

Product

FS3600



Hardware Specs

| CPU | |
|-----------------------------|--|
| CPU Model | Intel Xeon D-1567 |
| CPU Quantity | 1 |
| CPU Core | 12 |
| CPU Architecture | 64-bit |
| CPU Frequency | 2.1 (base) / 2.7 (turbo) GHz |
| Hardware Encryption Engine | v |
| Memory | |
| System Memory | 16 GB DDR4 ECC RDIMM |
| Memory Module Pre-installed | 16 GB (16 GB x 1) |
| Total Memory Slots | 4 |
| Maximum Memory Capacity | 128 GB (32 GB x 4) |
| Notes | <ul style="list-style-type: none">• Synology reserves the right to replace memory modules with the same or higher frequency based on supplier's product life cycle status. Rest assured that the compatibility and stability have been strictly verified with the same benchmark to ensure identical performance.• 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.• For more information on memory upgrade limitations, visit here.• For more information on the recommended memory configurations, visit here. |
| Storage | |

| | |
|---|---|
| Drive Bays | 24 |
| Maximum Drive Bays with Expansion Unit | 72 (FX2421 x 2) |
| Compatible Drive Type* (See all supported drives) | <ul style="list-style-type: none"> • 2.5" SAS HDD* • 2.5" SAS SSD* • 2.5" SATA SSD |
| Hot Swappable Drive* | v |
| Notes | <ul style="list-style-type: none"> • 2.5" SAS HDD and 2.5" SAS SSD only indicate the drive types that may be compatible with Synology devices. For supported drive models, please refer to the device's compatibility list. • "Compatible drive type" indicates drives that have been tested to be compatible with Synology products. This term does not indicate the maximum connection speed of each drive bay. |

External Ports

| | |
|----------------------|---|
| RJ-45 1GbE LAN Port | 4 |
| RJ-45 10GbE LAN Port | 2 |
| USB 3.2 Gen 1 Port* | 2 |
| Expansion Port | 1 |
| Expansion Port Type | Mini-SAS HD |
| Notes | The USB 3.0 standard was renamed to USB 3.2 Gen 1 by the USB Implementers Forum (USB-IF) in 2019. |

PCIe

| | |
|----------------|----------------------------|
| PCIe Expansion | 1 x Gen3 x8 slot (x8 link) |
|----------------|----------------------------|

Appearance

| | |
|-------------------------------|-------------------------|
| Form Factor (RU) | 2U |
| Size (Height x Width x Depth) | 88 mm x 482 mm x 724 mm |
| Weight | 14.9 kg |

| | |
|-----------------------------|---|
| Rack Installation Support* | 4-post 19" rack (Synology Rail Kit - RKS-02) |
| Notes | The rail kit is sold separately |
| Others | |
| System Fan | 80 mm x 80 mm x 4 pcs |
| Fan Speed Mode | <ul style="list-style-type: none"> • Full-Speed Mode • Cool Mode • Quiet Mode |
| Easy Replacement System Fan | v |
| Power Recovery | v |
| Noise Level* | 57 dB(A) |
| Scheduled Power On / Off | v |
| Wake on LAN / WAN | v |
| Power Supply Unit / Adapter | 500 watts |
| Redundant Power Supply | v |
| AC Input Power Voltage | 100V to 240V AC |
| Power Frequency | 50/60 Hz, Single Phase |
| Power Consumption | 258.23 watts (Access) 127.99 watts (HDD Hibernation) |
| British Thermal Unit | 881.12 BTU/hr (Access) 436.72 BTU/hr (HDD Hibernation) |
| Notes | <ul style="list-style-type: none"> • Power consumption is measured when it is fully loaded with HGST 1.8TB HUC101818CS4204 hard drive(s). • Noise Level Testing Environment: Fully loaded with Toshiba 600GB AL14SEB060N hard drive(s) in the idle state. Two G.R.A.S. Type 40AE microphones, each set up 1 meter away from the Synology NAS at the front and rear. Background noise: 16.49-17.51 dB(A); Temperature: 24.25-25.75°C; Humidity: 58.2-61.8% |

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) |
| Relative Humidity | 5% to 95% RH |

