



# DiskStation DS411j

Budget-friendly 4-bay NAS Server for Small Office and Home Use

**Synology DiskStation DS411j is designed to provide a cost-effective file storage and backup solution with RAID protection for multi-user home environments. The operating system, Synology DiskStation Manager, delivers rich features for multimedia enjoyments, worry-free backup, Internet sharing, and energy-saving options.**

## Key Features

- Large Storage Capacity
- Secure RAID Data Protection
- 24/7 PC-Less Download Server
- DLNA Certified Media Server
- Cool and Quiet

## Your Own Entertainment Center

**Download Station** functions as a 24x7 BitTorrent, FTP, HTTP, eMule, and NZB download center without a PC. The eMule download engine allows search-n-download capability with a web-browser without installing additional desktop applications.

**Audio Station** supports music, Internet radio stations, and iPod playback with the optional speakers. An optional direction-free Synology Remote allows you to freely enjoy your music. Streaming mode allows your music to be shared with multiple users over the Intranet or Internet.

**DLNA/UPnP Compliant Media Server** allows you to stream multimedia files with an UPnP Digital Media Adapter (DMA) to a stereo system or a TV-set. Sony PS3 and Microsoft Xbox360 are also supported.

**iTunes® Server** is an easy way to share music with other iTunes clients over the network. Password protection prevents unauthorized sharing.

## Back Up Your Precious Data

**DiskStation Manager** offers comprehensive solutions for you to back up data stored on DiskStation or your desktop computer to the DiskStation.

**Server backup** includes two alternatives: Network Backup and Local Backup. Both allow you to back up data in the shared folders and databases. Incremental backup option and flexible schedules are available. All can be easily configured with a step-by-step wizard.

**Desktop backup** provides your Windows PC with **Synology Data Replicator** for backing up desktop data, Outlook, and Outlook Express emails to your DiskStation by choosing one of the three backup modes: Immediate, Sync, and Scheduled backup, while Mac OS X users can use **Apple Time Machine** backup application to back up their critical data to DiskStation.

## Enrich Your Web Presence

**Photo Station** simplifies photo, video, and blog sharing over the Internet. The flexibility of photo theme customization, blog layout arrangement, visitor's privilege setting, RSS feed, and the dazzling 3-dimensional photo browsing with Cooliris make Photo Station your state-of-the-art lifestyle sharing center on the Internet.

**Web Station** with built-in PHP+MySQL allows you to publish your own websites or install numerous popular open source programs.

## Access With Your Mobile Device

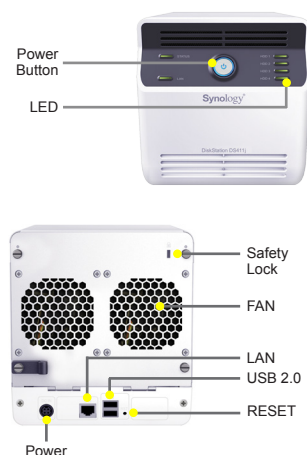
The iPhone and Android App, **DS audio**, allows you to stream music stored on your DiskStation with your mobile devices where Internet access is available, while **DS photo+** allows browsing and uploading photos and videos stored on DiskStation from your mobile devices.

If you own a mobile device running on Windows Mobile® 6.0, iPhone OS 2.2.1 onward, or Symbian OS 9.1, you can log on your DiskStation to view photos with **Mobile Photo Station** and read supported file formats with **Mobile File Station** wherever Internet access is available.

## Synology Protects Our Earth

Synology DiskStation is designed and developed with energy efficiency in mind. Compared with the average PC counterparts, Synology DiskStation consumes a relatively low amount of power and makes the external hard drives hibernate when not in use. 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 &amp; BUTTONS



## Technical Specifications

## Hardware

- CPU Clock Rate: 1.2GHz, 16bit/DDR800
- RAM Size: DDR2 128MB
- Internal HDD<sup>1</sup>: 4X 3.5" or 4X 2.5" SATA(III)
- External HDD Interface: 2X USB ports
- Size: 168mm X 184mm X 230mm
- Weight: 2.23kg
- LAN: 1X Gigabit

