



DiskStation DS413

Synology® DiskStation DS413 is eco-friendly and features rich 4-bay NAS for workgroups and offices, specifically designed for users who need to share and protect data cost-effectively, while increasing productivity with comprehensive business-oriented applications.

Highlights

- **Dual Core™ CPU with Floating-Point Unit**
- **Extra Power-saving System Hibernation**
- **Hardware Encryption Engine**
- **Features SuperSpeed USB 3.0**
- **Hassle-free System Installation**
- **Running on Synology DiskStation Manager (DSM)**

Dual Core Performance with Smart Energy Management

With Duo Core processing power, Synology DS413 delivers an average 80.67 MB/sec writing speed under RAID 5 configuration in a Windows® environment, and 111.14 MB/sec reading¹. The built-in Floating-Point Unit makes for faster thumbnail processing to enhance photo viewing at different resolutions. Coming with USB 3.0 support which offers transmission speeds of up to 5 Gbps, namely 10 times faster than USB 2.0, DS413 takes less time for data transfer for external hard drives and consumes less power.

Synology DS413 delivers high performance when needed, but during low activity level it also uses very small amount of power. During System Hibernation mode, DS413 consumes only 3.3 watts of power to listen for network activities, and resumes back to operation in very short amount of time upon demand. Compared to shutting off the whole system, System Hibernation brings a closer balance between smart energy management and system responsiveness.

Flexible Storage 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.

Multiple Volumes on RAID allows you to create more than one volume on a RAID structure, providing a flexible and efficient way to manage your storage across all available hard drives. When the need arises to expand the volumes, simply allocate more storage space on the UI, and DSM does the rest for you without any service disruption.

Complete Backup Solutions

Synology DS413 offers a centralized backup target to consolidate fragmented and unstructured data across a network. PC users can back up their data to Synology DS413 using Synology Data Replicator software, and Mac OS X® users enjoy native Apple® Time Machine® integration.

A web-based backup wizard is provided for backing up data in Synology DS413 to another Synology DiskStation or any rsync server via an encrypted protocol, or to an external hard drive via USB and eSATA connections. In addition, backing up to the cloud using Amazon S3® service is supported. The add-on package, Time Backup, keeps DiskStation data in multiple versions, so IT administrators could easily keep track of them and restore to previous version whenever required.

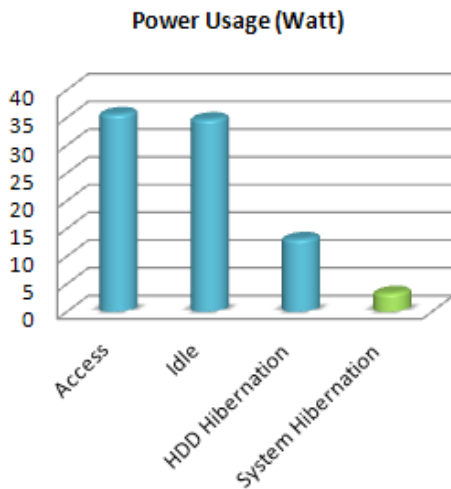


Figure 1) System Hibernation

System hibernation provides considerable more energy savings by controlling power usage from both CPU and the hard disks.

Rich Office Applications

Synology DiskStation DS413 runs on renowned multitasking operating system, the Synology DiskStation Manager (DSM). Offering a comprehensive list of business applications, the DS413 can be customized to run multiple applications of your choice to fulfill the requirement of your business environment. The DS413 replaces several pieces of traditional network hardware with rich features designed specifically for workgroups and offices such as antivirus, video surveillance, webmail, VPN, and LDAP directory services.

Applications are managed in the Package Center, an application portal that hosts applications as ready-to-use packages; to ensure high software integration as well as one-click-installation to eliminate guess work during installation. Additional approved 3rd party PHP web application such as content management, customer relationship management & e-commerce system can be hosted on DS413 by using Web Station with support for PHP/MySQL® web content.

Hassle-free System Installation

Web Assistant is a web-based utility to make every DiskStation as easy to install as possible. Installation is done inside your existing web browser by setting up all vital system components in few simple steps. Combined with a quick start widget, users can simultaneously tour the DSM operating system and setup to use right away.

Peace of Mind with Data Encryption

The Synology DS413 is equipped with an encryption engine which offloads the encryption calculation task away from the main CPU, helping to improve file transfer speeds of the DiskStation.

Data protection is an important matter for businesses of all sizes. High-end features previously available only on enterprise level hardware are now accessible via Synology DS413 to small and medium-sized businesses. DS413 provides share-level AES 256-bit encryption to aid in the prevention of unauthorized access attempts to the hard drives.

Energy Efficient with Cool and Quiet Design

With 35.62 watts power consumption in operation, Synology DS413 is designed with energy efficiency in mind. Not only does it provides two 92x92 mm fans and the smart airflow to keep the system running cool 24/7, its noise dampening design makes it really quiet compared to PC counterparts. The support of multiple scheduled power on/off and System Hibernation can further reduce power consumption and operation cost.

