

# FlashStation **FS3600**



# Accelerate Your Business with an Affordable All-Flash Solution

FS3600 is a 24-bay all-flash NAS that lets enterprises boost the performance of I/O sensitive applications such as database, virtualization, and online transaction processing (OLTP) at a competitive total cost of ownership. Powered by Synology's awardwinning DiskStation Manager (DSM) operating system, FS3600 simplifies data management tasks with an intuitive and efficient user interface. A wide range of integrated data protection features helps maintain high service availability.

# Highlights

- High Performance Over 195,000 iSCSI 4K random write IOPS<sup>1</sup>
- Easy System Administration Easy to deploy with an intuitive user interface
- Effortless Capacity Expansion Flexibly scale up to 72 drives<sup>2</sup> to increase storage capacity as demand grows
- Virtualization-Ready Integration with virtualization platforms at no extra cost
- **Protect and Restore Data in a Snap** Back up critical data and reduce your Recovery Time Objective (RTO) with Snapshot Replication
- Boost Business Productivity Build an on-premises, multi-user collaboration environment with fine-grained controls



#### Integration With Existing SAN

Synology systems can integrate with your virtualization platforms and easily replace aging SAN storage arrays in any organization's existing infrastructure.

# Fast, Scalable, and Affordable

FS3600 is an all-flash NAS solution that delivers more than **195,000 iSCSI 4K random write IOPS**<sup>1</sup>, ideal for enterprises looking for high-speed infrastructure that responds fast under I/O intensive workloads, such as database, virtualization, or OLTP applications. FS3600 is **10GbE-ready** and is easily integrated to businesses' existing LAN environment, with a competitive total cost of ownership.

Powered by **Synology DiskStation Manager (DSM)**, the award-winning and web-based operating system, FS3600 provides an intuitive graphical user interface that lets IT administrators manage and monitor system resource easily and efficiently. FS3600 supports easy storage capacity expansion using Synology Expansion Unit **FX2421/RX1217sas**<sup>2</sup>, without removing existing data or installing additional management software.

## **Built for Your SAN Storage Needs**

Synology FS3600 offers a fully certified virtualization solution with support for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack® Cinder. It supports both iSCSI and NFS protocols, and integrates with VMware VAAI and Microsoft ODX, allowing IT administrators to effectively deploy and facilitate storage operations in various virtualization environments. IT administrators can efficiently manage virtualized workloads using Synology's intuitive user interface, as well as add-on plugins for VMware and Windows environments. Features including instant snapshots, fast cloning, NFS v4.1, and thin provisioning deliver more flexibility to accommodate different administration needs.

At no additional license cost, you can further protect your virtualized workload with a comprehensive suite of data protection applications, including **Synology Snapshot Replication**, **Hyper Backup**, **Active Backup for Business** and **Synology High Availability**, to handle various protection scenarios.



#### Virtualization-Ready Platform

Synology's native hypervisor, Virtual Machine Manager, allows you to manage multiple virtual machines on your FS3600 and run Windows<sup>®</sup>, Linux<sup>®</sup>, and Virtual DSM applications on your Synology NAS.



#### **Snapshot Replication**

State-of-the-art data snapshot technology allows flexible point-in-time recovery of files, while only using a fraction of the storage space and computing resources required for traditional backup.

# **Running & Protecting Virtual Machines**

Synology Virtual Machine Manager (VMM) is an intuitive hypervisor application that lets users easily set up virtual machines and run operating systems including Windows<sup>®</sup>, Linux<sup>®</sup>, and Virtual DSM. With VMM, users can build up a cluster environment with multiple Synology systems while keeping the flexibility to scale out online and migrate virtual machines for load balancing and resource allocation. Disaster recovery features including instant snapshot, replication, cloning, restore and failover help you fully protect each virtual machine and safeguard your digital assets at no additional cost.

