

FlashStation FS3017



Designed for lightning-fast computing environments, Synology FlashStation FS3017 is a highly reliable, cost-efficient, and ultra-high performance all-flash storage solution with comprehensive business applications for enterprise users. Synology FlashStation FS3017 simplifies data management and optimizes virtualization environments, with minimal time investment in setup and maintenance. Synology FS3017 is backed with Synology's 5-year limited warranty.

Astonishing Performance

Powered by **two Intel Xeon E5-2620** six-core CPUs and **64GB DDR4 ECC RDIMM** (up to 512GB), Synology FS3017 delivers over **200,000 4K Random Write IOPS¹**, making it ideal for video post-productions, mail server, virtualization and database applications, which require ultra-high performance and low latency.

FS3017 comes with **dual 10GBase-T** ports and supports optional **10GbE / 25GbE / 40GbE** network interface cards, allowing more flexibilities for network configurations. Network performance is further enhanced with **iSCSI over RDMA²** and **Non-Uniform Memory Access (NUMA)** integration.

Cost Effective Unified Storage

Synology FS3017 is compatible to major SAS / SATA SSD brands to avoid vendor lock-in. FS3017 is also a unified storage server supporting iSCSI protocol and file sharing services, which provides the cost savings and simplicity of consolidating storage over an existing network while providing the flexibility required by virtual server environments. In addition to the internal 24 drive bays, FS3017 supports up to two Synology Expansion Unit RX2417sas⁴ to provide a total of 72 2.5" drive bays for flexible storage management.

Virtualization Ready

FS3017 provides seamless storage solutions for virtualization environments, including **VMware, Citrix, Hyper-V, and OpenStack**. With **VMware vSphere 6 and VAAI** integration certified, FS3017 helps offload specific storage operations and optimizes computing power for unparalleled performance and efficiency in VMware environments. **Windows Offloaded Data Transfer (ODX)** and **Synology Advanced LUN** support greatly improves the efficiency on massive data transfer and migration. With **OpenStack** support, FS3017 can be used as a block-based storage component for servers complying with the **Cinder API**.

Highlights

- 200,000 4K Random Write IOPS¹, ultra-high performance with low latency
- Dual Intel Xeon 6-core CPU and 64GB DDR4 ECC RDIMM, expandable up to 512GB
- Dual onboard 10GBase-T ports, capable of installing optional 10GbE / 25GbE / 40GbE NICs with iSCSI over RDMA
- Complete virtualization solution for VMware, Windows Hyper-V, Citrix and Openstack
- Advanced Btrfs file system offering 65,000 system-wide snapshots and 1,024 snapshots per shared folder
- Scale up to 72 drives with 2 x Synology Expansion Unit RX2417sas⁴
- Backed with Synology's 5-year limited warranty & Synology Replacement Service (SRS)

Rock-Solid Data Protection

The **Snapshot Replication** application provides schedulable, near-instantaneous data protection. It replicates **65,000** system-wide backup copies to offsite servers and local volumes, bringing near-instantaneous data protection and ensuring data in shared folders or virtual machines in iSCSI LUNs remain available in the event of a disaster.

With block-level incremental backup and cross-version deduplication, Synology **Hyper Backup** provides multi-version backup with optimized storage space utilization and allows multiple backup destinations to local shared folders, external hard drives, network shared folders, rsync server, and public cloud services.

Comprehensive Business Applications

Powered by the innovative Synology **DiskStation Manager (DSM)**, FS3017 comes fully-equipped with applications and features designed specifically for large-scale business:

- **Windows® AD and LDAP** support allowing easy integration with existing business directory services without recreating user accounts.
- **Windows ACL** support provides fine-grained access control and efficient privilege settings, allowing FS3017 to fit seamlessly into current infrastructure.
- **MailPlus** allows your business to set up a secure, reliable, and private mail server while giving your employees a modern mail client for receiving and sending messages.

