Product

FS3410

Hardware Specs

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	v

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	• Synology reserves the right to replace memory modules with the same or higher frequency based on supplier's product life cycle status. Rest assured that the compatibility and stability have been strictly verified with the same benchmark to ensure identical performance. • 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. • Installing memory modules with differing capacities is not recommended. Check the Hardware Installation Guide of your Synology product for recommended memory configurations.

Storage

Drive Bays	24
Compatible Drive Type* (See all supported drives)	2.5" SATA SSD
Hot Swappable Drive*	v
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. "Compatible drive type" indicates drives that have been tested to be compatible with Synology products. This term does not indicate the maximum connection speed of each drive bay.

External Ports

RJ-45 1GbE LAN Port	4
RJ-45 10GbE LAN Port	2
Out-of-Band Management LAN Port	1
Max. Number of LAN Ports	15
USB 3.2 Gen 1 Port*	2
Notes	- This device's 1GbE LAN ports have a maximum transmission unit (MTU) size of 1,500 bytes. - The USB 3.0 standard was renamed to USB 3.2 Gen 1 by the USB Implementers Forum (USB-IF) in 2019.

PCIe

PCIe Expansion	2 x Gen3 x8 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 4 pcs
Fan Speed Mode	- Full-Speed Mode - Cool Mode - Quiet Mode
Easy Replacement System Fan	v
Power Recovery	v
Noise Level*	46.1 dB(A)
Scheduled Power On / Off	v
Wake on LAN / WAN	v
Power Supply Unit / Adapter	550 watts
Redundant Power Supply	v
AC Input Power Voltage	100V to 240V AC
Power Frequency	50/60 Hz, Single Phase
Power Consumption	113.84 watts (Access)
British Thermal Unit	388.70 BTU/hr (Access)
Notes	- Noise testing was conducted with the Synology system fully installed with Synology SATA SSDs and in an idle state. Two G.R.A.S. type 40AE microphones were placed at a 1 m distance from the front and rear of the device. Background noise: 16.49-17.51 dB(A); Temperature: 24.25-25.75°C; Humidity: 58.2-61.8%. - The power consumption of the NAS model is measured when it is fully loaded with Synology SAT5200-3840G solid-state drives.

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

Certification

- FCC
- CE
- BSMI
- VCCI
- RCM
- UKCA
- EAC
- CCC
- KC
- UL

Warranty

5 Years

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

Environment

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: E10G21-F2/E10G30-T2/E10G18-T1
- Rail Kit Sliding: RKS-02

Notes	Installing memory modules with differing capacities is not recommended. Check the Hardware Installation Guide of your Synology product for recommended memory configurations.

Software Specs

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)	v
SSD TRIM	v
RAID Group	v
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 SMB/AFP/FTP Connections	4,000
Maximum Concurrent SMB/AFP/FTP Connections (with RAM expansion)	10,000
Windows Access Control List (ACL) Integration	v
NFS Kerberos Authentication	v
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	v
Entire System Backup	v
Notes	Full-system backup requires DSM 7.2 or later.

High Availability

Synology High Availability	v

Log Center

Syslog Events per Second	3,000

Virtualization

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

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.

Add-on Packages view the complete package list

Antivirus by McAfee (Trial)

v

Central Management System

v

Synology Chat

Suggested Concurrent Users	500
Notes	• Measured with simulated users, each with an average record of 20,000 messages, emojis, or stickers. The required server response time is below ten seconds. • For tested models with expandable memory, the maximum amount of RAM was installed.

SAN Manager

Maximum iSCSI Target Number	256
Maximum LUN	512
LUN Clone/Snapshot, Windows ODX	v

Synology MailPlus / MailPlus Server

Free Email Accounts	5 (Additional accounts require purchase of licenses)
Suggested Maximum Users	10,000
Suggested Concurrent Users	2,000
Maximum Server Performance	4,471,000 emails per day, approx. 136 GB
Notes	• FS series were installed with 12 SSDs in RAID F1 configuration. • For tested models with expandable memory, the maximum amount of RAM was installed. • 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).

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)	• 720p: 200 channels, 6000 FPS • 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)	• 720p: 300 channels, 9000 FPS • 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 maximum number of camera stream outputs is 2 times the suggested maximum number of IP cameras.

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. - For tested models with expandable memory, the maximum amount of RAM was installed. - Btrfs file system and non-encrypted shared folders were used during the aforementioned testing.

Synology Office

Suggested Maximum Users	12,500
Suggested Concurrent Users	5,000

Notes	• Multiple files were opened for testing and each file was edited by 30 users simultaneously. • For tested models with expandable memory, the maximum amount of RAM was installed. • 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	16 (Learn more)
Recommended Virtual DSM Number (Licenses required)	16 (including 1 Free License)
Notes	The specifications vary depending on system configuration and memory size.

VPN Server

Maximum Connections	60