

# Synology DiskStation DS1010+

High-performance & Scalable 5-bay All-in-1 NAS Server for SMB Users



**Synology® DiskStation DS1010+ offers a high-performance, scalable, and full-featured network attached storage solution that meets the needs of small and medium-sized businesses that require an efficient way to centralize data protection, simplify data management, and rapidly scale storage capacity with minimal time spent on setup and management. The Synology DS1010+ is backed with Synology's 3-year limited warranty.**

## Highlights

- 116+ MB/sec Reading, 103+ MB/sec Writing<sup>(1)</sup>
- Scalable with Synology DX510<sup>(2)</sup> to up to 10 Drives
- Power-saving with only 68 W in Operation
- Wake on LAN for Remote Wakeup
- Includes Feature-Rich Synology DiskStation Manager 2.2 (DSM 2.2)
- Expandable RAM Size (up to 2GB)

## High Performance, High Data Availability

The Synology DS1010+ delivers an average 116+ MB/sec reading speed under RAID 5 configuration in a Windows environment, and 103+ MB/sec writing. The hard drives are hot-swappable to ensure continual service uptime should the drives need replacement. Businesses need a strong foundation to face mission-critical tasks so the Synology DS1010+ delivers high-performance with high data availability ensuring access when it's needed.

## Robust & Affordable Scalability Up to 20 TB<sup>(3)</sup>

When the storage capacity of the Synology DS1010+ is nearing its limits, it can easily be expanded by the Synology DX510. The Synology DX510 securely connects to the Synology DS1010+ via an eSATA cable of specially-designed connectors on both ends to ensure maximum throughput. The Synology DX510 can directly expand the existing storage on the Synology DS1010+ to a maximum 20 TB capacity.

## 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.

## Complete Backup Solutions

The Synology DS1010+ offers a centralized backup target to consolidate fragmented and unstructured data across a network. PC Users can back up their data to the Synology DS1010+ 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 DS1010+ to another Synology DiskStation or any rsync server via an encrypted transmission, or to an external hard drive via USB or eSATA connection.

## Full-featured Business Applications

The Synology DS1010+ runs on the renowned system firmware, Synology DSM 2.2 offering comprehensive applications and features designed specifically for SMBs. Comprehensive network protocol support assures seamless file sharing across Windows, Mac, and Linux platforms. Windows ADS integration allows the Synology DS1010+ to quickly and easily fit in an existing business network environment with no need to recreate users accounts on the Synology DS1010+. The User Home feature minimizes the administrator's effort in creating a private shared folder for a large amount of users. The sub-folder privilege settings further extend the flexibility to allocate permissions for different workgroups.

Internet file access is simplified by the encrypted FTP server and the web-based file explorer, Synology File Station 2. HTTPS, firewall, and IP auto-block support ensure file sharing over the Internet is protected at a high security level.

The PHP/MySQL Synology Web Station allows hosting up to 30 websites on a Synology DS1010+. Synology Surveillance Station offers a centralized interface to safeguard the office environments by deploying IP cameras. The Mail Station add-on turns a Synology DS1010+ into a mail server with only few steps of installation. The USB printer sharing capability minimizes businesses' cost by sharing printing resources throughout the office.

Using the NFS protocol or with iSCSI target support, within Synology DSM 2.2, the Synology DS1010+ is a storage asset when serving Windows, Linux, or Virtual Machine Servers.

## Energy Efficient Design

Synology DiskStations are designed and developed with energy efficiency in mind. Compared with the average PC counterparts, Synology DiskStations consume a relatively low amount of power and have the hard drives hibernate when not in use.

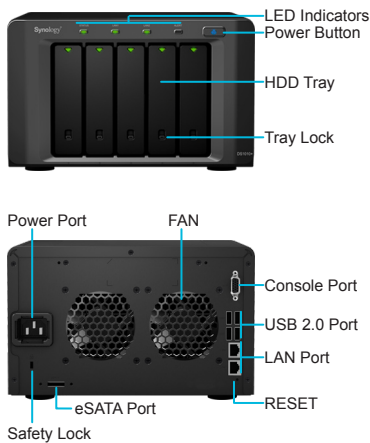
All Synology products are produced with RoHS compliant parts and packed with recyclable packing materials. Synology acknowledges the responsibility as a global citizen to continually work to reduce the environmental impact of every product produced.

<sup>(1)</sup> The performance figures could vary on different environments.

<sup>(2)</sup> Purchase separately. Available in March 2010.

<sup>(3)</sup> When expanding a RAID 5 volume on the Synology DS1010+ with the Synology DX510, a maximum 16 TB volume is limited due to the nature of EXT3 file system.

## CONNECTIONS & BUTTONS



## Technical Specifications

### Hardware

- CPU: Intel® Atom™ D510, Dual Core 1.6GHz
- RAM Size: 1 GB (64bit@DDR800)
- Internal HDD<sup>(4)</sup>: 5X 3.5" SATA(II) or 5X 2.5" SATA/SSD
- External HDD Interface: 4X USB ports, 1X eSATA port
- Size: 157mm X 248mm X 233mm
- Weight: 4.25kg
- LAN: 2X Gigabit
- Fan: 2X (80mm X 80mm)
- Noise Level<sup>(5)</sup>: 30dB(A)
- Power Recovery
- AC Input Power Voltage: 100V to 240V
- Power Frequency: 50Hz to 60Hz, Single Phase
- Max Internal Capacity: 10TB (5X 2TB hard drives)<sup>(6)</sup>
- Max Supported IP Camera #<sup>(7)</sup>: 20<sup>(7)</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>(8)</sup>

- 68W (Access); 30W (HDD Hibernation)

