# DiskStation DS220j

# Household Cloud Solution for Data Sharing and Backup

Synology DiskStation DS220j is an entrylevel network-attached storage for your household to store and share photos, videos, documents, and all types of personal data. The 2-bay private cloud solution provides complete and intuitive data protection approaches for you to easily back up computer data and mobile photos, with just a few clicks.

### Highlights

- A Simple-to-Use Private Cloud for Everyone 24/7 file server for your household to store, share, and backup personal data
- Easy-to-Use Award-winning DiskStation Manager (DSM) brings intuitive operation flow and reduces learning curve
- Seamless File Sharing
   Access and share data with any Windows<sup>®</sup>, macOS<sup>®</sup>, and Linux<sup>®</sup> computers or mobile devices
- On-the-Fly Streaming
   Integrated media server to support multimedia content streaming
- Anytime, Anywhere

Freely access private cloud files on-the-go and back up mobile photos with iOS and Android  $^{\rm M}$  apps

• Data Guardian

Safeguard digital assets with cross-platform computer backup applications

# **Syno**logy®



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#### Synology DiskStation Manager (DSM)

DSM is a web-based operating system that provides an intuitive data management experience and supports different computer platforms.



#### Cross-platform File Sharing

DS220j comes with comprehensive support of networking protocols — FTP, SMB2, SMB3 (encrypted), AFP, NFS, and WebDAV — and provides seamless file sharing across Windows<sup>®</sup>, macOS<sup>®</sup>, and Linux<sup>®</sup> platforms.

# 24/7, Private Cloud Solution for Home Users

Forget and leave your USB drives behind. Synology DS220j is an entrylevel network-attached storage supporting RAID 1 configuration to prevent data from sudden drive failure. Consuming only **12.46 watts** during access and **5.06 watts** during HDD hibernation, DS220j is energysaving and ideal to serve 24/7 without depleting your wallet. With high data transmission speed at over **112 MB/s sequential reading** and **writing**<sup>2</sup>, your household members can smoothly store, share, and back up data whenever your want.

# Powered by Synology DiskStation Manager (DSM)

DSM is a web-based operating system that provides private cloud services. It is designed to simplify your daily task management. The multitasking web interface allows you to run multiple applications simultaneously on one browser tab and instantly switch between them. The intuitive DSM allows you to effortlessly configure storage capacity, gives you complete control over your personal cloud, and lets you access your Synology NAS from anywhere.

The built-in **Package Center** allows you to download and install the packages designed to satisfy different user needs, such as sharing files on the cloud, sharing photos on an online album, or setting up a VPN environment. Tasks can be done with just a few clicks.

# Cross-platform File Sharing and Data Synchronization

Synology DS220j supports comprehensive network protocols, ensuring a seamless file sharing experience across Windows®, macOS® and Linux® platforms. **Cloud Sync** keeps your Dropbox, Google™ Drive, Microsoft® OneDrive, Baidu, and Box storage in sync with your personal DiskStation at home. **Synology Drive** allows you to synchronize files across different computer and mobile platforms, effortlessly keeping everything up-to-date. DS220j combines seamless file sharing capability with a high level of security, including HTTPS support, a built-in firewall, and multiple IP and account intrusion auto-blocking mechanisms.



Personal Multimedia Bank

Real-time video streaming provides hassle-free and high-quality video playback among various devices.

## Your Personal Multimedia Library

DS220j helps you easily manage and share your multimedia content. With **Video Station**, you can organize your personal digital video library using comprehensive media information. **Audio Station** comes with Internet radio, lossless audio format support, and provides music playback via DLNA and AirPlay<sup>®</sup> devices. **Photo Station**'s intuitive design allows professional photographers to effortlessly organize photos into customized categories, smart albums, and link them to social media sites with just a few clicks. As a brand-new photo solution for personal and home use, **Moments** promises users a modern browsing experience by offering mobile photo backup, photo sharing, image recognition, and similar photo detection.

# Available Anytime and Anywhere

Synology provides mobile applications for you to enjoy your multimedia library anytime and anywhere. Available on iOS and Android<sup>™</sup> 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.

# **Easy Backup Solutions**

Synology **Hyper Backup** provides multi-version backup with block-level incremental backup and cross-version deduplication. It optimizes storage utilization and allows data to be backed up to multiple destinations such as local shared folders, external hard drives, network shared folders, rsync servers, and public cloud services.

**Synology Drive Client** provides real-time or scheduled backup of important folders of your computers to prevent accidental deletion and ransomware threats.

## **Hardware Overview**

#### Front

Rear



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

# **Technical Specifications**

#### Hardware

| CPU                        | Realtek RTD1296 4-core 1.4 GHz                              |
|----------------------------|---|
| Hardware encryption engine | Yes   |
| Memory                     | 512 MB DDR4   |
| Compatible drive type      | 2 x 3.5" or 2.5" SATA HDD <sup>3</sup> (drive not included) |
| External port              | 2 x USB 3.0 port  |
| Size (HxWxD)               | 165 x 100 x 225.5 mm  |
| Weight                     | 0.88 kg   |
| LAN                        | 1 x Gigabit (RJ-45)   |
| Wake on LAN/WAN            | Yes   |
| Scheduled power on/off     | Yes   |
| System fan                 | 1 (92 x 92 x 25 mm)   |
| AC input power voltage     | 100 V to 240 V 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 specification

