Synology®

Datasheet

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FlashStation

FS3410

Dependable Solid-State Storage for Businesses and Production Studios

Synology FlashStation FS3410 is a 24-bay all-flash server engineered to boost the responsiveness of I/O-intensive applications. Lightning-fast data transfer speeds, comprehensive connectivity options, and built-in high-availability safeguards make it the ideal platform to support latency-sensitive applications for which data and service uptime is of paramount importance. Powered by Synology DiskStation Manager (DSM), the FS3410 comes with reliable and easy-to-set-up backup, file sharing and synchronization, and virtualization solutions.

- **Powerful Performance**
  Over 394,000/129,000 iSCSI 4K random read/write IOPS to handle intensive I/O operations efficiently[1]

- **Flexible Virtualization**
  Certified support for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack with Kubernetes CSI driver

- **Comprehensive Connectivity**
  Built-in Gigabit and 10GbE ports for fast connectivity out of the box, with 25/40GbE upgrade available through network interface cards[2]

- **Uptime Protection**
  Hardware and software solutions for high availability and shorter recovery time objectives

- **Long-Term Support**
  Backed by Synology's 5-year limited warranty[3]

All-Flash Storage for Businesses and Creative Studios

The FS3410 is a cost-effective solution for centralized and distributed business infrastructure operating file serving applications, VM storage and backup, and mission-critical database services. Its high sustained throughput makes it also suitable for production studios tackling projects requiring direct and latency-free editing of large video assets.

- Over **394,000/129,000 iSCSI 4K random read/write IOPS** and **7,000/3,400 MB/s sequential read/write** performance support both I/O-intensive applications and large file transfers[1]

- Fast connectivity options right out of the box with **four 1GbE RJ-45 ports** and dual 10GbE, upgradable to 25/40GbE through PCIe 3.0 expansion cards[2]

- Dedicated **out-of-band management (OOB) port** helps system administrators reduce maintenance and troubleshooting efforts

- **Redundant power supply units and system fans** coupled with **network ports that support automatic failover** prevent single points of hardware failure

- **Volume-wide deduplication** optimizes VM and container storage by removing duplicate data on a schedule or on demand

Certified Virtual Machine and Container Storage

Deploy and facilitate storage operations in virtualization environments with full certification for **VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™,** and **OpenStack**. A **Kubernetes CSI driver** provides integrated volume management.

The FS3410 is ideal as virtual machine storage, but can also serve as an alternative **VM host** and run **Docker** containers.

- **Synology Virtual Machine Manager** is a hosted hypervisor for VMs running Windows®, Linux®, or virtualized versions of Synology DSM with recovery mechanisms that ensure data protection on each VM[4]

- Manage storage directly from your hypervisor with **Synology Storage Console** for VMware or Windows platforms

- Offload storage operations and speed up data transfer using **VMware VAAI integration** and **Windows ODX**

- Save significant storage space with **full flash volume deduplication** when used together with **Synology SSDs**

- Protect full **VMware® vSphere™** and **Microsoft® Hyper-V®** deployments with agentless **virtual machine backup** in **Synology Active Backup for Business**

Reliable Data and Uptime Protection Tools

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 FS3410 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[5]
- **Hyper Backup** protects your NAS by backing up data and configurations to multiple destinations with efficiency delivered by built-in deduplication, integrity checks, compression, and versioning
- **C2 Storage for Hyper Backup** offers a dedicated and secure public cloud destination for Synology NAS backup data[6]

Seamless Collaboration Between Distributed Teams

Synology's productivity 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.

By leveraging private cloud infrastructure, businesses can ensure complete data ownership and multi-layered security.