- Hardware Encryption Engine
- Wireless Support<sup>2</sup>
- Fan: 2X (80mm X 80mm)
- Noise Level<sup>3</sup>: 21.7dB(A)
- AC Input Power Voltage: 100V to 240V
- Power Frequency: 50Hz to 60Hz, Single Phase
- Max Internal Capacity: 8TB (4X 2TB hard drives)<sup>4</sup>

- Operating Temperature: 5°C to 35°C (40°F to 95°F)
- Storage Temperature: -10°C to 70°C (15°F to 155°F)
- Relative Humidity: 5% to 95% RH
- Max Operating Altitude: 10,000 feet
- Power Consumption<sup>5</sup>: 42.9W (Access); 16W (HDD Hibernation)
- Certification: FCC Class B, CE Class B, BSMI Class B

## Applications

## File Browser / File Station

- FTP Server
- Bandwidth Control
- Custom FTP Passive Port Range
- Anonymous FTP
- Transfer Log

## Web Station

- Virtual Host (up to 30 websites)
- PHP/MySQL
- Alternative HTTP Error Page
- 3rd-Party Applications Support

## Surveillance Station

- Default IP cam # 1
- MAX IP cam # (licenses required): 5<sup>6</sup>

## Photo Station

- Supported Image Format: BMP, JPG (jpe, jpeg), GIF, RAW (arw, srf, sr2, dcr, k25, kdc, cr2, crw, nef, mrw, ptx, pef, raf, 3fr, erf, mef, mos, orf, rw2, dng, x3f)
- Supported Video Format<sup>7</sup>: 3G2, 3GP, ASF, AVI, DAT, DivX, FLV, M4V, MOV, MP4, MPEG, MPG, QT, WMV, XviD, RM, RMVB, VOB, RV30, RV40, AC3, AMR, WMA3

## Download Station

- Supported Download Protocols: BT/HTTP/FTP/NZB/eMule
- Custom BitTorrent Port Range
- BitTorrent / eMule Bandwidth Control

## Audio Station

- Supported Audio Format: (USB Mode) AAC, FLAC, M4A, MP3, Ogg Vorbis, WMA, WMA VBR; (Streaming Mode) MP3, M4A, M4B
- Supported Playlist Format: M3U, WPL
- Internet Radio: SHOUTcast, Radioio

## DLNA/UPnP Media Server

- DLNA Certified
- PS3/Xbox 360 Support
- Supported Audio Format: AAC, FLAC, M4A, MP3, Ogg, Vorbis, PCM, WAV, WMA, WMA VBR, WMA PRO, WMA Lossless
- Supported Video Format: 3GP, 3G2, ASF, AVI, DAT, DivX, DVR-MS, ISO, M2T, M2TS, M4V, MKV, MP4, MPEG1, MPEG2, MPEG4, MTS, MOV, QT, SWF, TP, TRP, TS, VOB, WMV, XviD, RV30, RV40, AC3, AMR, WMA3
- Supported Image Format: BMP, JPG (jpe, jpeg), GIF, ICO, PNG, PSD, TIF (tiff), UFO, RAW (arw, srf, sr2, dcr, k25, kdc,

- cr2, crw, nef, mrw, ptx, pef, raf, 3fr, erf, mef, mos, orf, rw2, dng, x3f)
- Supported Subtitles Format: srt, psb, smi, ass, ssa, sub, idx,ifo

## iTunes Server

- Supported Audio Format<sup>8</sup>: MP3, M4A, MP4, WAV, AIF
- Supported Video Format: M4V, MOV, MP4
- Supported Playlist Format: M3U, WPL

Print Server<sup>9</sup>

- Max Printer #: 2
- Printing Protocols: LPR, CIFS, AppleTalk

## Synology Packages

- Mail Station
- Squeezebox Server
- Webalizer
- phpMyAdmin
- Time Backup

## iPhone and Android Applications

- DS photo+
- DS audio
- DS cam

## General Specifications

## Networking Protocols

- CIFS, AFP, FTP, iSCSI, Telnet, SSH, NFS, WebDAV, SNMP

## File System

- EXT4
- EXT3
- FAT32 (External Disk Only)<sup>10</sup>
- NTFS (External Disk Only)<sup>11</sup>

