

# Disk Station DS509+

Scalable 5-bay SATA NAS Server for Corporate Users



## Key Features

- High Speed
  - 39+ MB/Sec RAID 5 Write
  - 55+ MB/Sec RAID 5 Read
- Hot-swappable HDD Design
- 2 Gigabit LAN Ports
- Windows + Mac + Linux
- Power Saving (30W~69W)

## Shipped with Disk Station Manager 2.1 that provides:

- AJAX-Based Management Interface
- Windows ADS Support
- Business Mail Server
- Corporate Surveillance
- Schedule Power On/Off

And more...

**Synology Disk Station DS509+ offers PC server equivalent performance for efficient data sharing and backup. Its high performance coupled with sophisticated Synology Disk Station Manager 2.1 provides an ideal solution for cross platform sharing, secure server backup, Windows ADS integration, business mail server, and corporate surveillance. The plug-n-use Synology DX5 easily expands the DS509+'s storage capacity up to 10 hard drives on the fly.**

### Corporate IT Management

Synology Disk Station DS509+ supports various volume types, like basic, RAID 0/1/5/6, and RAID 5+Spare to fit users' needs. Advanced operations allow RAID expansion and RAID type changing to provide flexible management experience.

S.M.A.R.T. is a monitoring system for hard drives used to detect and report various attributes of reliability, helping to anticipate malfunctions.

UPnP support allows users to stream multimedia files with an UPnP Digital Media Adapter (DMA) on a stereo system or a TV-set. Sony PS3 and Microsoft Xbox360 are also supported.

The Link Aggregation feature provides share-loading and failover support for Synology Disk Station DS509+.

### Affordable Scalability

When running out of the hard drive capacity on Synology Disk Station DS509+, users can expand more storage with Synology DX5. By attaching it to Synology Disk Station DS509+, the plug-n-use connectivity and eSATA 3.0 Gb/sec definition allow users to expand volume from Synology Disk Station DS509+. No firmware installation is needed.

### Perfect Backup Solution

Synology Network Backup allows users to back up files from one to another Synology Disk Station or any rsync-compatible server, The Local Backup allows backups to external hard drives via USB or eSATA, both providing flexible scheduling options.

The Local Backup provides Synology Disk Station DS509+ with the ability to back up data to a shared folder or, to external USB or SATA hard drives.

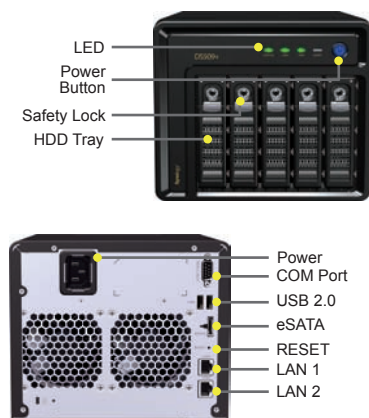
Synology DX5 delivers a perfect backup solution for Synology Disk Station DS509+, too. By attaching it to Synology Disk Station DS509+, the plug-n-use connectivity and eSATA 3.0 Gb/sec definition allows users to create an independent volume on the DX5 as a good backup target. No firmware installation is needed.

### Eco-Friendly

Synology Disk Station is designed and developed perpetually with the concept of energy saving. Compared with its average PC counterparts, Synology Disk Station DS509+ 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.

Additionally, 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 Clock Rate: 1.06GHz
- RAM Size: 1GB
- Internal HDD <sup>(1)</sup>: 5X 3.5" SATA(II)
- External HDD Interface: 2X USB ports, 1X eSATA port
- Size: 177mm X 203mm X 242mm
- Weight: 4.75kg
- LAN: 2X Gigabit
- Fan: 2X (80mm X 80mm)
- Noise Level <sup>(2)</sup>: 26dB(A)
- Power Recovery
- AC Input Power Voltage: 100V to 240V
- Power Frequency: 50Hz to 60Hz, Single Phase
- Max HDD Support (Internal HDD): 1.5TB
- Max Supported IP Camera: 10
- 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>(3)</sup>

- 69W (Access); 30W (Hibernation)

### Certification

- FCC Class B, CE Class B, BSMI Class B

### Networking Protocols

- CIFS
- AFP (3.1)
- FTP
- NFS
- Telnet/SSH

### Windows ADS Integration

- Supports up to Windows Server 2008
- Domain users login via Samba/AFP/FTP
- Synology Data Replicator 3 for Domain Users

### Security

- FTP over SSL/TLS (explicit)
- FTP Auto-Block
- Encrypted Network Backup
- Encrypted rsync
- HTTPS Connection

### File System

- EXT3
- FAT (External Disk Only)
- NTFS (External Disk Read Only)

