

# DiskStation DS420j



## Affordable Data Management Solution For Your Home

DS420j is a 4-bay desktop NAS designed for home users' data backup and file sharing. It supports various networking protocols, multiple RAID configurations and diverse add-on packages, effortlessly enabling cross-platform file synchronization and sharing on a private cloud. DS420j is backed by Synology's 2-year limited warranty.<sup>2</sup>

### Highlights

- 4-bay home NAS with over 60 TB raw capacity support suitable for data backup and file sharing
- 64-bit 4-core 1.4 GHz processor and 1 GB DDR4 memory
- Over 112 MB/s encrypted sequential reading and writing throughput<sup>1</sup>
- Easy-to-deploy surveillance solution that supports up to 16 IP cameras
- Energy-saving design with only 7.88 W consumed in hibernation mode
- Backed by Synology 2-year limited warranty<sup>2</sup>

## Reliable 4-Bay Home NAS for Data Backup

Equipped with a **64-bit 4-core 1.4 GHz processor** and **1 GB DDR4 memory**, DS420j delivers encrypted sequential throughput at **over 112 MB/s in reading and writing**.<sup>1</sup> It supports up to **64 TB raw capacity** with 4 drive trays. Powered by **Synology DiskStation Manager (DSM)**, DS420j offers various applications to optimize data backup and file sharing for home use, and is highly reliable to store and centralize your media files.

## Intelligent Photo Library

Centralize your photos and videos in one private, organized place with **Synology Moments** and enjoy a modern browsing experience with image recognition techniques.

- Safely store your memorable moments on DS420j
- Group photos by topics based on deep learning algorithm
- Effortlessly find desired photos and share with friends and family
- Optimized browsing experience with super resolution
- Back up photos and free up storage space of mobile devices



### Feature-rich Syncing & Sharing Suite

*With Synology Drive, DS420j can serve as a centralized file server, allowing files to be synced and accessed across platforms while enabling easy file sharing and management.*

## Effective Sync and Backup Solution

DS420j can serve as a centralized backup destination, making it easy to create your own private cloud. **Synology Cloud Sync** keeps your Dropbox, Google Drive, Microsoft OneDrive, Baidu, and Box storage accounts in sync with DS420j at home. **Synology Drive** allows you to sync files across Windows, macOS, Linux, and mobile devices, effortlessly keeping everything up-to-date. **Synology Hyper Backup** provides multi-version backup with block-level incremental backup and cross-version deduplication. It has optimized storage utilization and allows data backup to multiple destinations, including local shared folders, external hard drives, network shared folders, rsync servers, and public cloud services.



### Surveillance Station

Monitor anytime, anywhere using a web browser, desktop client, or mobile device. Surveillance Station works perfectly with Windows, Mac, iOS, and Android.

## 24/7 Security Solution

Featuring user-friendly video management tools and an intuitive desktop-like interface, **Synology Surveillance Station** is a reliable private-security solution that can support multiple IP cameras connected to DS420j. Surveillance Station features optimized live view together with streamlined real-time monitoring. Its powerful analytics, such as **motion detection and alert notification**, allows you to stay informed of any suspicious activity with triggers sent via SMS, e-mail, and DS cam on mobile devices.

## Energy Efficient with Green Design

DS420j is designed with energy efficiency in mind. Compared with its average PC counterpart, DS420j consumes relatively little power at **21.71 watts while accessing and 7.88 watts when hard drive hibernation is enabled**. The power scheduling feature further reduces power consumption and operating costs.



### Anytime Availability

Access your DS420j anywhere using Synology mobile apps.

## Available Anytime and Anywhere

Synology provides mobile applications for you to enjoy your multimedia library anytime and anywhere. Available on iOS and Android™ platforms, **DS photo**, **DS audio**, **DS video**, and **DS file** allow access to your Synology NAS respectively through **Photo Station**, **Audio Station**, **Video Station**, and **File Station**. **QuickConnect** allows connection to your Synology NAS via a secure and customizable address, so that you can instantly access media and work files on any Windows, Mac, Linux computers, and mobile devices.

