DiskStation
DS3617xs

Synology DiskStation DS3617xs provides the reliable and ultra-high performance network attached storage solution for large-scale businesses that require an efficient way to centralize data protection, simplify data management, deploy virtualization solutions, and rapidly expand storage capacity with minimal time spent on setup and maintenance. Synology DS3617xs is backed with Synology's 5-year limited warranty.

Ultra-High Performance

Synology DS3617xs is a 12-bay desktop network attached storage solution with powerful network performance and easy management. The NAS integrates an **Intel® Xeon® D-1527 quad-core processor** and dual-channel **16 GB DDR4 ECC SO-DIMM (up to 48 GB)**, providing fast system response time and optimized multitasking operation. With an optional 10GbE network card installed, DS3617xs delivers outstanding network performance at over **2,358 MB/s sequential throughput reading** and **406,760 sequential IOPS reading** under a RAID 5 configuration with 10GbE Link Aggregation enabled[1].

Btrfs: Next Generation Storage Efficiency

DS3617xs 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-wise 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 single file or folder.
- **Cloud Station with file versioning** reduces down to half of storage consumption when compared with ext4 file system.

Highlights

- Ultra-high performance of over 2,358 MB/s sequential throughput reading and 406,760 sequential IOPS reading[1]
- Intel Xeon D-1527 quad-core CPU and 16 GB (up to 48 GB) DDR4 ECC SO-DIMM
- Scale up to 36 drives with 2 x Synology Expansion Unit DX1215
- PCIe 3.0 slot to support optional high performance network interface card
- Advanced Btrfs file system offering 65,000 system-wide snapshots and 1,024 snapshots per shared folder
- Complete virtualization solution for VMware®, Citrix®, Microsoft® Hyper-V® and OpenStack®
- Backed with SRS, Synology's next business day replacement service[2]

Virtualization Ready

DS3617xs provides seamless storage solutions for virtualization environments, including **VMware**, **Citrix**, **Hyper-V**, and **OpenStack**. With **VMware vSphere 6 and VAAI** integration certified, DS3617xs helps offload specific storage operations and optimizes computation power for unparalleled performance and efficiency in VMware environments. As the centralized storage of a virtual environment, DS3617xs enables virtual machine migration, allowing movement from server to server whilst eliminating service downtime and disruption to users. **Windows Offloaded Data Transfer (ODX)** and **Synology Advanced LUN** support greatly improves the efficiency on massive data transfer and migration. With **OpenStack** support, DS3617xs can be used as a block-based storage component for servers complying with the **Cinder API**.

Comprehensive Business Applications

Powered by the innovative Synology **DiskStation Manager (DSM)**, DS3617xs comes fully-equipped with applications and features designed specifically for large-scale business:

- **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 DS3617xs to fit seamlessly into current infrastructure.
- **Application privileges** controls access to applications and packages based on each individual account, user group, or IP address.

Robust Scalability

Management of the storage space on DS3617xs is simple and flexible. **Multiple Volumes on RAID** allows you to create more than one volume on a RAID structure, providing a flexible and efficient way to manage your storage across all available hard drives. When the need for more space arises, the volume can be easily expanded without any service disruption. DS3617xs provides the ability to seamlessly expand a single volume up to **108 TB** (default) / **200 TB** (with at least 32 GB RAM installed) on the fly. When the storage capacity of DS3617xs nears its limit, expansion is easily accomplished with up to two **Synology Expansion Unit DX1215** to support up to 36 SATA drives.

Reliability, Availability & Disaster Recovery

System reliability is of paramount importance to businesses which depend upon their commercial servers every day. DS3617xs responds to these concerns with wide-ranging availability and redundancy features:

- **Synology High Availability** ensures seamless transition between clustered servers in the event of server failure with minimal impact on applications.
- **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 in the event of a disaster.
- **Redundant system fans** and **network ports** with failover support ensure continual service uptime.
- High reliability system design including **fan-less CPU heat-sink** and passive cooling technology prevents single points of failure.
- **DDR4 ECC SO-DIMM** reduces power consumption and has error detection and correction capabilities during data transmission.
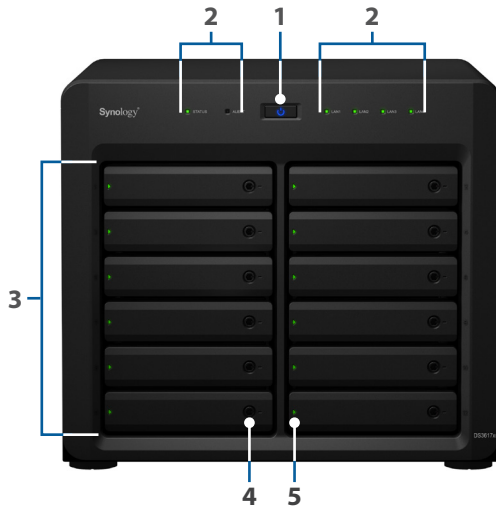

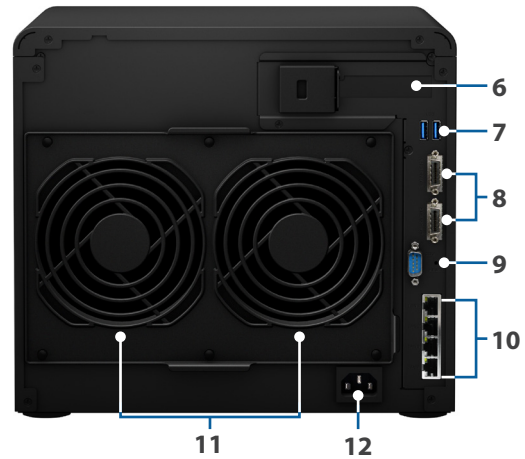### Reliability, Availability & Disaster Recovery

High Availability Manager ensures seamless transition between clustered servers in the event of server failure with minimal impact on businesses.