### Certification

- FCC Class, CE Class B, BSMI Class B

### Networking Protocols

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

### Windows ADS Domain Integration

- ADS Support
- Domain users login via Samba/AFP/FTP
- Synology Data Replicator 3 for Domain Users

### Security

- Firewall
- 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 Only)

### File Sharing

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

### Utilities

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

### Applications

- Surveillance Station 3
- Photo Station 3
- File Station 2
- Audio Station
- Web Station (PHP/MySQL)

- Download Station 2
- iTunes Server

### iPhone Applications

- DS photo
- DS audio

### Packages

- Mail Station
- phpMyAdmin
- SqueezeCenter
- Webalizer

### DLNA/UPnP Media Server Support

- DLNA Certified
- Sony PS3, Microsoft Xbox360 (See All Supported DMA)
- Audio Format: AAC, FLAC, M4A, MP3, Ogg Vorbis, PCM, WAV, WMA, WMA VBR, WMA PRO, WMA Lossless
- 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
- Image Format: BMP, JPG (jpe, jpeg), GIF, ICO, PNG, PSD, TIF (tiff), UFO
- Playlist Format: WPL, M3U

### iTunes Server Support

- Audio Format<sup>(9)</sup>: MP3, M4A, M4P, WAV, AIF
- Video Format: M4V, MOV, MP4
- 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<sup>(10)</sup>: 3G2, 3GP, ASF, AVI, DAT, DivX, FLV, M4V, MOV, MP4, MPEG, MPG, QT, WMV, XviD, RM, RMVB, VOB
- Image Format: BMP, JPG (jpe, jpeg), GIF

### Management

- AJAX-based Management UI
- Wake-on-LAN
- Sub-folder Privileges Setting
- User Home
- Applications privileges Setting
- BitTorrent Port Range Setup
- BitTorrent DHT Support
- Changing Management UI Ports
- 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
- Link Aggregation
- External HDD Hibernation (eSATA, USB)
- Scheduled Power Off
- Firmware Upgrade
- FTP passive port range
- Hide-able Shared Folder
- Internal HDD Hibernation
- Movable Shared Folder
- Removable Default Shared Folder
- System Temperature
- DNS
- PPPOE
- Resource Monitor
- SMS Notification
- SNMP
- UPS Management (Over USB 2.0)
- User Quota

- Web-based Download Station 2

### RAID/Storage Management

- Volume Type: Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 5+Spare, RAID 6
- Upgrade from Basic to RAID 1, from Basic to RAID 5, from RAID 1 to RAID 5, from RAID 5 to RAID 5+Spare
- Expand RAID 1, RAID 5, RAID 5+Spare or RAID 6 with Larger Hard Drives
- Expand RAID 5, RAID 5+Spare or RAID 6 by Adding a Hard Drive On The Fly
- iSCSI

### Backup Solutions

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

### Supported Clients

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

### Supported Browsers

- Internet Explorer 7 and onward
- Firefox 3 and onward
- Safari 3 and onward (Mac)

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

- iPhone OS 2.2.1 and onward
- Windows Mobile 6.0 (IE Mobile or Opera 9.0 onward)
- Symbian OS 9.1, S60 3rd Edition onward

### Printer Support<sup>(11)</sup>

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

### Languages

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

### Environment

- RoHS Compliant

### Package Content

- DS1010+ Main Unit
- Installation CD
- Welcome Note
- Assembling Kit
- AC Power Cord
- 2X 2M RJ-45 LAN Cable
- 1GB RAM module (optional)

(4) Hard drive not included.

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

(6) The actual capacity will differ according to volume types.

(7) 1 free license to install 1 IP camera. Additional licenses can be purchased to expand the license quota.

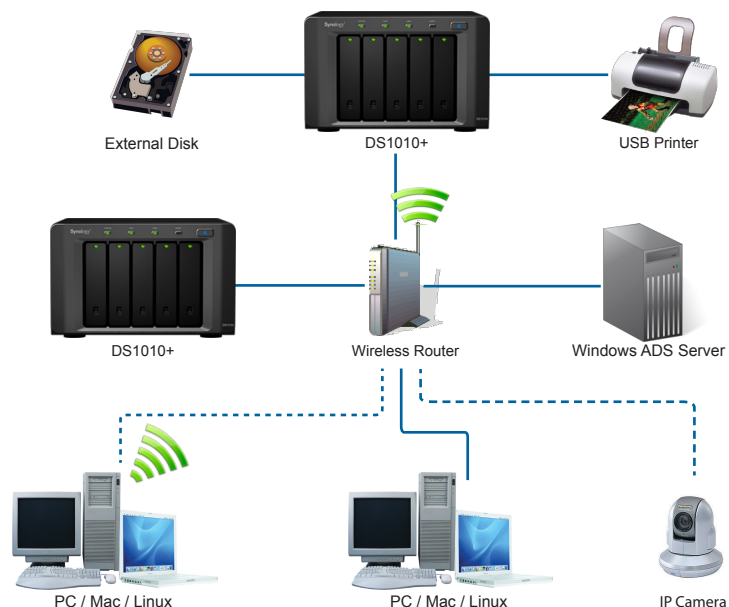
(8) Measured with 5 Seagate 750GB ST3750640NS hard drive. The figures could vary on different environments.

(9) WAF and AIF files can be streamed, but the metadata (ex: title, album) may not be indexed on the iTunes.

(10) User can click and download DAT, MP4, MPEG2, RM, RMVB, and VOB files, but not play them in Photo Station 3 as compressed Flash video.

(11) For Mac users, the Synology DS1010+ supports PostScript USB printers only.

## Networking



## 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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