Certification

- FCC
- CE
- BSMI
- VCCI
- RCM
- EAC
- CCC

Warranty

5 Years

| | |
|-------|--|
| Notes | The warranty period starts from the purchase date as stated on your purchase receipt. (Learn more) |
|-------|--|

Environment

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 RDIMM: [D4RD-2666-16G*/D4RD-2666-32G](#)
- Expansion Units: [FX2421*/RX1217sas](#)
- Enterprise Series 2.5" SATA SSD: [SAT5200 Series](#)
- 25GbE Network Interface Card: [E25G30-F2](#)
- 10GbE Network Interface Card: [E10G21-F2/E10G30-T2/E10G18-T1](#)
- Rail Kit Sliding: [RKS-02](#)

Notes

- It is required to use D4RD-2666-16G with identical memory modules of the same capacity and frequency. For more information, visit [here](#).
- Expansion Unit FX2421 can only be used with identical expansion units.

Software Specs

DSM Specifications

Storage Management

| | |
|--|--|
| Maximum Single Volume Size | <ul style="list-style-type: none">• 1 PB (64 GB memory required, for RAID 6 groups only)• 200 TB (32 GB memory required)• 108 TB |
| Maximum Internal Volume Number | 256 |
| SSD Read/Write Cache (Determining cache size) | v |
| SSD TRIM | v |
| RAID Group | v |
| Supported RAID Type | <ul style="list-style-type: none">• RAID F1• Basic• JBOD• RAID 0• RAID 1• RAID 5• RAID 6• RAID 10 |
| RAID Migration | <ul style="list-style-type: none">• Basic to RAID 1• Basic to RAID 5• RAID 1 to RAID 5• RAID 5 to RAID 6 |

| | |
|--------------------------------------|---|
| Volume Expansion with Larger HDDs | <ul style="list-style-type: none"> • RAID F1 • RAID 1 • RAID 5 • RAID 6 • RAID 10 |
| Volume Expansion by Adding a HDD | <ul style="list-style-type: none"> • RAID F1 • JBOD • RAID 5 • RAID 6 |
| Global Hot Spare Supported RAID Type | <ul style="list-style-type: none"> • RAID F1 • RAID 1 • RAID 5 • RAID 6 • RAID 10 |
| Notes | <ul style="list-style-type: none"> • 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. • When Peta Volume is enabled, validated services and packages are required. Please refer to this article for more information on limitations. • Actual maximum storage pool and volume sizes depend on drive sizes used, the number of drive bays available, and the RAID configuration. • Volumes over 108 TB require 32 GB of memory or more. |

File System

| | |
|-----------------|--|
| Internal Drives | <ul style="list-style-type: none"> • Btrfs • ext4 |
| External Drives | <ul style="list-style-type: none"> • 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. |

File Services

| | |
|---|--|
| File Protocol | <ul style="list-style-type: none"> • SMB • AFP • NFS • FTP • WebDAV • Rsync |
| Maximum Concurrent SMB/AFP/FTP Connections | 4,000 |
| Maximum Concurrent SMB/AFP/FTP Connections (with RAM expansion) | 10,000 |
| Windows Access Control List (ACL) Integration | v |
| NFS Kerberos Authentication | v |
| Notes | <ul style="list-style-type: none"> • 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 Sync Tasks | 32 |

Hybrid Share

| | |
|------------------------------|----|
| Maximum Hybrid Share Folders | 30 |
|------------------------------|----|

Hyper Backup

| | |
|---------------------------|---|
| Folder and Package Backup | v |
|---------------------------|---|

| | |
|----------------------|---|
| Entire System Backup | v |
|----------------------|---|

| | |
|-------|---|
| Notes | Full-system backup requires DSM 7.2 or later. |
|-------|---|

High Availability

| | |
|----------------------------|---|
| Synology High Availability | v |
|----------------------------|---|

Log Center

| | |
|--------------------------|-------|
| Syslog Events per Second | 3,000 |
|--------------------------|-------|