### File Sharing

- Max User Account: 2,048
- Max Group: 256
- Max Shared Folder: 256
- Max Concurrent Connections (SAMBAA, FTP, AFP): 512

### Utilities

- Synology Assistant

- Synology Data Replicator 3
- Synology Download Redirector
- Add printer wizard

### Applications

- Surveillance Station 2
- Photo Station 3
- File Station 2
- Audio Station
- Web Station
- PHP/MySQL
- Download Station 2
- iTunes Server

### Packages

- Mail Station
- SqueezeCenter

### UPnP Multimedia Service Support

- Sony PS3, Microsoft Xbox360
- Audio Format: AAC, FLAC, M4A, MP3, Ogg Vorbis, WAV, WMA, WMA VBR, WMA PRO, WMA Lossless
- Video Format: ASF, AVI, DAT, DivX, MP4, MPEG1, MPEG2, MPEG4, VOB, WMV, XviD, PNG, PSD, TIF (tiff), UFO
- Playlist Format: WPL, M3U
- Subtitles: srt, psb, smi, ass, ssa, sub, idx, ifo

### iTunes Server Support

- Audio Format: MP3, M4A, M4P, WAV<sup>(4)</sup>, AIF<sup>(4)</sup>
- Playlist Format: M3U, WPL

### Audio Station Support

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

### Photo Station 3 Support

- Video Format: ASF, AVI, MPEG1, MPEG4, WMV, XviD, DivX, FLV, DAT<sup>(5)</sup>, MP4<sup>(5)</sup>, MPEG2<sup>(5)</sup>, RM<sup>(5)</sup>, RMVB<sup>(5)</sup>, VOB<sup>(5)</sup>
- Image Format: BMP, JPG (jpe, jpeg), GIF

### Management

- AJAX-based Management UI
- BitTorrent Port Range Setup
- BitTorrent DHT Support
- CIFS Recycle Bin
- Download Station Bandwidth control
- Download Station Port Range Setup
- Editable HTTP Error Page
- Email Alert Message
- Email Notification for New User
- Package Management
- External HDD Hibernation (USB, eSATA)
- Scheduled Power On/Off
- Firmware Upgrade
- FTP passive port range
- Hide-able Shared Folder
- Internal HDD Hibernation
- Removable Default Shared Folder

- Ez-Internet
- PPPoE
- UPS Management (Over USB 2.0)
- User Quota
- Web-based Download Station

### RAID Management

- Volume Type: Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 5+Spare, RAID 6
- RAID Change: Basic to RAID 1, RAID 1 to RAID 5, RAID 5 to RAID 5+Spare
- Expand with Larger Hard Drives: RAID 1, RAID 5, RAID 5+Spare, RAID 6
- Expand with More Hard Drive: RAID 5 from 3 to 4 HDDs, RAID 5 from 4 to 5 HDDs, RAID 5+Spare from 4 to 5 HDDs, RAID 6 from 4 to 5

### Backup Solutions

- Network Backup
- Local Backup
- Desktop Backup (using Synology Data Replicator 3)
- 3rd-Party Backup Support

### Supported Clients

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

### Printer Support<sup>(6)</sup>

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

### Languages

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

### Environment

- RoHS Compliant

### Package Content

- DS509+ Main Unit
- Installation CD
- Welcome Note
- Assembling Kit
- AC Power Cord
- 2M RJ-45 LAN Cables

(1) Hard drive not included.

(2) Fan only. Measured at 2300~6200RPM, varied among models. More details about dB(A) value, check <http://www.quietnoise.com/facts.htm>

(3) Measured with 5 Seagate 750GB ST3750640NS hard drive. The figures could vary on different environments.

(4) The music can be streamed, but the metadata (ex: title, album) may not be indexed on the iTunes.

(5) User can click and download the file, but not play it in Photo Station 3 as compressed Flash video.

(6) For Mac users, DS509+ supports PostScript USB printers only.

## SYNOLOGY INC.

Synology Inc., founded in April 2000 by a duo experienced in system designing and marketing, is a dedicated Network Attached Storage (NAS) products provider located in the Taipei city, Taiwan. With a staunch and united team organization, Synology creates and brings forth NAS servers of originality for the global market. Under the breezy yet conscientious team work, Synology embodies the spirit of vitality, creativity, speciality, and versatility, implanting a new breath into the staid NAS business. With our sustained and substantial investment in research and development, Synology is pursuing the laurels of contemporary NAS industry on an international scale.

Synology NAS Servers are designed to fulfill its customers' need of security, performance, energy saving, and functionality on a broad range around the globe from prosumers to corporations. Moreover, to practice commitment made to its widespread customers and to provide every possible means of satisfactory services, Synology is using its best endeavors to the establishment a fully developed customer support and service team. Having a vision beyond the visible, Synology NAS Servers signify -Value.

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## Networking