- **Synology Office** lets multiple users edit, comment on, and share files together using Synology Documents, Spreadsheets, and Slides
- **Synology Drive** is a private cloud file management solution that supports remote data access, synchronization, on-demand file restoration, and backup
- **Synology Chat** brings teams together with one-on-one chats, group chats, and encrypted private channels over multiple platforms
- **Synology MailPlus**[7] provides a secure, reliable, and private email server
- **Synology Calendar** helps teams keep track of what is most important with convenient calendar sharing and scheduling
- **Synology Hybrid Share** combines reliable on-premises storage and efficient syncing of shared folders in the cloud to enable seamless cross-site synchronization and local access at LAN speed[6]

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.[3]
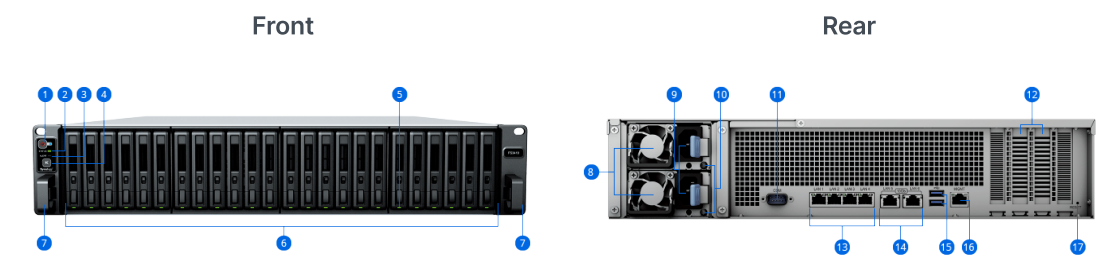
Choose Synology SSDs to populate your FlashStation and deal with a single vendor for warranty and support. Benefit from stable performance over time and low-latency data access thanks to

rigorous testing and integration.

Notes:

1. Performance figures obtained through internal testing by Synology. Actual performance may vary depending on the testing environment, usage, and configuration. See **performance charts** for more information.

2. For the most up-to-date list of compatible NICs, please check our **compatibility list**.

3. The warranty period starts from the date of purchase as stated on your purchase receipt. Visit **https://www.synology.com/company/legal/warranty** for more information.

4. 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.

5. While using Peta Volume, certain features will be restricted, including Snapshot Replication, SSD cache, and encryption/compression options for shared folders. Please refer to **this article** for the detailed limitations.

6. C2 Storage for Hyper Backup and Hybrid Share requires purchase of an eligible **annual or monthly subscription**. A free trial is available for each newly registered device.

7. Five MailPlus email accounts are included. Additional email accounts can be added with the purchase of Synology MailPlus License Packs. **Learn more**

Hardware Overview

Front	Rear

No.	Name	No.	Name
1.	Power button and indicator	10.	PSU Indicators
2.	Status Indicator	11.	Console Port
3.	Alert Indicator	12.	PCI Express Expansion Slots
4.	Mute Button	13.	1GbE RJ-45 Ports
5.	Drive Status Indicators	14.	10GbE RJ-45 Ports
6.	Drive Trays	15.	USB 3.2 Gen 1 Ports
7.	Rail Kit Release Tabs	16.	Management Port
8.	PSU Fans	17.	Reset Button
9.	Power Ports		

Technical Specifications

Hardware

CPU

CPU Model	Intel Xeon D-1541
CPU Quantity	1
CPU Core	8
CPU Architecture	64-bit
CPU Frequency	2.1 (base) / 2.7 (turbo) GHz
Hardware Encryption Engine	Yes

Memory

System Memory	16 GB DDR4 ECC RDIMM
Memory Module Pre-installed	16 GB (16 GB x 1)
Total Memory Slots	4
Maximum Memory Capacity	128 GB (32 GB x 4)
Notes	Please select Synology memory modules for optimum compatibility and reliability. Synology will not provide complete product warranty or technical support if non-Synology memory modules are used for memory expansion.

Storage

Drive Bays	24
Drive Type	2.5" SATA SSD
Hot Swappable Drive	Yes
Notes	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.

