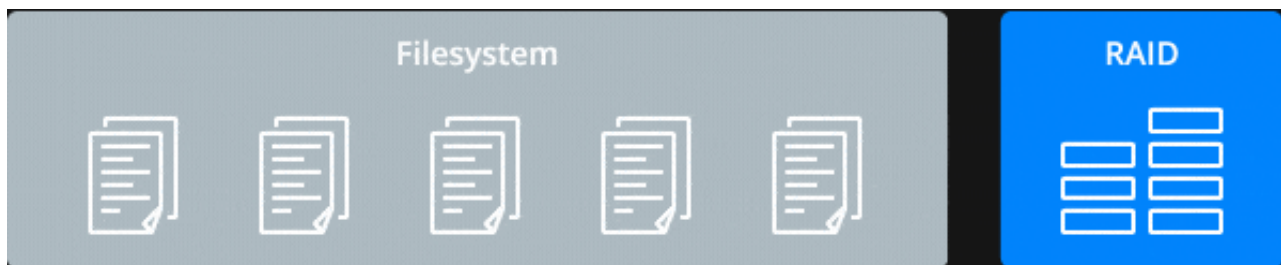
The Btrfs file system introduces advanced storage technologies and optimized snapshots to prevent data corruption and reduce maintenance overheads. It offers flexible, efficient data protection and recovery tools while ensuring high-level data integrity.

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

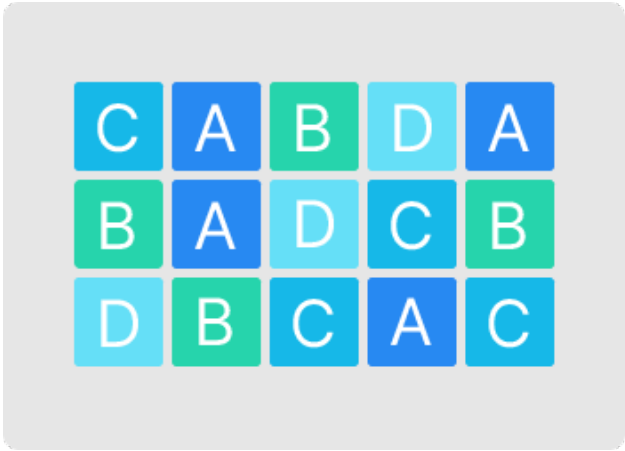
File- or folder-level data restoration accelerates data recovery and provides more flexibility for businesses

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

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 [this article](#) 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 4,000

SMB/AFP/FTP Connections

Maximum Concurrent 10,000

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 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](#)
[Log Center](#)
Virtualization

Synology High Availability
Syslog Events per Second 3,000
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
Notes

600
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
Suggested Users
Notes

5 ([Additional accounts require purchase of licenses](#))
12,000

- 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, 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
Notes

15,000

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

Product Gallery