## Hardware Overview

Front



Rear



1	Status indicator	2	LAN indicator	3	Power button and indicator	4	Drive status indicator
5	1GbE RJ-45 port	6	Power port	7	Kensington Security Slot	8	Fan
9	USB 3.0 port	10	Reset button				

## Technical Specifications

### Hardware

CPU	Realtek RTD1296 4-core 1.4 GHz
Memory	1 GB DDR4
Compatible drive type	4 x 3.5" or 2.5" SATA HDD/SSD (drives not included)
External port	2 x USB 3.0 port
Size (HxWxD)	184 x 168 x 230 mm
Weight	2.21 kg
LAN	1 x Gigabit (RJ-45)
Wake on LAN/WAN	Yes
Scheduled power on/off	Yes
System fan	2 (80 x 80 mm)
AC input power voltage	100V to 240V AC
Power frequency	50/60 Hz, single phase
Operating temperature	0°C to 40°C (32°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	5,000 m (16,400 ft)

### General DSM Specifications

Networking protocol	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
File system	<ul style="list-style-type: none"> <li>Internal: ext4</li> <li>External: ext4, ext3, FAT, NTFS, HFS+, exFAT<sup>3</sup></li> </ul>
Supported RAID type	Synology Hybrid RAID (SHR), Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10

<b>Storage management</b>	<ul style="list-style-type: none"> <li>• Maximum single volume size: 108TB</li> <li>• Maximum internal volume: 64</li> </ul>
<b>File sharing capability</b>	<ul style="list-style-type: none"> <li>• Maximum local user account: 1,024</li> <li>• Maximum local group: 256</li> <li>• Maximum shared folder: 256</li> <li>• Maximum concurrent SMB/NFS/AFP/FTP connection: 100</li> </ul>
<b>Privilege</b>	Windows Access Control List (ACL), application privilege
<b>Directory service</b>	Windows® AD integration: Domain users login via SMB/NFS/AFP/FTP/File Station, LDAP integration
<b>Security</b>	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)
<b>Supported client</b>	Windows 7 onwards, Mac OS X® 10.11 onwards
<b>Supported browser</b>	Chrome®, Firefox®, Edge®, Internet Explorer® 10 onwards, Safari® 10 onwards; Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards) on tablets
<b>Interface language</b>	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文

## Packages and Applications

<b>File Server &amp; Synchronization</b>	
<b>Synology Drive</b>	Provides a universal portal to synchronize files across various platforms, including Windows, macOS, Linux, Android and iOS <ul style="list-style-type: none"> <li>• Maximum number of hosted files: 100,000</li> <li>• Maximum number of concurrent connections for PC clients: 200</li> </ul>
<b>File Station</b>	Virtual drive, remote folder, Windows ACL editor, compressing/extracting archived files, bandwidth control for specific users or groups, creating sharing links, transfer logs
<b>FTP Server</b>	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
<b>Cloud Sync</b>	One or two-way synchronization with public cloud storage providers including Alibaba Cloud OSS, Amazon Drive, Amazon S3-compatible storage, Backblaze B2, Baidu Cloud, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, MegaDisk, Microsoft OneDrive, OpenStack Swift-compatible storage, Tencent COS, WebDAV servers, Yandex Disk
<b>Universal Search</b>	Offers global searches into applications and files
<b>iSCSI Storage</b>	
<b>iSCSI Manager</b>	<ul style="list-style-type: none"> <li>• Maximum iSCSI target: 10</li> <li>• Maximum iSCSI LUN: 10</li> </ul>
<b>Data Protection &amp; Backup Solution</b>	
<b>Hyper Backup</b>	Supports local backup, network backup, and backup data to public clouds
<b>Backup tools</b>	DSM configuration backup, macOS Time Machine support, Synology Drive Client desktop application <ul style="list-style-type: none"> <li>• Shared folder sync - maximum task number: 4</li> </ul>
<b>Productivity &amp; Collaboration</b>	
<b>Collaboration tools</b>	Supports collaboration with instant message service Synology Chat, online editor Synology Office, and scheduling assistant Synology Calendar <ul style="list-style-type: none"> <li>• Chat maximum user: 10</li> <li>• Office maximum user: 200</li> <li>• Calendar: support CalDAV and access via mobile devices</li> </ul>
<b>Note Station</b>	Rich-text note organization and versioning, encryption, sharing, media embedding and attachments
<b>Multimedia</b>	
<b>Moments</b>	Supports smart AI album with facial and subject recognition, similar photo detection, and photo editing and sharing features. Mobile applications are available on iOS and Android devices.
<b>Other packages</b>	Video Station, Photo Station, Audio Station, iTunes® Server
<b>Surveillance</b>	
<b>Surveillance Station</b>	Maximum IP camera: 16 (total of 480 FPS at 720p, H.264) (Including two free camera licenses; additional cameras require the purchasing of additional licenses)
<b>All-in-One Server</b>	
<b>VPN Server</b>	Maximum connection: 10, supported VPN protocol: PPTP, OpenVPN™, L2TP/IPSec