**VMM Pro** licenses give access to advanced features including remote replication, remote storage migration, high availability and live migration, helping users further minimize the risk of service downtime and manage IT resources with maximum flexibility.

# Service Continuity Safeguards

Service continuity is critical for modern businesses. FS3600 brings thoughtful software and hardware integration to ensure a high standard of system availability if a disaster or major outage occurs.

- **Synology High Availability** provides fast transitions between clustered servers to keep services online.
- **Snapshot Replication** provides schedulable, near-instantaneous data protection with version control, ensuring that documents in shared folders and VMs on iSCSI LUNs remain safe and available.
- Redundant components, including power supply units, system fans, and network ports support automatic failover to eliminate single points of hardware failure.



#### Synology Collaboration Suite

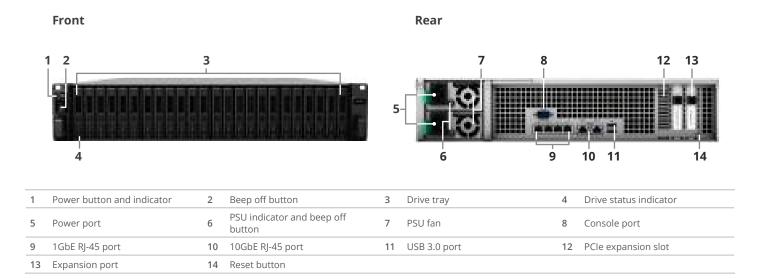
A powerful and secure private cloud solution that lets teams collaborate, sync files, and communicate with others anytime, anywhere.

# **On-premises Collaboration & Synching Solution**

FS3600 comes with **Synology Collaboration Suite**, the productivity and file sharing solution that powers team collaboration while leveraging the advantages of the private cloud to fully control data and prevent data leaks — through HTTPS support, a built-in firewall, and multiple IP and account intrusion auto-blocking mechanisms.

- Synology Drive enables data synchronization and backup via web portal and desktop applications across Windows<sup>®</sup>, macOS<sup>®</sup>, and Linux<sup>®</sup> platforms. Intelliversioning saves historical versions while minimizing storage space use and supports on-demand data restoration.
- **Synology Office** includes Documents, Spreadsheets, and Slides. Its online editing environment allows multiple users to edit, comment, and share company data simultaneously at no additional license fee.
- **Synology MailPlus** is a reliable mail server, accessible through an intuitive web-based client, that helps users to manage emails and increase productivity. MailPlus supports deployment in High-Availability clusters.
- **Synology Chat** enables instant conversations and optimizes team communications with powerful features including message encryption, pinning, forwarding, reminders, and scheduling.

### Hardware Overview



# **Technical Specifications**

#### Hardware

| CPU                        | Intel® Xeon® D-1567 12-core 2.1GHz, Turbo Boost up to 2.7GHz                                 |
|----------------------------|--|
| Hardware encryption engine | Yes (AES-NI)   |
| Memory                     | 16 GB DDR4 ECC RDIMM (expandable up to 128 GB)   |
| Compatible drive type      | 24 x 2.5" SAS SSD/HDD or SATA SSD (drives not included)                                      |
| Hot swappable drive        | Yes  |
| External port              | <ul><li>2 x USB 3.0</li><li>1 x Expansion</li></ul>  |
| Size (HxWxD)               | <ul> <li>88 x 430.5 x 692 mm</li> <li>88 x 482 x 724 mm (with server ears)</li> </ul>        |
| Weight                     | 14.9 kg  |
| LAN port                   | <ul> <li>4 x 1GbE RJ-45</li> <li>2 x 10GbE RJ-45</li> </ul>                                  |
| Wake on LAN/WAN            | Yes  |
| PCIe 3.0 slot              | <ul><li>1 x 8-lane x8 slot</li><li>High-performance network interface card support</li></ul> |
| Scheduled power on/off     | Yes  |
| System fan                 | 4 (80 x 80 x 32 mm)  |
| AC input power voltage     | 100 V to 240 V AC  |
| Power frequency            | 50/60Hz, single phase  |
| 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   |
| Maximum operating altitude | 5,000 m (16,400 ft)  |
|                            |  |