Virtualization

| | |
|--------------------------|---|
| VMware ESXi 6.5 and VAAI | v |
|--------------------------|---|

| | |
|---------------------|---|
| Windows Server 2016 | v |
|---------------------|---|

| | |
|---------------------|---|
| Windows Server 2019 | v |
|---------------------|---|

| | |
|---------------------|---|
| Windows Server 2022 | v |
|---------------------|---|

| | |
|--------------|---|
| Citrix Ready | v |
|--------------|---|

| | |
|-----------|---|
| OpenStack | v |
|-----------|---|

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 | <ul style="list-style-type: none">• 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 . |

Add-on Packages [view the complete package list](#)

Antivirus by McAfee (Trial)

v

Central Management System

v

Synology Chat

| | |
|----------------------------|--|
| Suggested Maximum Users | 6,000 |
| Suggested Concurrent Users | 600 |
| Notes | For tested models with expandable memory, the maximum amount of RAM was installed. |

SAN Manager

| | |
|---------------------------------|---|
| Maximum iSCSI Target Number | 256 |
| Maximum LUN | 512 |
| LUN Clone/Snapshot, Windows ODX | v |
| Notes | iSCSI Manager has been renamed to SAN Manager in DSM 7.0. |

Synology MailPlus / MailPlus Server

| | |
|-------------------------|--|
| Free Email Accounts | 5 (Additional accounts require purchase of licenses) |
| Suggested Maximum Users | 12,000 |

| | |
|----------------------------|--|
| Suggested Concurrent Users | 2,400 |
| Maximum Server Performance | 5,040,000 emails per day, approx. 151 GB |
| Notes | <ul style="list-style-type: none"> • FS series were installed with 12 SSDs in RAID F1 configuration. • For tested models with expandable memory, the maximum amount of RAM was installed. • 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: anti-spam, anti-virus, DNSBL, greylist, content scan, full-text search (English only). |

Snapshot Replication

| | |
|-------------------------------------|--------|
| Maximum Snapshots per Shared Folder | 1,024 |
| Maximum of System Snapshots | 65,536 |

Surveillance Station

| | |
|--|---|
| Default Licenses | 2 (Additional cameras require purchase of licenses) |
| Suggested Maximum IP Cameras and Total FPS (H.264) | <ul style="list-style-type: none"> • 720p: 200 channels, 6000 FPS • 1080p: 160 channels, 3840 FPS • 3M: 160 channels, 1600 FPS • 5M: 120 channels, 1200 FPS • 4K: 80 channels, 800 FPS |
| Suggested Maximum IP Cameras and Total FPS (H.265) | <ul style="list-style-type: none"> • 720p: 300 channels, 9000 FPS • 1080p: 200 channels, 6000 FPS • 3M: 160 channels, 2800 FPS • 5M: 160 channels, 1600 FPS • 4K: 120 channels, 1200 FPS |

| | |
|-------|--|
| Notes | <ul style="list-style-type: none"> • Surveillance Station 9.1.3 or above is required to support the maximum IP cameras and FPS figures listed. • 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 NVR Selector to quickly find a suitable model based on your requirements. • The maximum number of camera stream outputs is 2 times the suggested maximum number of IP cameras. |
|-------|--|

Synology Drive

| | |
|---|---|
| Recommended Number of Concurrent Sync Clients | 2,000 (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 Synology Drive . For file access through other standard protocols, refer to the File Services section above) |
| Notes | <ul style="list-style-type: none"> • Exceeding the recommended numbers above will not block application operations, but may result in longer response time. • Utilizing SSD cache can significantly improve performance. • For tested models with expandable memory, the maximum amount of RAM was installed. • Btrfs file system and non-encrypted shared folders were used during the aforementioned testing. |

Synology Office

| | |
|----------------------------|--------|
| Suggested Maximum Users | 15,000 |
| Suggested Concurrent Users | 6,000 |

Notes

- Multiple files were opened for testing and each file was edited by 30 users simultaneously.
- For tested models with expandable memory, the maximum amount of RAM was installed.
- Client performance may affect maximum simultaneous editing users. Client PCs used for testing: Intel Core i3-3220 / 8GB RAM

Virtual Machine Manager

Recommended Virtual Machine Instances

24 ([Learn more](#))

Recommended Virtual DSM Number ([Licenses required](#))

24 (including 1 Free License)

Notes

The specifications vary depending on system configuration and memory size.

VPN Server

Maximum Connections

60