<b>Mail Server</b>	Supported Mail Server Protocols: POP3, SMTP, IMAP, Support LDAP/AD account
<b>Mail Station</b>	Webmail interface for Mail Server to receive emails from multiple POP3 mailboxes, customizable SMTP server
<b>Web Station</b>	Virtual host (up to 30 websites), PHP/MariaDB®, third-party applications support
<b>Other packages</b>	DNS Server, RADIUS Server, Log Center
<b>Others</b>	
<b>Storage Analyzer</b>	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
<b>Antivirus Essential</b>	Full system scan, scheduled scan, white list customization, virus definition auto update
<b>iOS/Android™ applications</b>	Synology Drive, DS audio, DS photo, DS video, DS cam, DS file, DS finder, DS note, Moments
<b>Other packages</b>	Additional 3rd-party packages available in Package Center

## Environment and Packaging

<b>Environment safety</b>	RoHS compliant
<b>Package content</b>	<ul style="list-style-type: none"> <li>• DS420j main unit</li> <li>• Quick Installation Guide</li> <li>• Accessory pack</li> <li>• AC power adapter and power cord</li> <li>• RJ-45 LAN cable</li> </ul>
<b>Optional accessories</b>	<ul style="list-style-type: none"> <li>• VisualStation VS360HD, VS960HD</li> <li>• Surveillance Device License Pack</li> </ul>
<b>Warranty</b>	2 years <sup>2</sup>

\*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 may vary depending on the environment, usage, and configuration.
2. The warranty period starts from the purchase date as stated on your purchase receipt. Visit <https://www.synology.com/company/legal/warranty> for more information.
3. exFAT Access is sold separately in Package Center.

## SYNOLOGY INC.

Synology creates network-attached storage, IP surveillance solutions, and network equipment that transform the way users manage data, conduct surveillance, and manage networks in the cloud era. By taking full advantage of the latest technologies, Synology aims to help users centralize data storage and backup, share files on-the-go, implement professional surveillance solutions, and manage networks in reliable and affordable ways. Synology is committed to delivering products with forward-thinking features and the best in class customer services.

Copyright © 2019, Synology Inc. All rights reserved. Synology, the Synology logo are trademarks or registered trademarks of Synology Inc. Other product and company names mentioned herein may be trademarks of their respective companies. Synology may make changes to specification and product descriptions at anytime, without notice.

DS420j-2019-ENU-REV001

## Headquarters

Synology Inc. 9F., No.1, Yuandong Rd., Banqiao Dist., New Taipei City 220, Taiwan Tel: +886 2 2955 1814 Fax: +886 2 2955 1884

### China

Synology Shanghai  
200070, Room 201, No. 511 Tianmu W.  
Rd., Jingan Dist. Shanghai, China

### France

Synology France SARL  
102 Terrasse Boieldieu (TOUR W)  
92800 Puteaux, France  
Tel: +33 147 176288

### North & South America

Synology America Corp.  
3535 Factoria Blvd SE #200 Bellevue,  
WA98006, USA  
Tel: +1 425 818 1587

### United Kingdom

Synology UK Ltd.  
Unit 5 Danbury Court, Linford Wood,  
Milton Keynes, MK14 6PL, United Kingdom

### Germany

Synology GmbH  
Grafenberger Allee 295  
40237 Düsseldorf, Deutschland  
Tel: +49 211 9666 9666

### Japan

Synology Japan Co., Ltd  
4F, 3-1-2, Higashikanda, Chiyoda-ku,  
Tokyo, 101-0031, Japan