#### General DSM specification

| Networking protocol     | SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)  |
|-------------------------|---|
| File system             | <ul> <li>Internal: Btrfs, ext4</li> <li>External: Btrfs, ext4, ext3, FAT32, NTFS, HFS+, exFAT<sup>3</sup></li> </ul>  |
| Supported RAID type     | Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, Synology RAID F1  |
| Storage management      | <ul> <li>Maximum single volume size: 108TB/200TB (at least 32 GB RAM required, for RAID 5 or RAID 6 groups only)</li> <li>Maximum system snapshots<sup>4</sup>: 65,536</li> <li>Maximum internal volume: 256</li> </ul> |
| SSD cache               | Read/write cache support  |
| File sharing capability | <ul> <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: 4,000</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, shared folder encryption, SMB encryption, FTP over SSL/TLS, SFTP, rsync over SSH, login auto block, Let's Encrypt support, HTTPS (customizable cipher suite)  |
| Supported client        | Windows <sup>®</sup> 7 onwards, macOS <sup>®</sup> 10.12 onwards  |
| Supported browser       | Chrome®, Firefox®, Edge®, Internet Explorer® 10 onwards, Safari® 10 onwards, Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards) on tablets  |
| Interface Language      | English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar,<br>Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文                       |

#### Packages and Applications

| File Server & Synchronization  | on   |
|--------------------------------|--|
| Synology Drive                 | Provide a universal portal to synchronize your files across various platforms, including Windows®, macOS®, Linux®, Android™<br>and iOS. The built-in universal portal allows you to access data anytime and anywhere.<br>• Maximum number of hosted files: 5,000,000<br>• Maximum number of concurrent connections for PC clients: 2,000 |
| 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,<br>boot over the network with TFTP and PXE support, transfer logs  |
| Presto File Server⁵            | High-speed data transfer over WAN with exclusive SITA technology between Synology NAS and desktop  |
| Cloud Sync                     | One or two-way synchronization with public cloud storage providers including Alibaba Cloud OSS, Amazon S3-compatible<br>storage, Backblaze B2, Baidu Cloud, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, MegaDisk, Microsoft<br>OneDrive, OpenStack Swift-compatible storage, Tencent COS, WebDAV servers, Yandex Disk       |
| Universal Search               | Offer global search into applications and files  |
| iSCSI Storage & Virtualization |  |
| iSCSI Manager                  | <ul> <li>Maximum iSCSI target: 256</li> <li>Maximum iSCSI LUN: 512</li> <li>iSCSI LUN clone/snapshot support</li> </ul>  |
| Virtual Machine Manager        | Deploy and run various virtual machines on Synology NAS, including Windows®, Linux®, or Virtual DSM  |
| Data Protection & Backup S     | Solution   |
| Hyper Backup                   | Support local backup, network backup, and data backup to public clouds   |
| Backup tools                   | DSM configuration backup, macOS <sup>®</sup> Time Machine <sup>®</sup> support, Synology Drive Client desktop application Shared folder sync - maximum task number: 32   |
| Snapshot Replication           | <ul> <li>Maximum of shared folder snapshots: 1,024</li> <li>Maximum of Replication: 64</li> </ul>  |
| Synology High Availability     | Reduce service downtime by setting up two identical NAS into one high-availability cluster   |
| Active Backup for G Suite      | Support G Suite My Drive and Team Drive backup and restoration   |
| Active Backup for Office 365   | Support Office 365 OneDrive for Business, mail, contacts, and calendar backup and restoration  |
|                                |  |