## Volume Management

- Synology Hybrid RAID
- Max iSCSI Target / LUN: 10 / 10
- Volume Type: Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 5+Spares, RAID 6, RAID 10
- RAID Migration: from Basic to RAID 1, Basic to RAID 5, Basic to RAID 5+Spares, RAID 1 to RAID 5, RAID 1 to RAID 5+Spares, RAID 5 to RAID 5+Spares, RAID 5 to RAID 6 with Larger Hard Drives

## File Sharing Capability

- Max User Account: 1024
- Max Group: 256
- Max Shared Folder: 256
- Max Concurrent Connections (SMB, FTP, AFP): 128

## Windows Access Control List (ACL) Support

- Windows ADS Domain Integration
- Domain Users login via Samba/AFP/FTP/File Station

## Backup Solutions

- Network Backup
- Local Backup
- Desktop Backup (using Synology Data Replicator 3 or Apple Time Machine backup application)
- Time Backup (Synology package)
- 3rd-Party Backup Support

## Security

- FTP over SSL/TLS
- IP Auto-Block
- Firewall
- Encrypted Network Backup over Rsync
- HTTPS Connection

## Management

- DSM Upgrade
- Email Notification
- SMS Notification
- Customized User Quota
- DDNS Support
- IPv6 Support
- PPPoE
- Resource Monitor
- UPS Management
- Scheduled Power On/Off
- Custom Management UI HTTP/HTTPS Ports
- System Temperature Display

## HDD Management

- HDD Hibernation
- S.M.A.R.T.
- Dynamic Bad Sector Mapping

## Utilities

- Synology Assistant
- Synology Download Redirector
- Synology Data Replicator

## Support Browsers

- Chrome 5
- Internet Explorer 7 and 8
- Firefox 3.5 and 3.6
- Safari 4 and 5 (Mac)

## Supported Clients

- Windows 2000 onward
- Mac OS X 10.3 onward
- Ubuntu 9.04 onward

## Supported Mobile Devices (Photo Station, File Station)

- iPhone OS 2.2.1 onward
- Android OS 1.5 onward
- Windows Mobile (IE Mobile or Opera 9.0 onward)
- Symbian OS 9.1, S60 3rd Edition onward

## Language

- Czech, Danish, Dutch, English, French, German, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Brazilian, Portuguese European, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish

## Environment and Packaging

## Environment

- RoHS Compliant

## Package Content

- DS411j Main Unit
- Installation DVD

## Welcome Note

- Assembling Kit
- AC Power Adapter
- AC Power Cord
- 2M RJ-45 LAN Cable

## Optional Accessories

- Remote
- Camera License Pack

- Hard drive not included.
- Wireless dongles not included. Please check <http://www.synology.com/> for supported wireless dongles.
- Fully loaded with Seagate 1TB ST31000520AS hard drive(s) in operation; two G.R.A.S. Type 40AE microphones, each set up at 1 meter away from the DiskStation front and rear; Background noise: 17.2 dB(A); Temperature: 23.6°C; Humidity: 58.2%.
- The actual capacity will differ according to volume types.
- Measured with 4 Seagate 750GB ST3750640NS hard drive. The figures could vary on different environments.
- 1 free license to install 1 IP camera. Additional licenses can be purchased to expand the license quota.
- User can click and download the following video formats: RM, RMVB, VOB, RV30, RV40, AC3, AMR, WMA3, but not able to play it in Photo Station as compressed Flash video.

- The music in WAV and AIF format can be streamed, but the metadata (ex: title, album) may not be indexed on the iTunes.
- For Mac users, DS411j supports PostScript USB printers only.
- Primary partition only.
- Primary partition only.

## SYNOLOGY INC.

Founded in 2000, Synology is a young and energetic company dedicated to developing high-performance, reliable, versatile, and environmentally-friendly Network Attached Storage (NAS) products. Our goal is to deliver user-friendly solutions and solid customer service to satisfy the needs of businesses, home offices, individual users and families.

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## Networking