External Ports

RJ-45 1GbE LAN Port	4
RJ-45 10GbE LAN Port	2
Out-of-Band Management LAN Port	1
USB 3.2 Gen 1 Port	2

PCIe

PCIe Expansion	2 x Gen3 ×8 slots (x8 link)

Appearance

Form Factor (RU)	2U
Size (Height x Width x Depth)	88 mm x 482 mm x 724 mm
Weight	15.0 kg
Rack Installation Support	4-post 19" rack (Synology Rail Kit - RKS-02)
Notes	The rail kit is sold separately

Others

System Fan	80 mm x 80 mm x 38 mm x 4 pcs
AC Input Power Voltage	100V to 240V AC
Power Frequency	50/60 Hz, Single Phase

Temperature

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

General 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)	Yes
Supported RAID Type	RAID F1,Basic,JBOD,RAID 0,RAID 1,RAID 5,RAID 6,RAID 10

Notes	
	• Volumes over 108 TB require 32 GB of memory or more.
	• Actual maximum storage pool and volume sizes depend on drive sizes used, the number of drive bays available, and the RAID configuration.
	• 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.

File System

Internal Drives	Btrfs,ext4
External Drives	Btrfs,ext4,ext3,FAT32,NTFS,HFS+,exFAT

File Services

File Protocol	SMB,AFP,NFS,FTP,WebDAV,Rsync
Maximum Number of SMB Connections (FSCT-Based) with RAM Expansion	2,100
Windows Access Control List (ACL) Integration	Yes
NFS Kerberos Authentication	Yes

Account & Shared Folder

Maximum Local User Accounts	5,120
Maximum Local Groups	512
Maximum Shared Folder	512
Maximum Shared Folder Sync Tasks	32

Virtualization

VMware ESXi 6.5 and VAAI	Yes
Windows Server 2022	Yes
Citrix Ready	Yes
OpenStack	Yes

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)

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, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文
Notes	For an updated list of supported browser versions, check the DSM Technical Specifications.

Packages and Applications

Synology Drive

Synchronizes files across Windows®, macOS®, Linux®, Android™ and iOS. The built-in cross-platform portal allows access to data anytime and anywhere

Maximum Number of Users	3,900
Maximum Number of Hosted Files	25,000,000 (applies to files indexed or hosted by Synology Drive. For file access through other standard protocols, refer to the File Services section above)

File Station

Provides virtual drives, remote folders, Windows® ACL editor, compression/extraction of archived files, bandwidth control for specific users/groups, creation of sharing links, and transfer logs

Hybrid Share

Efficiently synchronizes files across sites by keeping shared data on Synology C2 Storage and streaming files to Synology NAS worldwide on request. Frequently requested files are cached at each site for low-latency access 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.

SAN Manager

Maximum iSCSI Target Number	128
Maximum LUN	256
LUN Clone/Snapshot, Windows ODX	Yes

Virtual Machine Manager

Recommended Virtual Machine Instances	16 (Learn more)

Recommended Virtual DSM Number (Licenses required)	16 (including 1 Free License)

Hyper Backup

Supports local backup, network backup, and data backup to other servers and public clouds, including C2 Storage

Snapshot Replication

Maximum Snapshots per Shared Folder	512
Maximum of System Snapshots	16,384

Synology High Availability

Reduces service downtime by combining two identical NAS into a high-availability cluster

Synology Chat

Maximum Number of Users	500

Synology Office

Maximum Number of Users	3,700

Synology MailPlus / MailPlus Server

A secure, reliable, and private mail solution featuring high-availability, load balancing, security, and filtering options

Free Email Accounts	5 (Additional accounts require purchase of licenses)
Maximum Number of Users	4,500

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

Central Management System

Provides a single interface to manage and monitor multiple Synology NAS

VPN Server

Maximum Connections	32

Other packages

Additional 3rd-party packages are available in the Package Center

Environment & Packaging

Environment safety

RoHS Compliant

Packaging Content

- Main Unit X 1
- Accessory Pack X 1
- AC Power Cord X 2
- Quick Installation Guide X 1

Optional Accessories

- DDR4 ECC RDIMM: D4ER01-16G*/D4ER01-32G
- Enterprise Series 2.5" SATA SSD: SAT5200 Series
- 25GbE Network Interface Card: E25G30-F2
- 10GbE Network Interface Card: E10G30-F2/E10G30-T2/E10G18-T1
- Rail Kit Sliding: RKS-02

Notes	For multi-module memory configurations, all modules must be identical and share the same model number. Check the Product Manual of your Synology product for recommended memory configurations.

Warranty

5 Years

Notes	The warranty period starts from the purchase date as stated on your purchase receipt. (Learn more)