



## DiskStation DS416

Synology DiskStation DS416 is a high-performance and feature-rich 4-bay NAS specifically designed for small businesses and home users to effectively manage, protect and share data. Equipped with comprehensive office applications, DS416 raises working efficiency while securing data with full backup solutions. Synology DS416 is backed with Synology's 2-year limited warranty.

### Highlights

- Dual-core CPU with hardware encryption engine
- Dual LAN with failover and link aggregation support
- Over 221.05MB/s reading, 139.51MB/s writing<sup>1</sup>
- Effective backup solution for all desktop and mobile devices
- Front USB 3.0 for fast easy access
- Hot-swappable & tool-less hard drive tray design
- Running on Synology DiskStation Manager (DSM)

### Optimal Price/Performance Ratio

Synology DS416 features a powerful **dual-core CPU** with **hardware encryption engine**, **1GB RAM**, **two Gigabit LAN ports**, **three USB3.0 ports**, and **tool-less drive trays**, standing out as one of the best values in 4-bay NAS devices available today.

Under link aggregation, DS416 delivers over **221.05 MB/s reading** speed under RAID 5 configuration in a Windows® environment, and over **139.51 MB/s writing**.<sup>1</sup> Powered with hardware encryption engine, DS416 delivers fast encrypted data transmission speeds of up to **146.5 MB/s reading** and **65.85 MB/s writing**.<sup>1</sup>

Designed with attention to recovery mechanism, DS416 comes with dual LAN failover support to ensure continual network service in case of LAN failure, while hot-swappable design facilitates easy drive replacement. External storage access is made fast and easy, with three USB 3.0 interfaces both in the back and the front panel for quick access.

### Cross Platform File Sharing and Mobile Access

Comprehensive network protocol support assures seamless file sharing across Windows, Mac®, and Linux® platforms. **Windows ADS** integration allows Synology DS416 to quickly and easily fit in an existing business network environment with no need to recreate user accounts. **Windows ACL** support provides much finer-grained access control and efficient privilege settings, allowing users to enjoy native Windows experience. The **User Home** feature minimizes the administrator's effort in creating a private shared folder for a large amount of users.

Internet file access is simplified by the encrypted FTP server and the web-based **File Station**. HTTPS, the built-in firewall, and IP auto-block support ensure file sharing over the Internet is protected at a high security level. For users who are always on the move, Synology provides a handy app, **DS file**, for popular mobile devices such as iPhone®, iPad®, Android™ devices and Windows Phone. Anything stored on Synology DS416 can be accessed remotely using DS file.



### Cross-platform File Synchronization

Auto-synchronize your files among DiskStation, PC and mobile devices using Synology Cloud Station.



### Anytime Availability

Access your DiskStation anywhere using Synology mobile apps.

## Easy Backup Solutions

To protect your valuable data, DS416 can become a centralized backup destination for consolidating fragmented and unstructured information across your network through a range of options. Advanced backup privilege management makes network backup tasks safer and more efficient. **Cloud Station** with selective sync and **ACL control** provides real-time data backup and synchronization among multiple computers and mobile devices. Complete backup solutions such as **Backup & Replication** minimize the impact of disasters.

## Rich Office Applications

Synology DS416 runs on the award-winning operating system, **Synology DiskStation Manager (DSM)**, which offers comprehensive applications and features designed specifically for growing businesses.

**Mail Server** turns Synology DS416 into a dedicated mail service provider, while **Mail Station**, provides a webmail interface for users to access emails stored on Synology DS416.

**VPN Server** offers an easy VPN solution that provides a secure way of connecting to a private LAN at a remote location. **RADIUS Server** strengthens network security by overseeing wireless access authentication via RADIUS (Remote Authentication Dial-In User Service) networking protocol.

## 24/7 Security Solution

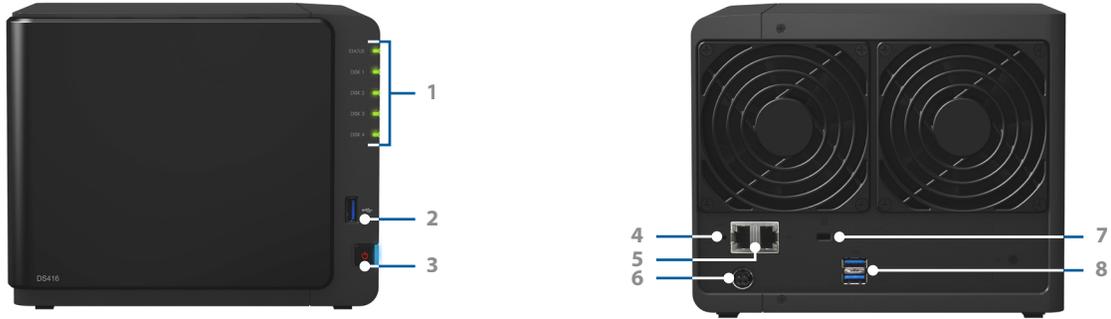
Synology **Surveillance Station** offers a centralized interface to manage IP cameras deployed in your office or home, allowing users traveling miles away to safeguard the environment by watching live views, recording events, and taking snapshots with a computer or mobile device. DS416 is an ideal surveillance solution as it is capable of hosting up to **25 IP cameras** (750 FPS at 720p). In addition to its intuitive setup and hassle-free interface, Surveillance Station features an optimized live view experience with on-screen operations, smart analytic tools like motion detection, and an alert system that sends instant notification through **DS cam**, SMS, and e-mail.

