Synology®

Datasheet

FlashStation

FS2500

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FlashStation

FS2500

Efficient All-Flash Server for I/O-Intensive Applications

Synology FlashStation FS2500 features 12 bays for 2.5” SATA SSDs in a 1U enclosure. Its compact form factor and processing power make it an ideal solution for I/O-intensive and latency-sensitive applications such as VM storage and email servers in small to medium-size deployments. Powered by Synology DiskStation Manager (DSM), the FS2500 comes with reliable and easy-to-set-up solutions for uptime and data protection.

- **High Performance**
  Handles intensive I/O efficiently with over 228,000/83,000 4K random read/write IOPS[1]
- **Flexible Virtualization Storage**
  Certified support for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack with Kubernetes CSI driver
- **Convenient Networking Options**
  Built-in dual 10GbE and dual Gigabit Ethernet ports offer easy integration with existing environments
- **Data and Services Protection**
  Back up critical data and cut your recovery time objective with built-in data protection and high availability tools
- **Long-Term Support**
  Backed by Synology’s 5-year limited warranty[2]

Solid State Storage for Small to Medium-Sized Businesses

The FS2500 is a lightning-fast, cost-effective, and space-saving storage solution for virtual machines, containers, email, and databases.

- Over **228,000/83,000 4K random read/write IOPS** and **4,700/2,600 MB/s sequential read/write** performance support both I/O-intensive applications and large file transfers[1]
- Built-in **dual 10GbE** and **dual 1GbE RJ-45** ports provide fast connectivity options right out of the box, while **10/25/40GbE NIC support** lets you add additional bandwidth through PCIe 3.0 expansion cards[3]
- **Redundant power supply units and system fans** coupled with **network ports that support automatic failover** prevent single points of hardware failure

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 FS2500 is ideal as virtual machine storage, but can also serve as an alternative **VM host** and run **Docker** containers.

- 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**[4]
- Protect full **VMware® vSphere™** and **Microsoft® Hyper-V®** deployments with agentless **virtual machine backup** in **Synology Active Backup for Business**

Powerful 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 FS2500 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
- **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[5]

Work and Collaborate From Anywhere

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**[6] 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[5]

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.[2]

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

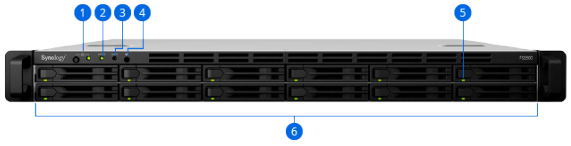
rigorous testing and integration.

Notes:

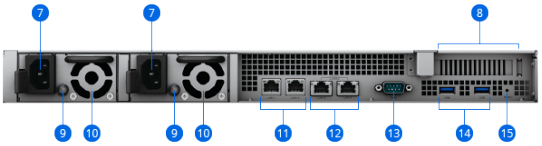
1. Performance figures obtained through internal testing by Synology. Actual performance may vary depending on the testing environment, usage, and configuration. See **performance charts** for more information.
2. The warranty period starts from the date of purchase as stated on your purchase receipt. Visit **https://www.synology.com/company/legal/warranty** for more information.
3. For the most up-to-date list of compatible NICs, please check our **compatibility list**.
4. Flash volume deduplication is available on flash-only volumes comprised of compatible Synology SSD drives and requires DSM 7.2 or newer. At least 16 GB of RAM is recommended for optimal performance. Synology measured a data reduction ratio of over 3.15:1 based on 10 VMs configured for remote desktop with two operating systems and enterprise applications installed.
5. 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.
6. 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	9.	PSU Indicators and Beep Off Buttons
2.	Status Indicator	10.	PSU Fans
3.	Alert Indicator	11.	1GbE RJ-45 Ports
4.	Beep off button	12.	10GbE RJ-45 Ports
5.	Drive Status Indicators	13.	Console Port
6.	Drive Trays	14.	USB 3.2 Gen 1 Ports
7.	Power Port	15.	Reset Button
8.	PCI Express Expansion Slot		

