FlashStation FS2500



Brand: Synology Product Code: FS2500 Availability: 10 Weight: 8.30kg Dimensions: 44.00mm x 481.90mm x 555.90mm Call for Price:

Short Description Synology 12 Bay FlashStation FS2500 (Diskless)

Description

Boost your applications with low-latency storage



Quad-core AMD[®] RyzenTM

***** ||

Throughput

Up to 172,552/82,917 4K random read/write IOPS



Form Factor

Rackmount 1U



Networking

Built-in dual 10GbE and dual Gigabit Ethernet ports

Dependable storage for many scenarios

Synology NAS is a versatile storage platform that fits perfectly in file server, block storage, or light application server roles that require high availability, reliability, and leading-edge storage technology.

Simple and efficient SAN storage

Choose certified block storage that fits into any environment from day one, with a short learning curve, easy management plugins, free snapshots, and built-in high availability

options.

Fast and secure SMB file sharing

Get great shared file storage that makes permission management a breeze, with powerful RAID options, reliable SMB file serving, efficient backup tools, and easy maintenance.

Business application platform

Host cost-efficient business solutions, including a powerful free backup server, a versatile mail server, lightweight directory server, or surveillance server with transparent licensing.

All the connectivity options you need

Ample built-in and supported networking options ensure that your applications fully benefit from the speed of all-flash arrays and make the FS2500 easy to integrate in any IT

environment.

Built-in connectivity

Leverage fast transfer speeds right out of the box and integrate easily with your existing infrastructure with dual 10GbE and dual 1GbE ports.

Support for 25/40GbE

Enable faster networking with 25 or 40GbE network interface cards, thanks to the PCIe 3.0 expansion slot.

Built to boost service continuity

The FS2500 protects data and services through robust hardware and software safeguards, ensuring access to your digital assets even in the face of disaster.

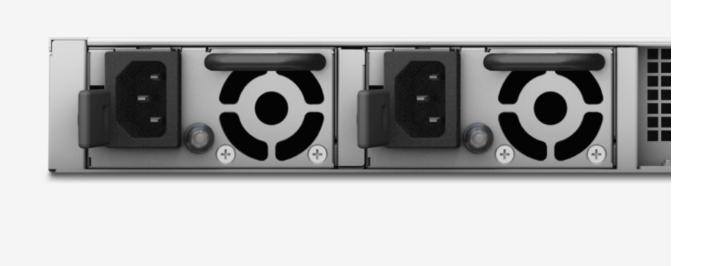
Redundancy first

Dual power supply

Reduce the possibility of power disruptions on a single distribution channel or PDU adversely impacting data and service availability with redundant PSUs.

Modular components

Automatic failover



Availability and protection

Synology High Availability (SHA)

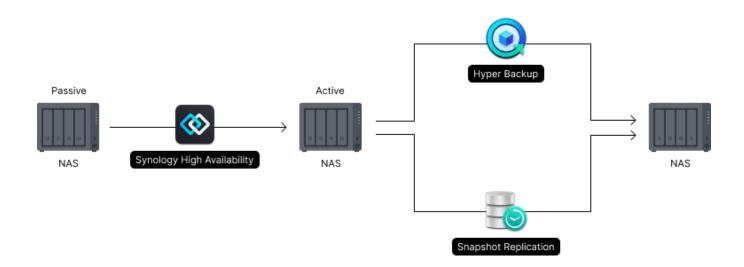
Enable automatic minute-level failover by pairing up two FS2500 units to create a high-availability cluster, minimizing service downtime in the event of a server failure.

Snapshot Replication

Create point-in-time snapshots of LUNs and shared folders with an RPO as low as 5 minutes, with support for granular version control.

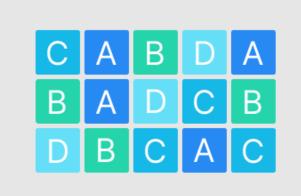
Hyper Backup

Back up files, LUNs, applications, and system configurations on your NAS to other Synology NAS, <u>Synology C2 Storage</u>, public cloud platforms, USB devices, file servers, or local folders.



Flash volume deduplication

Remove duplicate data on all-flash arrays with volume-wide deduplication to greatly increase storage efficiency. Eliminate redundant data to save up to 65% in storage space use in applications like virtual desktop infrastructure, and virtual machine.







Complete virtualization platform

Deploy the FS2500 as fast and efficient <u>VM storage</u> and benefit from free native hosting, management, and protection tools in Synology DiskStation Manager (DSM).

Certified storage for VMs and containers

Deploy and facilitate storage operations in various <u>virtualization environments</u> with full certification for VMware[®] vSphereTM, Microsoft[®] Hyper-V[®], Citrix[®] XenServerTM, and OpenStack, and a Kubernetes CSI driver for integrated volume management.

VM and container storage on all-flash arrays can benefit from volume-wide data deduplication, a technology that removes identical data to optimize storage use.