Reliability and System Availability

System reliability is of paramount importance to businesses which depend upon their commercial servers every day. FS3017 responds to these concerns with wide-ranging availability and redundancy features:

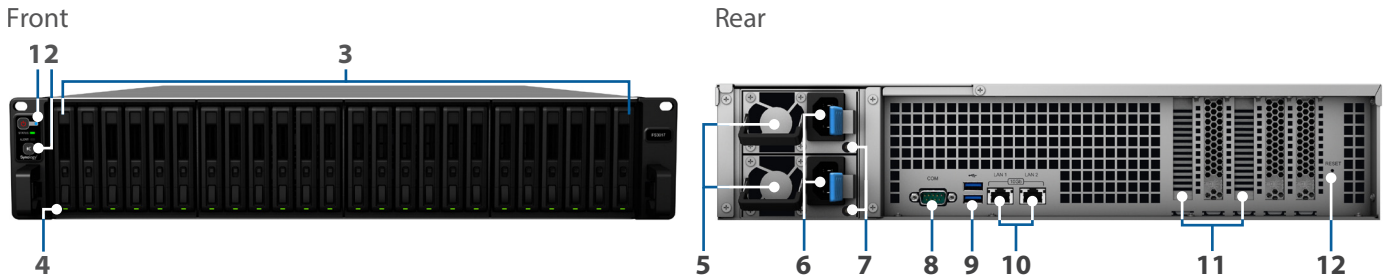
- Synology **RAID F1** optimizes RAID volume integrity and extends SSD lifespan.
- Synology **High Availability** ensures seamless transition between clustered servers in the event of one node failing with minimal impact to applications.
- **Redundant power supplies, system fans, and multiple network ports with failover support** ensure maximum continuous service uptime.
- **DDR4 ECC RDIMM** detects and corrects errors during data transmission.
- The **tool-free system fan design** allows hot swapping and simple exchanging of malfunctioned system fans. Optional **Synology RKS1317 rail kit** provides fast and easy system installation and maintenance.



Mainstream SSD Support

Synology FS3017 comes with 24 x 2.5" SAS / SATA interfaces and is compatible to major SSD brands, preventing vendor lock-in.

Hardware Overview



1	Power button and indicator	2	Beep off button	3	Drive tray	4	Drive status indicator
5	PSU fan	6	Power Port	7	PSU indicator	8	Console port
9	USB 3.0 port	10	10GbE RJ-45 port	11	PCIe 3.0 slot	12	Reset button

Technical Specifications

Hardware

CPU	2 x Intel Xeon E5-2620 six-core 2.4GHz
Hardware encryption engine	Yes (AES-NI)
Memory	64 GB DDR4 ECC RDIMM, expandable up to 512 GB
Compatible drive type	24 x 2.5" SAS SSD / HDD or SATA SSD
External ports	2 x USB 3.0
Size (HxWxD)	<ul style="list-style-type: none"> • 88 x 430.5 x 692 mm • 88 x 482 x 724 mm (with server ears) • 2RU
Weight	17.13 kg
LAN	2 x 10GbE (RJ45)
PCIe 3.0 slot	<ul style="list-style-type: none"> • x16 slot x 1 (16-lane) • x8 slot x 1 (8-lane) • 10GbE / 25GbE / 40GbE network interface cards support
Scheduled power on / off	Yes
System fan	4 (80 x 80 x 32 mm)
AC input power voltage	100V to 240V AC
Power frequency	47 to 63Hz, single phase
Operating temperature	5°C to 35°C (40°F - 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 (16,400 ft)

General

Networking protocol	CIFS, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
File system	<ul style="list-style-type: none"> • Internal: Btrfs, ext4 • External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT³
Storage management	<ul style="list-style-type: none"> • Maximum single volume size: 108TB, 200TB (RAID 5 or RAID 6 groups only) • Maximum internal volumes: 1,024 • Maximum iSCSI Targets: 128 • Maximum iSCSI LUNs: 512 • iSCSI LUN clone / snapshot support
Supported RAID type	Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, RAID F1
File sharing capability	<ul style="list-style-type: none"> • Maximum user account: 16,000 • Maximum user group: 512 • Maximum shared folder: 512 • Maximum concurrent CIFS / AFP / FTP connections: 13,000
Privilege	Windows Access Control List (ACL)
Virtualization	VMware vSphere® 6, Microsoft Hyper-V®, Citrix®, OpenStack®
Directory service	Windows® AD integration: Domain users login via Samba (CIFS) / AFP / FTP / File Station, LDAP integration