Hardware Overview

Front

Rear

1	Power button and indicator	2	LED indicator	3	Drive tray	4	Drive tray lock
5	Drive status indicator	6	PCIe expansion slot	7	USB 3.0 port	8	Expansion port
9	RESET button	10	1GbE RJ-45 port	11	System fan	12	Power port

Technical Specifications

Hardware

CPU	Intel Xeon D-1527 quad-core 2.2GHz, burst up to 2.7GHz
Hardware encryption engine	Yes (AES-NI)
Memory	16 GB DDR4 ECC SO-DIMM (expandable up to 48 GB)
Compatible drive type	12 x 3.5" or 2.5" SATA SSD / HDD (drives not included)
External ports	• 2 x USB 3.0 port • 2 x expansion port
Size (HxWxD)	270 x 300 x 340 mm
Weight	9.8 kg
LAN	4 x 1GbE (RJ45)
Wake on LAN/WAN	Yes
PCIe 3.0 slot	One x8 slot (at 8-lane)
Scheduled power on / off	Yes
System fan	2 (120 x 120 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	2,000 m (6,500 ft)

General

Networking protocol	CIFS, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN ™ , L2TP)
File system	• Internal: Btrfs, ext4 • External: Btrfs, ext4, ext3, FAT, NTFS, HFS+, exFAT³
Storage management	• Maximum single volume size: 108TB / 200TB (at least 32 GB RAM required, for RAID 5 or RAID 6 groups only) • Maximum internal volumes: 1,024 • Maximum iSCSI target: 64 • Maximum iSCSI LUN: 512 • iSCSI LUN clone / snapshot support
Supported RAID type	Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
File sharing capability	• Maximum local user account: 16,000 • Maximum local group: 512 • Maximum shared folder: 512 • Maximum concurrent CIFS / AFP / FTP connection: 2,048
Privilege	Windows Access Control List (ACL)
Virtualization	VMware vSphere® 6, Microsoft Hyper-V® , Citrix®, OpenStack®
Directory service	Windows® AD integration: Domain users login via Samba (CIFS) / AFP / FTP / File Station, LDAP integration
Security	FTP over SSL / TLS, IP auto-block, firewall, encrypted network backup over Rsync, HTTPS connection
Utilities	Synology Web Assistant, Cloud Station Drive, Cloud Station Backup, Cloud Sync Decryption Tool, Evidence Integrity Authenticator, Photo Station Uploader, Snapshot Manager for VMware, Snapshot Manager for Windows, NFS Plug-in for VMware VAAI
Supported clients	Windows 7 onwards, Mac OS X® 10.10 onwards
Supported browsers	Chrome®, Firefox®, Internet Explorer® 9 onwards, Safari® 8 onwards; Safari (iOS 7 onwards), Chrome (Android™ 4.0 onwards) on tablets
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

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
Backup solutions	Network backup; local backup; desktop backup; configuration backup; OS X Time Machine; backup data to public cloud; shared folder sync - maximum task number: 16
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
High Availability Manager	Combines two DS3617xs into one high-availability cluster
Security Advisor	Malware detection / removal; user account / password, network, system-related security scan
iOS / Android™ applications	DS cloud, DS file, DS finder, DS cam, DS note, MailPlus
Windows Phone® applications	DS file, DS finder

Add-on Packages

Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Cloud Station Server	Maximum concurrent file transfers: 2,000, retain historical and deleted file versions
Cloud Sync	One or two-way synchronization with public cloud storage providers including Amazon Cloud Drive, Amazon S3-compatible storage, Baiduyun, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, Megafon Disk, Microsoft OneDrive, OpenStack Swift-compatible storage, WebDAV servers, Yandex Disk
Log Center	SSL connection, log rotation: 6 months, 1 year, 2 years, 3 years, email notification
MailPlus	Intuitive webmail interface for MailPlus Server; customizable mail labels, filters, and user interface
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)
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
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)
VPN Server	Maximum connections: 30; supported VPN protocol: PPTP, OpenVPN™, L2TP
Web Station	Virtual host (up to 30 websites), PHP / MariaDB®, 3rd-party applications support
Other packages	Photo Station, Audio Station, iTunes® Server, additional 3rd-party packages are available on Package Center

Environment and Packaging

Environment safety	RoHS compliant
Package content	• DS3617xs main unit • Quick Installation Guide • Accessory pack • AC power cord
Optional accessories	• 16 GB DDR4-2133 ECC SO-DIMM (RAMEC2133DDR4SO-16G) • Synology E10G17-F2 / E10G15-F1 10Gbps Ethernet adapters • Synology Expansion Unit DX1215 • Synology VS360HD • Surveillance Device License Pack
Warranty	5 years

*Model specifications are subject to change without notice. Please refer to www.synology.com for the latest information.

1. Performance figures may vary depending on environment, usage, and configuration.
2. Available in selected countries only. For detailed terms and conditions, please visit the Synology Replacement Service (SRS) website at https://srs.synology.com.
3. 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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