Certified

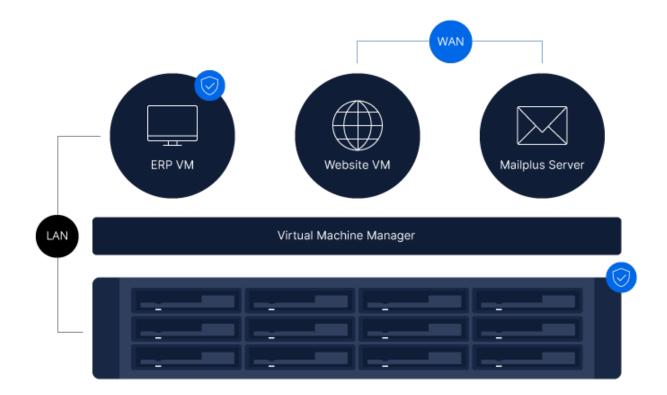






Alternative VM host for testing and recovery

Synology Virtual Machine Manager (VMM) is a hypervisor for Windows[®] and Linux[®] VMs or Virtual DSM, a virtualized version of DSM. Use your Synology device as an alternative host for VMs to quickly recover services following failure or run failover copies of PCs, servers, and VMs created with Active Backup for Business (ABB), DSM's data protection tool for physical and virtual environments.



Streamlined configuration and administration

Manage storage directly from your hypervisor with Synology Storage Console for VMware[®] or Windows platforms, provision volumes directly from the Kubernetes CLI, and offload storage operations and speed up data transfer through VMware[®] VAAI integration and Windows ODX.

| Synology Storage Console for VMware | | | About - Logo |
|-------------------------------------|---|-----------------------------|---------------|
| Norm The cor | nnection between VMware vCenter and Stora | ge Console server is normal | |
| VMware vCente | r | Storage Console | server |
| Connection set | tings | Network | |
| IP Address | 10.17.26.1 | Mode | DHCP |
| Username | administrator@synology.local | IP address | 10.17.195.174 |
| Password | ********* | Subnet mask | 255.255.240.0 |
| | | Gateway | 10.17.207.254 |
| Modify settings | | DNS | 8.8.8.8 |
| | | Modify settings | |
| | | Username & Pas | sword |
| | | Username | root |
| | | Password | ***** |
| | | | |
| | | | |

Enabling effective collaboration

Give your teams reliable tools to collaborate and communicate, wherever they are.

Synology MailPlus

Set up a private and secure mail server that can be merged with existing IT infrastructure and platforms.

Synology Office

Collaborate in real time on documents, spreadsheets, and slides for greater synergy and productivity.

Synology Drive

Host your own private cloud on the safety of your NAS with 100% data ownership and no subscription fees.



Get more with DiskStation Manager

Take advantage of a whole host of native productivity, management, and security solutions available on the web-based Synology DSM operating system.

Data Protection

Keep your business safe from data loss and minimize service downtime.

User Management

Manage user accounts and devices throughout your business with powerful directory services.

Security

Shield your Synology NAS from the most sophisticated threats with industry-leading security solutions.

File Management

Manage, sync, and share files from multiple devices through a centralized platform.

System Administration

Manage the health of your deployments and centrally administer updates with ease.

Public Cloud Integration

Back up and synchronize data easily between public cloud accounts and your NAS.



Synology has you covered

The FS2500 is backed by Synology's 5-year limited warranty, including technical support and hardware replacement services to maximize your return on investment and ensure continued high-quality performance.

Software DSM Specifications Maximum Single Volume Size

Maximum Internal Volume 256 Number SSD Read/Write Cache (Determining cache size) SSD TRIM RAID Group Supported RAID Type • 200 TB (32 GB memory required)

- 108 TB
- 56

- RAID F1
- Basic
- JBOD
- RAID 0
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- Basic to RAID 1
- Basic to RAID 5
- RAID 1 to RAID 5
- RAID 5 to RAID 6
- RAID F1
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- RAID F1
- JBOD
- RAID 5
- RAID 6
- RAID F1
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- Usable capacity for each volume will be lower than the maximum volume size and is dependent on the filesystem and

RAID Migration

Volume Expansion with Larger HDDs

Volume Expansion by Adding a HDD

Global Hot Spare Supported RAID Type

Notes

| <u>File System</u> | Internal Drives | the amount of system metadata stored. Volumes over 108 TB require 32 GB of memory or more. 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. |
| <u>File Services</u> | File Protocol | SMB AFP NFS FTP WebDAV Rsync |
| | Maximum Concurrent SMB/AFP/FTP Connections Maximum Concurrent SMB/AFP/FTP Connections (with RAM expansion) Windows Access Control List (ACL) Integration NFS Kerberos Authentication | 2,000 8,000 |
| | 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 | 32 |
| | Sync Tasks | |
| Hybrid Share | Maximum Hybrid Share | 30 |
| | Folders | |
| <u>Hyper Backup</u> | Folder and Package Backup | |
| | Entire System Backup | |
| | Notes | Full-system backup requires |
| | | DSM 7.2 or later. |
| <u>High Availability</u> | Synology High Availability | |
| Log Center | Syslog Events per Second | 3,000 |
| Virtualization | VMware ESXi 6.5 and VAA | I |
| | Windows Server 2022 | |
| | Citrix Ready | |
| | OpenStack | |
| General Specifications | Supported Protocols | SMB1 (CIFS), SMB2, |

| | | SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, HTTP, HTTPs, FTP, SNMP, LDAP, CalDAV |
|---|--|--|
| | Supported Browsers | Chrome Firefox Edge Safari |
| | Supported Language | English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svenska, Nederlands, ??????, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, ?eský, ??????, ???, ???, ????, ???? |
| | Notes | For an updated list of supported browser versions, check the <u>DSM Technical</u> <u>Specifications</u> . |
| Add-on Packages view the | e complete package list | |
| Central Management Syste | | |
| Synology Chat | Suggested Users Notes | 300 Models with expandable memory are tested with their maximum supported memory. |
| SAN Manager | Maximum iSCSI Target Number Maximum LUN LUN Clone/Snapshot, | 256 512 |
| <u>Synology MailPlus /</u> MailPlus Server | Windows ODX Free Email Accounts | 5 (Additional accounts require purchase of licenses) |
| | Suggested Users Notes | 5,000 Suggested users is derived from testing in an environment with 20% heavy users (each with 20,000 pre- |

(each with 20,000 prepopulated emails and

receiving 240 emails per day) and 80% light users (each receiving an average of 20 emails per day). Learn more

- 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: antispam, anti-virus, DNSBL, greylist, content scan, full-text search (English only).
- Models with expandable memory are tested with their maximum supported memory. To estimate the RAM requirement for your NAS, please <u>read this article</u>

Snapshot Replication

Surveillance Station

Maximum Snapshots per Shared Folder Maximum of System Snapshots Default Licenses

Suggested Maximum IP Cameras and Total FPS (H.264)

1,024

65,536

2 (Additional cameras require purchase of licenses)

- 1080p: 100 channels, 2800 FPS
- 3M: 100 channels, 1200 FPS
- 5M: 70 channels, 700 FPS

Suggested Maximum IP Cameras and Total FPS (H.265)

- 4K: 50 channels, 500 FPS
- 1080p: 100 channels, 3000 FPS
- 3M: 100 channels, 2400 FPS
- 5M: 100 channels, 1300 FPS
- 4K: 80 channels, 800 FPS
- 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 <u>NVR Selector</u> to quickly find a suitable model based on your requirements.
- The number of streams that can be viewed simultaneously is twice the suggested maximum number of cameras. For example, if the suggested maximum number of cameras

Notes

| | | for a model is 10 under H.264, 1080p, the model can support up to 20 streams of the same specification at the same time. |
|-----------------|--|--|
| Synology Drive | Recommended Number of Concurrent Sync Clients | 900 (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 <u>Synology Drive</u> . 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. Models with expandable memory are tested with their maximum supported memory. Btrfs file system and non-encrypted shared folders were used during the aforementioned testing. |
| Synology Office | Suggested Users Notes | 12,500 Suggested users is derived from testing in an environment |

with 60% idle users (each logging in and viewing documents) and 40% active users (each executing random actions at intervals of 20 to 40 seconds) operating within documents, each document having 30 users. Learn more

- Models with expandable memory are tested with their maximum supported memory.
- Client performance may affect maximum simultaneous editing users. Client PCs used for testing: Intel Core i3-3220 / 8GB RAM

| Virtual Machine Manager | Recommended Virtual | 8 (Learn more) |
|-------------------------|----------------------------|------------------------------|
| | Machine Instances | |
| | Recommended Virtual DSM | 8 (including 1 Free License) |
| | Number (Licenses required) | |
| | Notes | The specifications vary |
| | | depending on system |
| | | configuration and memory |
| | | size. |
| VPN Server | Maximum Connections | 60 |

Specification

| NAS | |
|----------------------|------------------|
| RJ-45 10GbE LAN Port | 2 |
| CPU Architecture | 64-bit |
| CPU Core | 4 |
| CPU Model | AMD Ryzen V1780B |
| CPU Quantity | 1 |
| Drive Bays | 12 |
| Form Factor (RU) | 1U |
| Hardware Encryption | Yes |

| Engine | |
|---------------------------|----------------------------|
| Hot Swappable Drive | Yes |
| Maximum Memory | 32 GB (16 GB x 2) |
| Capacity | |
| Memory | 8 GB DDR4 ECC UDIMM |
| PCIe Expansion | 1 x Gen3 x8 slot (x4 link) |
| Power Supply Unit / | 350 watts |
| Adapter | |
| Redundant Power Supply | Yes |
| RJ-45 1GbE LAN Port | 2 |
| System Fan | 40 mm x 40 mm x 4 pcs |
| Total Memory Slots | 2 |
| USB 3.2 Gen 1 Port | 2 |
| | |

Product Gallery