Technical Specifications

Hardware

CPU	
CPU Model	AMD Ryzen V1780B
CPU Quantity	1
CPU Core	4
CPU Architecture	64-bit
CPU Frequency	3.35 (base) / 3.6 (turbo) GHz
Hardware Encryption Engine	Yes

Memory	
System Memory	8 GB DDR4 ECC UDIMM
Memory Module Pre-installed	8 GB (8 GB x 1)
Total Memory Slots	2
Maximum Memory Capacity	32 GB (16 GB x 2)
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	12
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	2
RJ-45 10GbE LAN Port	2
USB 3.2 Gen 1 Port	2

PCIe	
PCIe Expansion	1 x Gen3 ×8 slot (x4 link)

Appearance	
Form Factor (RU)	1U
Size (Height x Width x Depth)	44 mm x 481.9 mm x 555.9 mm
Weight	8.3 kg
Rack Installation Support	4-post 19" rack (Synology Rail Kit - RKS-01)
Notes	The rail kit is sold separately

Others	
System Fan	40 mm x 40 mm x 28 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)
Operating Humidity	8% to 80% RH
Storage Humidity	5% to 95% RH
Maximum Operating Altitude	5,000 m

General DSM Specifications

Storage Management	
Maximum Single Volume Size	• 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.

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)	700
Windows Access Control List (ACL) Integration	Yes
NFS Kerberos Authentication	Yes

Account & Shared Folder	
Maximum Local User Accounts	2,048
Maximum Local Groups	512
Maximum Shared Folder	512
Maximum Shared Folder Sync Tasks	12

Virtualization	
VMware vSphere	ESXi 8.0 U2, ESXi 8.0 U1, ESXi 8.0, ESXi 7.0 U3, ESXi 7.0 U2, ESXi 7.0 U1, ESXi 7.0, ESXi 6.7 U3, ESXi 6.7 U2, ESXi 6.7 U1, ESXi 6.7, ESXi 6.5 U3, ESXi 6.5 U2, ESXi 6.5 U1, ESXi 6.5
Microsoft Hyper-V	Windows Server 2022
Citrix XenServer	XenServer 8, Citrix Hypervisor 8.2 LTSR CU1
OpenStack	Cinder

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 AI Console	
Centralize AI management with flexible configurations for AI model integration, user access control, data privacy, usage policies, and resource allocation	
Third-Party AI Model Integration	v
Maximum De-Identification Rate	700 words per second
Notes	• De-identification performance measurement: Filters for Credit Card Numbers, IBAN, Individual Taxpayer Identification Number, SSN, and Names applied to a 4,355-word English text. • To enable de-identification, your device must have at least 8 GB of memory and Container Manager installed.

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	1,300
Maximum Number of Hosted Files	15,000,000 (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

Synchronize data across multiple sites for fast and efficient multi-site teamwork. Powered by Synology C2 Storage, Hybrid Share requires purchase of a monthly or annual subscription

SAN Manager

Maximum iSCSI Target Number	64
Maximum LUN	128
LUN Clone/Snapshot, Windows ODX	Yes

Virtual Machine Manager

Recommended Virtual Machine Instances	8 (Learn more)
Recommended Virtual DSM Number (Licenses required)	8 (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	256
Maximum of System Snapshots	4,096

Synology High Availability

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

Synology Chat	
Maximum Number of Users	300

Synology Office	
Maximum Number of Users	1,300

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	1,600

Surveillance Station	
Default Licenses	2 (Additional cameras require purchase of licenses)
Suggested Maximum IP Cameras and Total FPS (H.264)	• 1080p: 100 channels, 2800 FPS • 3M: 100 channels, 1200 FPS • 5M: 70 channels, 700 FPS • 4K: 50 channels, 500 FPS
Suggested Maximum IP Cameras and Total FPS (H.265)	• 1080p: 100 channels, 3000 FPS • 3M: 100 channels, 2400 FPS • 5M: 100 channels, 1300 FPS • 4K: 80 channels, 800 FPS

Central Management System
Provides a single interface to manage and monitor multiple Synology NAS

VPN Server	
Maximum Connections	12

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 UDIMM: D4EU01-8G/D4EU01-16G
- 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-01

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)

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