

# FlashStation FS1018



Synology FlashStation FS1018 is a high-performance, desktop form factor NAS specifically designed for 2.5" SATA SSDs. FS1018 is ideal for running business applications, including data backup, virtualization, mail services, and services that require low-latency. Synology FS1018 is backed by Synology's 5-year limited warranty.

## Extraordinary Performance, Compact in Size

Synology FlashStation FS1018 is designed for low-latency performance even in I/O-intensive environments. Designed for desktop usage, FS1018 is a highly capable and expandable NAS built to support Synology's latest business applications. The **Four Gigabit LAN** ports can be expanded with higher performance options with the **PCIe 3.0 x8** slot, providing over **40K 4K Random Write IOPS<sup>1</sup>**.

FS1018 hosts 12 x 2.5" SATA SSDs, and can connect up to two Synology DX1215<sup>2</sup> Expansion Units, which allows users to have up to 288 TB of cold storage, while storing frequently accessed data in the main unit. FS1018 features **8GB** of **DDR4 ECC RAM**, expandable up to **32GB**.

## Btrfs: Next Generation Storage

FS1018 integrates the **Btrfs** file system, bringing the most advanced storage technologies to meet the management needs of modern large-scale businesses:

- **Flexible Shared Folder / User Quota System** provides comprehensive quota control on all user accounts and shared folders.
- **Advanced snapshot technology** with customizable backup schedule allows up to **1,024** copies of shared folder backups and **65,000** copies of system-wide snapshots without occupying huge storage capacity and system resources.
- **File or folder level data restoration** brings huge convenience and saves time for users who wish to restore only a specific file or folder.
- **File self-healing:** Btrfs file system is able to auto-detect corrupted files with mirrored metadata, and recover broken data using the supported RAID volumes, which include RAID 1, 5, 6, 10 and RAID F1.

## Highlights

- Powerful and compact 12-bay, All-SSD desktop NAS
- Intel Pentium D1508 dual-core CPU and 8GB DDR4 ECC SODIMM, expandable up to 32GB
- 40K 4K Random Write IOPS<sup>1</sup>, high performance and low latency
- Plug-and-use up to two Synology DX1215 Expansion Units for high capacity storage<sup>2</sup>
- Quad 1GbE LAN ports, capable of installing optional 10GbE NICs
- Advanced Btrfs file system offering 65,000 system-wide snapshots and 1,024 snapshots per shared folder
- Complete virtualization solution for VMware, Windows Hyper-V, Citrix, OpenStack, and Synology Virtual Machine Manager
- Backed with SRS, Synology's next business-day replacement service

## Virtualization Solutions

Synology's **Virtual Machine Manager** opens up abundant possibilities, allowing you to set up and run various virtual machines, including **Windows**, **Linux**, and **Virtual DSM**. You can also test new software versions in a sandbox environment, isolate your customers' machines, and increase the flexibility of your FS1018 without spending extra cost for deployment and maintenance.

Synology iSCSI storage fully supports most virtualization solutions to enhance work efficiency with easy management interface. **VMware vSphere™ 6.5** and **VAAI** integration helps offload storage operations and optimizes computation efficiency. **Windows Offloaded Data Transfer (ODX)** speeds up data transfer and migration rate, while **OpenStack Cinder** support turns your Synology NAS into a block-based storage component.

## Comprehensive Business Applications

Powered by the innovative Synology **DiskStation Manager (DSM)**, FS1018 comes fully-equipped with applications and features designed specifically for large-scale businesses:

- **Windows® AD and LDAP** support allows easy integration with existing business directory services without recreating user accounts.
- **Windows ACL** support provides fine-grained access control and efficient privilege settings, allowing FS1018 to fit seamlessly into current infrastructure.
- Internet file access is simplified by the encrypted FTP server and the web-based file explorer, Synology **File Station**. HTTPS, firewall, and IP auto-block support ensure file sharing over the Internet is protected with a high level of security.
- **Application Privileges** controls access to applications and packages based on each individual account, user group, or IP address.
- **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.
- With Synology **Office**, **Calendar** and **Chat**, the powerful **Collaboration Suite** allows secure and efficient private communications as well as content organization that your business can easily manage and control.

## Reliability, Availability & Disaster Recovery

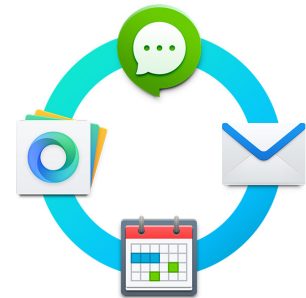
System reliability is of paramount importance to businesses which depend upon their commercial servers every day. FS1018 responds to these concerns with wide-ranging availability and redundancy features:

- **Synology High Availability** ensures seamless transition between clustered servers and that your services remain online in the event of unexpected disasters.
- **Snapshot Replication** provides schedulable, near-instantaneous data protection, ensuring business documents in shared folders, virtual machines in iSCSI LUNs, or dockerized application data remain safe and available when disasters happen.
- **Redundant system fans** and **network ports** with failover support ensure continual service uptime.



