

# DiskStation DS411slim

Green, Quiet, and Reliable 4-bay 2.5" HDD NAS Server for Home to Small Office



**Synology DiskStation DS411slim is designed to provide users with a compact yet feature laden solution for easy file sharing and backup. Snap-in 2.5" hard drives design brings low power consumption, quiet operation, reliability and easy disk replacement in a compact size. The operating system, Synology DiskStation Manager 3.0, delivers rich features for multimedia enjoyments, Internet sharing, worry-free data protection and energy-saving options.**

## Highlights

- Small Footprint
- Flexible RAID Data Protection
- Cross Platform File Sharing & Backup
- DLNA Certified Media Server
- Cool and Quiet
- Power-Saving (9W~16W)

## Green, Quiet, and Reliable

The Synology DS411slim is designed to work with 2.5" hard drives. The low power consumption characteristic of 2.5" hard drives will lower your electricity bill, as well as reduce your carbon footprint. In addition, 2.5" hard drives have reduced vibration, increased MTBF (mean time before failure), and shock tolerance. It not only extends hard drive's lifespan, but also provides better reliability. The smart fan design keeps the DS411slim's fan off under normal operations and spinning up at a very low speed only when needed, thus minimizing the noise level.

## Flexible RAID Management

The Synology Hybrid RAID (SHR) automatically builds an optimal RAID volume with data protection based on the hard drives installed, eliminating the need to have hard drives of identical size, while still offering a manual setup option for advanced users.

## Cross Platform File Sharing & Backup

Synology DiskStation is designed for data storage and sharing among Windows, Mac, and Linux. Seamless file sharing across different operation systems is an effortless process. Internet file access is simplified by the encrypted FTP server, the web-based File Browser and File Station. HTTPS, firewall, and IP auto-block support ensure file sharing over the Internet is protected at a high security level.

The Synology DS411slim offers a centralized backup target to consolidate fragmented and unstructured data across a network. PC Users can back up their data to the Synology DS411slim using the free Synology Data Replicator software, while Mac OS X users enjoy native Apple® Time Machine integration.

A web-based backup wizard is provided for backing up data in the Synology DS411slim to another Synology DiskStation or any rsync server via an encrypted transmission, or to an external hard drive via USB or eSATA connection. In addition, backing up to the cloud using Amazon® S3 service is also supported.

## 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.

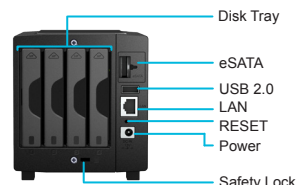
## Eco Friendly

Synology DiskStation is designed and developed perpetually with the concept of energy saving. Compared with average PC counterparts, Synology DiskStation consumes a relatively low amount of power and hibernates when not in use. This not only helps to save energy but also extends the lifespan of the hard disk.

Synology DiskStation truly earns the title of "green product" because of the unique Scheduled Power On/Off feature.

Finally, all Synology products are produced with RoHS compliant parts and packed with recyclable packing materials. Synology recognizes its responsibility as a global citizen and is continually working to reduce the environmental impact of the products we create.

## CONNECTIONS & BUTTONS



## Technical Specifications

### Hardware

- CPU Frequency: 1.6GHz
- Memory: DDR3 256MB
- Internal HDD<sup>1</sup>: 2.5" SATA X4
- Max Internal Capacity: 4TB (4X 1TB HDD)<sup>2</sup>
- Size (HxWxD): 120mm X 105mm X 142mm
- External HDD Interface: USB 2.0 port X2, eSATA port X1
- Weight: 0.66kg
- LAN: Gigabit X1
- Wireless Support<sup>3</sup>

- Noise Level<sup>4</sup>: 21.1 dB(A)
- Power Recovery
- AC Input Power Voltage: 100V to 240V
- Power Frequency: 50Hz to 60Hz, Single Phase
- Power Consumption<sup>5</sup>:
  - Access: 16.8W
  - Idle: 13.2W
  - HDD Hibernation: 9.6W
- 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
- Maximum Operating Altitude: 10,000 feet
- Certification: FCC Class B, CE Class B, BSMI Class B

### Applications

#### 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): 8<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: 3GP, ASF, AVI, DAT, DivX, FLV, M4V, MOV, MP4, MPEG, MPG, QT, WMV, XviD, RM7, RMVB7, VOB7, RV307, RV407, AC37, AMR7, WMA37

#### 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: iShoutCast, Radioio

#### DLNA/UPnP Media Server

- 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, DivX-RM5, 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, M4P, WAV6, AIF
- Supported Video Format: M4V, MOV, MP4
- Supported Playlist Format: M3U, WPL

#### Printer Server<sup>9</sup>

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

#### Synology Packages

- SqueezeCenter
- Mail Station
- Webalizer
- phpMyAdmin
- Time Backup

#### iPhone / Android Applications

- DS photo+
- DS audio
- DS cam

## General Specifications

### Networking Protocols

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

### File System

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

### Volume Management

- Synology Hybrid RAID
- Max iSCSI Target / LUN: 10 / 10
- Volume Type: Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 5+ Spare, RAID 6, RAID 10
- RAID Migration: From Basic to RAID 1, Basic to RAID 5, Basic to RAID 5+ Spare, RAID 11 to RAID 5, RAID 1 to RAID 5+ Spare, RAID 5 to RAID 5+ Spare, RAID 5 to RAID 6
- Expand RAID 1, RAID 5, RAID 5+ Spare or RAID 6 with Larger Hard Drives
- Expand RAID 5 by Adding a Hard Drive On The Fly

### File Sharing Capability

- Max User Accounts: 2,048
- Max Groups: 256
- Max Shared Folder: 256
- Max Concurrent Connections(SAMBA, FTP, AFP): 128

### Windows Access Control List (ACL)

- 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 or Apple Time Machine backup application)
- Time Backup (Synology package. Max task number: 2)
- Time Machine Backup (Mac)
- USB Copy

### 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
- PPPoE
- Resource Monitor
- UPS Management
- Scheduled Power On/Off
- Custom Management UI HTTP/HTTPS Ports

### HDD Management

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

### Utilities

- Synology Assistant
- Synology Download Redirector
- Synology Data Replicator

### Supported Clients

- Windows 2000 onward
- Mac OS X 10.3 onward
- Linux

### Supported Browsers

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

### 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 Brazil, Portuguese European, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish

## Environment and Packaging

### Environment

- RoHS Compliant

### Package Content

- Main Unit (Base X1 included)
- Installatin DVD

### Assembling Kit

- AC Power Adapter
- AC Power Cord
- 2M RJ-45 LAN Cable
- Welcome Note

### Optional Accessories

- Remote
- Camera License Pack

## 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) server 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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- Hard drive not included.
- The actual capacity will differ according to volume types.
- Wireless dongles not included. Please check <http://www.synology.com/> for supported wireless dongles.
- Fully loaded with Seagate 320 GB ST9500325AS 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%. More details about dB(A) value, check: <http://www.memtechacoustical.com/facts.asp>
- Measured with 4 Seagate 320GB ST930252AS 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 file, but not play it in Photo Station as compressed Flash video.
- The music can be streamed, but the metadata (ex: title, album) may not be indexed on the iTunes.
- For Mac users, DS411slim supports PostScript USB printers only.
- Primary partition only.

## Networking