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 & Buttons



Technical Specifications

Hardware

CPU Frequency	1.067GHz Duo Core
Floating Point	Yes
Hardware Encryption Engine	Yes
RAM Size	DDR3 1GB
Internal HDD/SSD	3.5" or 2.5" SATA(II) X 4 (hard drives not included)
Max Internal Capacity	16TB (4X 4TB hard drives) (The actual capacity will differ according to volume types.)
External HDD Interface	1X USB 2.0 port, 2X USB 3.0 ports, 1X eSATA port
Size (HxWxD)	165mm X 203mm X 233.2mm
Weight	2.03kg
LAN	1X Gigabit
Hot Swappable HDD	Yes
Wake on LAN/WAN	Yes
Noise Level ²	19.3 dB(A)
AC Input Power Voltage	100V to 240V
Power Frequency	50Hz to 60Hz, Single Phase
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
Power Consumption ³	35.62 W (Access), 3.39 W (System Hibernation)

Applications

File Station	Virtual Drive, Remote Folder
Backup Solutions	Network Backup, Local Backup, Desktop Backup (Window: Synology Data Replicator; Mac: Apple Time Machine backup application), LUN Backup - Max Concurrent Task Number: 2, Shared Folder Sync - Max Task Number: 4, Configuration Backup
Mail Server	Supported Mail Server Protocols : POP3, SMTP, IMAP
FTP Server	Bandwidth Control, Custom FTP Passive Port Range, Anonymous FTP, Transfer Log
Web Station	Virtual Host (up to 30 websites), PHP/MySQL, 3rd-Party Applications Support
Printer Server	Max Printer #: 2, Printing Protocols: LPR, CIFS, IPP, Apple AirPrint™, Google Cloud Print™, Multi Functional Print Server (MFP functions are for Windows PC only)
iOS/Android™ Applications	DS photo+, DS audio, DS cam, DS file, DS finder
Windows Phone Applications	DS finder

Add-on Packages

Surveillance Station	Default IP cam #: 1, MAX IP cam # (licenses required): 12 (1 free license to install 1 IP camera. Additional licenses can be purchased to expand the license quota.)
Directory Server	LDAP Directory Server, Backup and Restore LDAP Database
VPN Server	Maximum Connections : 15, VPN Method: PPTP, OpenVPN™
DHCP Server	Independent DHCP Server on Different Network Interfaces, Multiple Subnets Support, Address Reservation
Syslog Server	SSL Connection, Log Rotation: 6 months, 1 year, 2 years, 3 years, Email Notification
Mail Station	Webmail Interface for Mail Server, Receiving Mails from Multiple POP3 Mailboxes, Customizable SMTP Server
Antivirus Essential	Full System Scan, Scheduled Scan, White List Customization, Virus Definition Auto Update
Time Backup	Maximum Task Number : 4, Multiple File Versions Retained, Instant File Restoration
Cloud Station	Maximum User Accounts : 16, Retain Historical and Deleted File Versions
DLNA®/UPnP® Media Server	PS3®/Xbox 360® Support
Download Station	Supported Download Protocols: BT/HTTP/FTP/NZB/eMule Maximum Concurrent Download Tasks : 50
Other Packages	Photo Station, Audio Station, iTunes® Server, 3rd-party packages

General

Networking Protocols	CIFS, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN)
File System	EXT4, EXT3 (External Disk Only), FAT (External Disk Only), NTFS (External Disk Only)
Storage Management	Max File System Size: 16TB, Max Internal Volume #: 128, Max iSCSI Target #: 10, Max iSCSI LUN#: 10, Supported RAID Type : Synology Hybrid RAID, Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 5+Spares, RAID 6, RAID 10
File Sharing Capability	Max User Account: 2048, Max Group: 256, Max Shared Folder: 256, Max Concurrent CIFS/AFP/FTP Connections: 256
Privilege	Windows Access Control List (ACL)
Directory Service	Windows ADS Domain Integration, LDAP Integration
Security	FTP over SSL/TLS, IP Auto-Block, Firewall, Encrypted Network Backup over Rsync, HTTPS Connection
Utilities	Synology Web Assistant, Synology Assistant, Synology Data Replicator
Supported Clients	Windows XP onward, Mac OS X 10.5 onward, Ubuntu 9.04 onward
Support Browsers	Chrome, Internet Explorer®: 8, 9, Firefox®, Safari® (Mac): 5
Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, 日本語, 한국어, 繁體中文, 简体中文

Environment and Packaging

Environment	RoHS Compliant
Package Content	DS413 Main Unit, Installation Disc, Welcome Note, Assembling Kit, AC Power Cord, AC Power Adapter, RJ-45 LAN Cable X1
Optional Accessories	Remote, Camera License Pack
Warranty	2 years

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

1. The performance figures could vary on different environments.

2. Fully loaded with Seagate® 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: 17.1 dB(A); Temperature: 24.2°C; Humidity: 63%; More details about dB(A) value, check <http://www.memtechacoustical.com/facts.asp>

3. Measured with 4 Western Digital® 3TB WD30EZR5 hard drives. The figures could vary on different environments.

SYNOLOGY INC.

Synology is dedicated to taking full advantage of the latest technologies to bring businesses and home users reliable and affordable ways to centralize data storage, simplify data backup, share and sync files across different platforms, and access data on-the-go. Synology aims to deliver products with forward-thinking features and the best in class customer services.

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