### Virtual Machine Manager

Virtual Machine Manager implements various virtualization solutions, allowing you to manage multiple virtual machines on your FS1018, including **Windows**, **Linux**, and **Virtual DSM**.



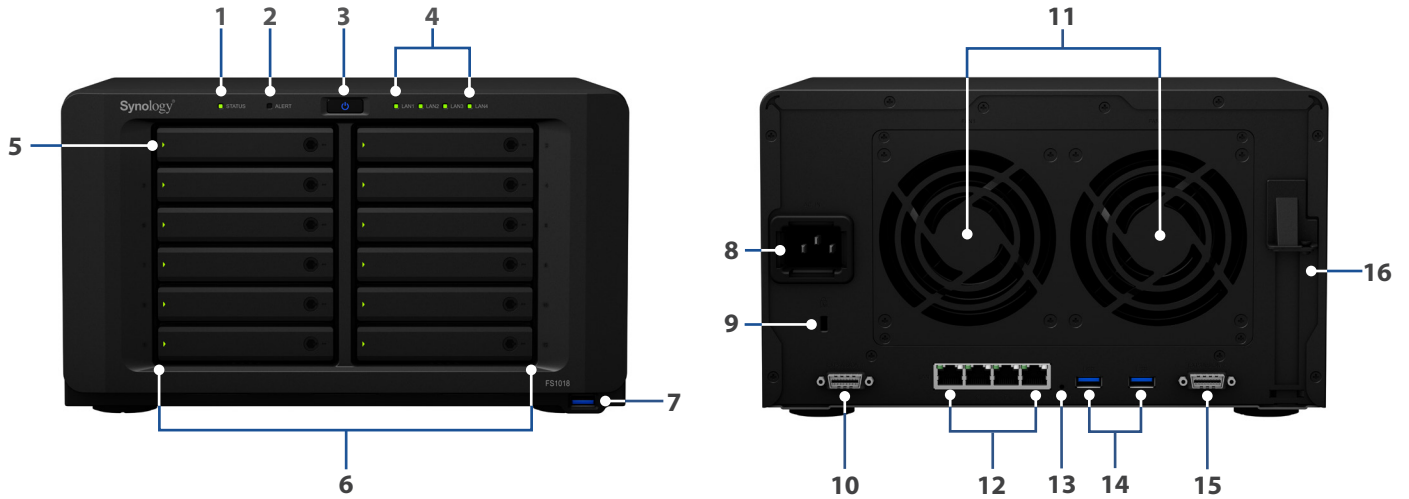
### Synology Collaboration Suite

Powerful and secure private cloud solution for business collaboration and organization with simple but effective management options.

# Hardware Overview

Front

Rear



1	Status indicator	2	Alert indicator	3	Power button	4	LAN indicator
5	Drive status indicator	6	Drive tray	7	USB 3.0 port	8	Power port
9	Kensington Security Slot	10	Expansion port 1	11	Fan	12	1GbE RJ-45 port
13	Reset button	14	USB 3.0 port	15	Expansion port 2	16	PCIe expansion slot

# Technical Specifications

## Hardware

CPU	Intel Pentium D1508 dual-core 2.2GHz, boost up to 2.6GHz
Hardware encryption engine	Yes (AES-NI)
Memory	8GB DDR4-2133 SO-DIMM (expandable up to 32 GB)
Compatible drive type	12 x 2.5" SATA SSD (drives not included)
Hot swappable drive	Yes
External port	<ul style="list-style-type: none"> <li>• 3 x USB 3.0 ports</li> <li>• 2 x expansion ports</li> </ul>
Size (HxWxD)	166 x 282 x 243 mm
Weight	5.2 kg
LAN	4 x 1GbE (RJ-45)
Wake on LAN/WAN	Yes
PCIe 3.0 slot	<ul style="list-style-type: none"> <li>• x8 slot x 1 (8-lane)</li> <li>• 10GbE network interface cards support</li> <li>• M2D17 M.2 SSD adapter card support<sup>3</sup></li> </ul>
Scheduled power on/off	Yes
System fan	2 (92 x 92 x 25 mm)
AC input power voltage	100V to 240V AC
Power frequency	50/60Hz, single phase
Operating temperature	5°C to 40°C (40°F to 104°F)
Storage temperature	-20°C to 60°C (-5°F to 140°F)
Relative humidity	5% to 95% RH
Maximum operating altitude	3,048 m (10,000 ft)

