# Synology



# DiskStation DS416j

Synology DiskStation DS416j is a 4-bay NAS server specifically designed for home and personal users to effectively manage, protect and share data. You can enjoy effortless data sharing, multimedia streaming and cloud synchronization features while keeping data safe and secure. Synology DS416j is backed with Synology's 2-year limited warranty.

## **Highlights**

- Dual-core CPU with hardware encryption engine
- Over 112.82 MB/s reading, 101.2 MB/s writing<sup>1</sup>
- Powerful entry-level 4-Bay NAS for home and personal use
- Brightness adjustable front LED indicators
- DLNA-certified media server
- Running on Synology DiskStation Manager (DSM)

## Classic 4-bay NAS, ideal companion for your own cloud

Inherited Synology's most classic industrial design, Synology DS416j comes with the latest storage technology to meet the need of home and personal users. Being a powerful yet budget-friendly model of the Synology J series family, Synology DS416j features a **dual-core CPU** with **hardware encryption engine**, **512MB RAM**, **one Gigabit LAN port**, **one USB3.0 port and one USB2.0 port**, standing out as one of the best values in 4-bay NAS devices available today. DS416j delivers up to an average **112.82 MB/s reading** and **101.2 MB/s writing** speed under RAID 5 configuration in a Windows<sup>®</sup> environment<sup>1</sup>, which is a **37.33% writing speed increase** comparing with its predecessor DS414j.

The built-in floating-point unit enhances the overall capability of the main CPU, and is particularly advantageous in speeding up thumbnail processing, making photo viewing a refreshingly new experience. Running on Synology's award-winning **DSM** operating system, DS416j shares the rich reservoir of applications available in DSM **Package Center**.

## Cross platform file sharing

Synology DS416j supports comprehensive network protocols, ensuring a seamless file sharing experience across Windows, Mac<sup>®</sup>, and Linux<sup>®</sup> platforms. **Windows AD and LDAP integration** allows Synology DS416j to fit quickly and effortlessly into any existing network environment without the necessity to recreate user accounts. **Cloud Sync** keeps your Dropbox, Google™ Drive, Microsoft OneDrive, Baidu and Box storage in sync with your personal DiskStation at home. **Cloud Station** suit allows users to sync files among multiple devices, no matter it's Windows PC, Mac, Linux, iOS or Android™ tablets/phones, effortlessly keeping everything up-to-date. While you enjoy the seamless file sharing, all the file sharing over the Internet is protected at a high security level through the HTTPS, firewall, and IP auto-block that supported by DS416j.



#### **Cross-platform File Synchronization**

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



#### Wireless Multimedia Streaming

DS416j turns your living room into a multimedia entertainment center.



#### **Anytime Availability**

Access your DiskStation anywhere using Synology mobile apps.

## Easy backup solutions

To protect your valuable data, DS416j 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. **Backup & Restore** is a complete backup solution to minimize the impact of disasters, keeping your valuable data safe and secure.

## **DLNA compliant media server**

As a DLNA compliant DMS (Digital Media Server), DS416j comes with the capability to host digital multimedia contents for remote playback, bringing you a brand new experience for your home entertainments. Once configured in your network, DS416j is able to stream music, photos and videos to DLNA compliant devices, enabling users to enjoy their collection on larger screens or with quality speakers. Synology even makes it possible for users to browse and select DiskStation contents using DS audio to designate a DLNA player within the same local network for audio playback.

## Anywhere/anytime availability

QuickConnect and EZ-Internet configure your DS416j for accessing over the Internet with minimal effort. Combined with Synology's mobile apps for every popular feature, including DS photo, DS audio, and DS video for anywhere multimedia access, DS download, DS file, and DS cloud for seamless file download/access/synchronization, you can enjoy your NAS anywhere, any time.

## Energy efficient with eco-friendly design

All Synology NAS is designed with energy efficiency in mind. The two 80 x 80 mm fans with the smart airflow functions keep the system running cool 24/7. Synology DS416j consumes relatively little power at 21.6 watts while accessing and 12.75 watts when hard drive hibernation is enabled. The noise dampening design makes DS416j 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 Power button
- 2 LED indicator
- 3 Power port
- 4 Gigabit (RJ-45) LAN port
- 5 USB 2.0 port
- 6 USB 3.0 port
- 7 Reset button
- 8 Fan
- 9 Kensington security slot

## Technical Specifications Hardware

Marvell Armada 88F6828 dual-core 1.3GHz Yes Yes
Yes
DDR3 512 MB
3.5" or 2.5" SATA(II) x 4 (hard drives not included)
32TB (4 x 8TB hard drive) (the actual capacity will differ according to volume types)
16TB
USB 3.0 port x 1, USB 2.0 port x 1
184mm x 168mm x 230mm
2.21 kg
Gigabit (RJ-45) x 1
Yes (wireless dongles not included)
Yes
Yes
100V to 240V
50Hz to 60Hz, single phase
5°C to 40°C (40°F to 104°F)
-20°C to 60°C (-5°F to 140°F)
5% to 95% RH

## General

Networking protocols	CIFS, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
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 (SHR), Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
File sharing capability	Maximum user account: 1024, Maximum group: 256, Maximum shared folder: 256, Maximum concurrent CIFS/AFP/FTP/File Station connection: 128
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, Synology Cloud Sync Decryption Tool, Photo Station Uploader, Evidence Integrity Authenticator
Supported clients	Windows XP onwards, Mac OS X <sup>®</sup> 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, 緊體中文, 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: 2
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 <sup>™</sup> 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: 16 (total of 480 FPS at 720p, H.264) (Including two free camera licenses. Procurement of additional licenses is required.)
VPN Server	Maximum connections: 5; 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: 128, 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 <sup>®</sup> Media Server	DLNA compliant, 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: 30
Other Packages	Photo Station, Audio Station, iTunes® Server, 3rd-party packages

## **Environment and Packaging**

Environment	RoHS Compliant
Package content	DS416j main unit, Welcome note, accessory pack, AC Power Cord, AC power adapter, RJ-45 LAN cable
Optional accessories	Camera License Pack, VS360HD
Warranty	2 Years

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

1. The performance figures vary on different environments. Synology is dedicated to continual performance enhancement. Please find the latest figures on www.synology.com.

#### 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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