| Active Backup for Business   | All-in-one backup solution designed for heterogeneous business IT environment, enabling IT admins to remotely manage and monitor protection over PC, servers and VM on one centralized console   |
|------------------------------|--|
| Productivity & Collaboration |  |
| Collaboration tools          | Collaborate with instant message service Synology Chat, online editor Synology Office, and scheduling assistant Synology<br>Calendar<br>• Chat maximum user: 6,000<br>• Office maximum user: 3,400<br>• Calendar: support CalDAV and access via mobile devices |
| Note Station                 | Rich-text note organization and versioning, encryption, sharing, media embedding and attachments   |
| Synology 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)                                  |
| Synology MailPlus            | Intuitive webmail interface for Synology MailPlus Server, customizable mail labels, filters, and user interface  |
| Surveillance                 |  |
| Surveillance Station         | Maximum IP camera: 128 (total of 3,840 FPS at 720p, H.264) (including two free camera licenses. Additional cameras require the purchasing of additional licenses)  |
| All-in-One Server            |  |
| Synology Directory Server    | Provide a flexible and cost-effective domain controller solution   |
| Central Management System    | Provide a single interface to manage and monitor multiple Synology NAS   |
| VPN Server                   | Maximum connection: 40. Supported VPN protocol: PPTP, OpenVPN™, L2TP/IPSec   |
| Mail Server                  | Supported Mail Server protocol: POP3, SMTP, IMAP. LDAP/AD account support  |
| Mail Station                 | Webmail interface for Mail Server to receive emails from multiple POP3 mailboxes, customizable SMTP server   |
| Web Station                  | Virtual host (up to 30 websites), PHP / MariaDB <sup>®</sup> , 3rd-party applications support  |
| Other packages               | DNS Server, RADIUS Server, Log Center  |
| Others                       |  |
| Storage Analyzer             | Volume and quota usage, total size of files, volume usage and trends based on past usage, size of shared folders, large files, most recently modified files, least recently accessed files   |
| Antivirus Essential          | Full system scan, scheduled scan, white list customization, virus definition auto update   |
| Security Advisor             | Malware detection/removal, user account/password, network, system-related security scan  |
| Other packages               | Additional 3rd-party packages available on Package Center  |
|                              |  |

#### **Environment and Packaging**

| Environment safety                | RoHS compliant   |
|-----------------------------------|--|
| Package content                   | <ul> <li>FS3600 main unit x 1</li> <li>Quick Installation Guide x 1</li> <li>Accessory pack x 1</li> <li>AC power cord x 2</li> </ul>  |
| Optional accessories <sup>6</sup> | <ul> <li>2.5" SATA SSD: SAT5200</li> <li>DDR4 ECC RDIMM: D4RD-2666-16G<sup>7</sup>/D4RD-2666-32G</li> <li>10GbE Network Interface Card: E10G18-T2/E10G18-T1/E10G17-F2</li> <li>Expansion Unit: FX2421/RX1217sas</li> <li>VisualStation: VS960HD/VS360HD</li> <li>Surveillance Device License Pack</li> <li>Synology MailPlus License Pack</li> <li>Virtual DSM License Pack</li> </ul> |
| Warranty                          | 5 years <sup>8</sup>   |

\*Model specifications are subject to change without notice. Please refer to www.synology.com for up-to-date information.

1. Performance figures may vary depending on environment, usage, and configuration.

- 2. FS3600 can scale up to 72 drives with 2 x FX2421 or 48 drives with 2 x RX1217sas. Synology Expansion Units are sold separately.
- 3. exFAT Access can be purchased separately in Package Center.
- 4. System snapshots include snapshots taken by iSCSI Manager, Snapshot Replication, and Virtual Machine Manager. Availability of these packages varies by model.
- 5. Presto File Server licenses can be purchased separately in Package Center.
- 6. Please refer to www.synology.com/compatibility for the latest optional accessory list.
- 7. D4RD-2666-16G must be used with identical memory modules of the same capacity and frequency.

8. The warranty period starts from the purchase date as stated on your receipt of purchase. Visit https://www.synology.com/company/legal/warranty for more information.



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