Security	FTP over SSL / TLS, IP auto-block, firewall, encrypted network backup over Rsync, HTTPS connection
Utilities	Synology Web Assistant, Cloud Station Drive, Cloud Station Backup, Cloud Sync Decryption Tool, Evidence Integrity Authenticator, Snapshot Manager for VMware, Snapshot Manager for Windows, NFS Plug-in for VMware VAAI
Supported clients	Windows 7 onward, Mac OS X® 10.10 onward
Supported browsers	Chrome®, Firefox®, Internet Explorer® 9 onwards, Safari® 8 onwards; Safari (iOS 7 onwards), Chrome (Android™ 4.0 onwards) on tablets
Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, 日本語, 한국어, 繁體中文, 简体中文

Applications

File Station	Virtual drive, remote folder, Windows ACL editor, compress / extract archived files, bandwidth control for specific users or groups, creating sharing links, transfer logs
Backup solutions	Network backup; local backup; desktop backup; configuration backup; OS X Time Machine; backup data to public cloud; shared folder sync - maximum task number: 32
FTP Server	Bandwidth control for TCP connections, custom FTP passive port range, anonymous FTP, FTP SSL / TLS and SFTP protocol, boot over the network with TFTP and PXE support, transfer logs
High Availability Manager	Combines two FS3017 into one high-availability cluster
Security Advisor	Malware detection / removal, user account / password, network, system-related security scan
iOS / Android™ applications	DS cloud, DS file, DS finder, DS cam, DS note, MailPlus
Windows Phone® applications	DS file, DS finder

Add-on Packages

Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Cloud Station Suite	Maximum concurrent file transfers: 16,000, retain historical and deleted file versions
Cloud Sync	One or two-way synchronization with public cloud storage providers including Amazon Cloud Drive, Amazon S3-compatible storage, Baiduyun, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, Megafon Disk, Microsoft OneDrive, OpenStack Swift-compatible storage, WebDAV servers, Yandex Disk
Log Center	SSL connection, log rotation: 6 months, 1 year, 2 years, 3 years, email notification
MailPlus	Intuitive webmail interface for MailPlus Server; customizable mail labels, filters and user interface
MailPlus Server	Secure, reliable, and private mail solution with High-availability, load balancing, security and filtering design (Includes 5 free email account licenses, additional accounts require the purchasing of additional licenses)
Note Station	Rich-text note organization and versioning, encryption, sharing, media embedding and attachments
Storage Analyzer	Volume and quota usage, total size of files, volume usage and trends based on past usage, size of shared folders, largest / most / least frequently modified files
Surveillance Station	Maximum IP camera: 100 (total of 3,000 FPS at 720p, H.264) (Includes two free camera licenses, additional cameras require the purchasing of additional licenses)
VPN Server	Maximum connections: 30; supported VPN protocol: PPTP, OpenVPN™, L2TP
Web Station	Virtual host (up to 30 websites), PHP / MariaDB®, 3rd-party applications support
Other packages	Additional 3rd-party packages are available on Package Center

Environment and Packaging

Environment safety	RoHS compliant
Package content	<ul style="list-style-type: none"> • FS3017 main unit • Quick Installation Guide • Accessory pack • 2 x AC power cord
Optional accessories	<ul style="list-style-type: none"> • 16GB / 32GB DDR4-2133 ECC RDIMM (RAMRG2133DDR4-16G / RAMRG2133DDR4-32G) • Synology E10G17-F2 / E10G15-F1 10Gbps Ethernet adapters • Synology FS3017 Expansion Card for Expansion Unit RX2417sas support⁴ • Synology Expansion Unit RX2417sas • Synology RKS1317-Rail Kit Sliding • Synology Surveillance Video Decoder VS360HD • Surveillance Device License Pack • MailPlus License Pack
Warranty	5 years ⁵

*Model specifications are subject to change without notice. Please refer to www.synology.com for the latest information.

1. Performance figures may vary depending on environment, usage and configuration.
2. iSCSI over RDMA support vary depending on the NICs installed. Please refer to www.synology.com for the latest NIC compatibility list.
3. exFAT Access is purchased separately in Package Center
4. FS3017 supports up to 2 Synology Expansion Unit RX2417sas when the optional FS3017 Expansion Card is installed.
5. The warranty period starts from the purchase date as stated on your purchase receipt. Visit <https://www.synology.com/company/legal/warranty> for more information.

SYNOLOGY INC.

Synology is dedicated to taking full advantage of the latest technologies to bring businesses and home users reliable and affordable ways to centralize data storage, simplify data backup, share and sync files across different platforms, and access data on-the-go. Synology aims to deliver products with forward-thinking features and the best in class customer services.

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FS3017-2019-ENU-REV005

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