## General DSM specification

Networking protocol	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
File system	<ul style="list-style-type: none"> <li>Internal: Btrfs, ext4</li> <li>External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT<sup>4</sup></li> </ul>
Supported RAID type	RAID Group, Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, RAID F1
Storage management	<ul style="list-style-type: none"> <li>Maximum single volume size: 108TB</li> <li>Maximum internal volume: 1,024</li> <li>Maximum iSCSI target: 64</li> <li>Maximum iSCSI LUN: 512</li> <li>iSCSI LUN clone/snapshot support</li> </ul>
SSD cache	<ul style="list-style-type: none"> <li>Read-write cache support</li> <li>M.2 SATA SSD support (with M2D17)<sup>3</sup></li> </ul>
File sharing capability	<ul style="list-style-type: none"> <li>Maximum local user account: 16,000</li> <li>Maximum local group: 512</li> <li>Maximum shared folder: 512</li> <li>Maximum concurrent SMB/NFS/AFP/FTP connection: 2,000</li> </ul>
Privilege	Windows Access Control List (ACL), application privilege
Directory service	Windows® AD integration: Domain users login via SMB/NFS/AFP/FTP/File Station, LDAP integration
Virtualization	VMware vSphere® 6.5, Microsoft Hyper-V®, Citrix®, OpenStack®
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)
Supported client	Windows 7 and 10, Mac OS X 10.11 onwards
Supported browser	Chrome®, Firefox®, Internet Explorer® 10 onwards, Safari® 10 onwards; Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards)
Interface 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

## Packages and Applications

File Station	Virtual drive, remote folder, Windows ACL editor, compressing/extracting archived files, bandwidth control for specific users or groups, creating sharing links, transfer logs
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
Universal Search	Offer global search into applications and files
Hyper Backup	Support local backup, network backup, and backup data to public clouds
Active Backup for Server	Centralize data backup for Windows and Linux servers without client installation
Backup tools	DSM configuration backup, macOS Time Machine support, Cloud Station Backup Shared folder sync - maximum task number: 16
Cloud Station Suite	Sync your data between multiple platforms by installing the client utilities on Windows, Mac, Linux, Android and iOS devices, while retaining up to 32 historical versions of files Maximum concurrent file transfer: 2,000
Cloud Sync	One or two-way synchronization with public cloud storage providers including Amazon Drive, Amazon S3-compatible storage, Baidu cloud, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, MegaDisk, Microsoft OneDrive, OpenStack Swift-compatible storage, WebDAV servers, Yandex Disk
Surveillance Station	Maximum IP camera: 75 (total of 2,250 FPS at 720p, H.264) (Includes two free camera licenses; additional cameras require the purchasing of additional licenses)
Virtual Machine Manager	Deploy and run various virtual machines on Synology NAS, including Windows, Linux, or Virtual DSM
High Availability Manager	Reduce service downtime by setting up two identical NAS into one high-availability cluster
Snapshot Replication	<ul style="list-style-type: none"> <li>Maximum of replications: 64</li> <li>Maximum of shared folder snapshots: 1,024</li> <li>Maximum of system snapshots: 65,536</li> </ul>
Active Directory Server	Provide a flexible and cost-effective domain controller solution
CMS	Provide a single interface to manage and monitor multiple Synology NAS
VPN Server	Maximum connection: 30, supported VPN protocol: PPTP, OpenVPN™, L2TP/IPSec
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)

MailPlus	Intuitive webmail interface for MailPlus Server, customizable mail labels, filters, and user interface
Collaboration Suite	<ul style="list-style-type: none"> <li>• Chat maximum user: 3,000</li> <li>• Office maximum user: 400, maximum simultaneous editing user: 80</li> <li>• Calendar: support CalDAV and access via mobile devices</li> </ul>
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
Security Advisor	Malware detection/removal, user account/password, network, system-related security scan
Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Download Station	Supported download protocols: BT, HTTP, FTP, NZB, eMule, Thunder, FlashGet, QQDL Maximum concurrent download task: 80
Web Station	Virtual host (up to 30 websites), PHP / MariaDB®, third-party applications support
Other packages	Video Station, Photo Station, Audio Station, DNS Server, RADIUS Server, iTunes® Server, Log Center, third-party packages available on Package Center
iOS / Android™ applications	DS audio, DS cam, DS cloud, DS file, DS finder, DS get, DS note, DS photo, DS video, MailPlus
Windows Phone® applications	DS audio, DS file, DS finder, DS photo, DS video

## Environment and Packaging

Environment safety	RoHS compliant
Package content	<ul style="list-style-type: none"> <li>• FS1018 main unit x 1</li> <li>• Quick Installation Guide x 1</li> <li>• Accessory pack x 1</li> <li>• AC power cord x 1</li> <li>• RJ-45 LAN cable x 2</li> </ul>
Optional accessories	<ul style="list-style-type: none"> <li>• 16 GB DDR4-2133 ECC SO-DIMM (RAMEC2133DDR4SO-16G)</li> <li>• E10G17-F2 / E10G15-F1 10Gbps Ethernet adapters</li> <li>• M2D17 M.2 SSD adapter card</li> <li>• Expansion Unit DX1215</li> <li>• VS360HD / VS960HD</li> <li>• Surveillance Device License Pack</li> <li>• MailPlus License Pack</li> </ul>
Warranty	5 years

\*Model specifications are subject to change without notice. Please refer to [www.synology.com](http://www.synology.com) for the latest information.

1. Performance figures may vary depending on environment, usage, and configuration.
2. FS1018 supports up to two Synology DX1215, sold separately.
3. FS1018 supports dual M.2 SSD through M2D17 adapter card, sold separately.
4. exFAT Access is purchased separately in Package Center.

## 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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