| •                       |   |
|-------------------------|---|
| Networking protocol     | SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)  |
| File system             | <ul> <li>Internal: ext4</li> <li>External: ext4, ext3, FAT, NTFS, HFS+, exFAT<sup>4</sup></li> </ul>  |
| Supported RAID type     | Synology Hybrid RAID (SHR), Basic, JBOD, RAID 0, RAID 1   |
| Storage management      | <ul><li>Maximum single volume size: 108 TB</li><li>Maximum internal volume: 64</li></ul>  |
| File sharing capability | <ul> <li>Maximum local user account: 1024</li> <li>Maximum local group: 256</li> <li>Maximum shared folder: 256</li> <li>Maximum concurrent SMB/NFS/AFP/FTP connection: 100</li> </ul>            |
| Privilege               | Windows Access Control List (ACL), application privilege  |
| Directory service       | Windows® AD integration: Domain users login via SMB/NFS/AFP/FTP/File Station, LDAP integration  |
| Security                | 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)                            |
| Supported client        | Windows 7 onwards, Mac OS X <sup>®</sup> 10.11 onwards  |
| Supported browser       | Chrome®, Firefox®, Edge®, Internet Explorer® 10 onwards, Safari® 10 onwards; Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards) on tablets  |
| Interface language      | English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar,<br>Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文 |
|                         |   |

#### Packages and Applications

| File Server & Synchroniza | ation  |
|---------------------------|--|
| Synology Drive            | Provide a universal portal to synchronize your files across various platforms, including Windows, macOS, Linux, Android and<br>iOS. The built-in universal portal allows you to access data anytime and anywhere.<br>• Maximum number of hosted files: 100,000<br>• Maximum number of concurrent connections for PC clients: 200                 |
| 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   |
| 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   |
| Cloud Sync                | One or two-way synchronization with public cloud storage providers including Alibaba Cloud OSS, Amazon Drive, Amazon<br>S3-compatible storage, Backblaze B2, Baidu Cloud, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, MegaDisk,<br>Microsoft OneDrive, OpenStack Swift-compatible storage, Tencent COS, WebDAV servers, Yandex Disk |
| Universal Search          | Offer global search into applications and files  |
| iSCSI Storage             |  |
| iSCSI Manager             | <ul> <li>Maximum iSCSI target: 10</li> <li>Maximum iSCSI LUN: 10</li> </ul>  |
| Data Protection & Backu   | p Solution   |
| Hyper Backup              | Support local backup, network backup, and backup data to public clouds   |
| Backup tools              | DSM configuration backup, macOS Time Machine support, Synology Drive Client desktop application<br>Shared folder sync - maximum task number: 2   |
| Productivity & Collabora  | tion   |
| Collaboration tools       | Collaborate with instant message service Synology Chat, online editor Synology Office, and scheduling assistant Synology<br>Calendar<br>• Chat maximum user: 10<br>• Office maximum user: 200<br>• Calendar: support CalDAV and access via mobile devices  |
| Note Station              | Rich-text note organization and versioning, encryption, sharing, media embedding and attachments   |
| Multimedia                |  |
| Moments                   | Support smart Al album with facial recognition, similar photo detection, and photo editing and sharing features. Mobile applications are available on iOS and Android devices.   |
| Other packages            | Video Station, Photo Station, Audio Station, iTunes® Server  |

| Surveillance                          |   |
|---------------------------------------|---|
| Surveillance Station                  | Maximum IP camera: 12 (total of 360 FPS at 720p, H.264) (Including two free camera licenses. Additional cameras require the purchasing of additional licenses)                                |
| All-in-One Server                     |   |
| VPN Server                            | Maximum connection: 10. Supported VPN protocol: PPTP, OpenVPN™, L2TP/IPSec  |
| Mail Server                           | Supported Mail Server Protocols: POP3, SMTP, IMAP. LDAP/AD account support  |
| Mail Station                          | Webmail interface for Mail Server to receive emails from multiple POP3 mailboxes, customizable SMTP server  |
| Web Station                           | Virtual host (up to 30 websites), PHP/MariaDB <sup>®</sup> , third-party applications support   |
| Other packages                        | DNS Server, RADIUS Server, Log Center   |
| Others                                |   |
| Storage Analyzer                      | Volume and quota usage, total size of files, volume usage and trends based on past usage, size of shared folders, large files,<br>most recently modified files, least recently accessed files |
| Antivirus Essential                   | Full system scan, scheduled scan, white list customization, virus definition auto update  |
| iOS/Android <sup>™</sup> applications | Synology Drive, DS audio, DS photo, DS video, DS cam, DS file, DS finder, DS note, Moments  |
| Other packages                        | Additional 3rd-party packages available on Package Center   |

#### Environment and Packaging

| Environment safety    | RoHS compliant  |
|-----------------------|---|
| Package content       | <ul> <li>DS220j main unit</li> <li>Quick Installation Guide</li> <li>Accessory pack</li> <li>AC power adapter</li> <li>RJ-45 LAN cable</li> </ul> |
| Optional accessories⁵ | <ul> <li>VisualStation VS360HD, VS960HD</li> <li>Surveillance Device License Pack</li> <li>2.5" Disk Holder Type C</li> </ul>                     |
| Warranty              | 2 years <sup>1</sup>  |

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

1. 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.

2. Performance figures may vary depending on environment, usage, and configuration.

3. A disk holder is required for 2.5" drive, which is sold separately.

4. exFAT Access is sold separately in Package Center.

5. Please refer to www.synology.com/compatibility for the latest optional accessory list.

#### 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.

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