## Energy Efficient with Cool and Quiet Design

All Synology NAS is designed with energy efficiency in mind. Not only does DS416 provide two 92 mm x 92 mm fans and the smart airflow to keep the system running cool 24/7, its noise dampening design makes it really quiet compared to PC counterparts. The support of Wake on LAN/WAN, multiple scheduled power on/off can further reduce power consumption and operation cost.

All Synology products are produced with RoHS compliant parts and packed with recyclable packing materials. Synology acknowledges the responsibility as a global citizen to continually work to reduce the environmental impact of every product produced.

# Connections & Buttons



1	LED indicator	2	USB 3.0 port	3	Power button	4	Reset button
5	LAN port	6	Power port	7	Kensington Security Slot	8	USB 3.0 port

## Technical Specifications

### Hardware

CPU	Annapurna Labs Alpine AL-212 dual-core 1.4GHz
Hardware encryption engine	Yes
Floating point unit	Yes
RAM size	DDR3 1GB
Compatible drive type	3.5"/2.5" SATA III/II x 2 (hard drives not included)
Maximum internal raw capacity	32 TB (8 TB HDD x 4) (The actual capacity will differ according to volume types)
Hot swappable drive	Yes
External ports	USB 3.0 ports x 3
Size (HxWxD)	165 mm x 203 mm x 233.2 mm
Weight	2.04 kg
LAN	Gigabit (RJ-45) x 2
Wake on LAN/WAN	Yes
Wireless support	Yes (wireless dongles not included)
AC input power voltage	100V to 240V
Power frequency	50Hz to 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

### General

Networking protocols	CIFS, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, LZTP)
File system	Internal: ext4 External: ext4, ext3, FAT, NTFS, HFS+ (read only)
Storage management	Maximum single volume size: 16TB, Maximum internal volume: 256, Maximum iSCSI Target: 10, Maximum iSCSI LUN: 10
Supported RAID type	Synology Hybrid RAID, Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
File sharing capability	Maximum user account: 2048, Maximum group: 256, Maximum shared folder: 256, Maximum concurrent CIFS/AFP/FTP/File Station connection: 256
Privilege	Windows Access Control List (ACL)
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, Synology Assistant, Cloud Station, Photo Station Uploader, Evidence Integrity Authenticator
Supported clients	Windows XP onwards, Mac OS X® 10.7 onwards, Ubuntu 12 onwards
Supported browsers	Chrome™, Firefox®, Internet Explorer®: 8 onwards, Safari® 7 onwards, Safari (iOS® 7 onwards on iPad®), 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, compress/extract archived files, bandwidth control for specific users or groups, create 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: 4
Mail Server	Supported Mail Server protocols: POP3, SMTP, IMAP, support LDAP/AD account
FTP Server	Bandwidth control for TCP connections, custom FTP passive port range, anonymous FTP, FTP SSL/TLS and SFTP protocols, boot over the network with TFTP and PXE support, transfer logs
Web Station	Virtual host (up to 30 websites), PHP/MariaDB®, 3rd-party applications support
Printer Server	Maximum printer: 2, printing protocols: LPR, CIFS, IPP, iOS printing, Google Cloud Print™, multi functional print server (MFP functions are for Windows PC only)
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
Security Advisor	Malware detection/removal, user account/password, network, system-related security scan
Log Center	SSL connection, log rotation: 6 months, 1 year, 2 years, 3 years, email notification
iOS/Android™ applications	DS cloud, DS file, DS finder, DS cam, DS note, DS audio, DS download, DS photo, DS video
Windows Phone® applications	DS file, DS finder, DS audio, DS download, DS photo, DS video

## Add-on Packages

Surveillance Station	Maximum IP camera: 25 (total of 750 FPS at 720p, H.264) (Including two free camera licenses. Procurement of additional licenses is required.)
VPN Server	Maximum connections: 15; supported VPN protocols: PPTP, OpenVPN™, L2TP
Mail Station	Webmail interface for Mail Server; receiving mails from multiple POP3 mailboxes, customizable SMTP server
Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Cloud Station	Maximum concurrent file transfers: 256, 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
DLNA/UPnP® Media Server	DLNA certified, PS3®/PS4®/Xbox 360®/Xbox One® support
Note Station	Rich-text note organization with versioning, encryption, sharing, media embedding and attachments
Download Station	Supported download protocols: BT/HTTP/FTP/NZB/eMule Maximum concurrent download task: 50
Other packages	Photo Station, Audio Station, iTunes® Server, 3rd-party packages

## Environment and Packaging

Environment	RoHS Compliant
Package content	DS416 main unit, Welcome note, accessory pack, AC power adapter, RJ-45 LAN cable x 2
Optional accessories	Camera License Pack, VS360HD
Warranty	2 Years

\*Model specifications are subject to change without notice. Please refer to [www.synology.com](http://www.synology.com) for the latest information.

1. Performance figures could vary on different environments.

### 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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