

# Synology®

use-IP

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## DiskStation DS416play

Synology® DiskStation DS416play is a 4-bay NAS server with incredible fun. The massive storage capacity allows you to store your entire multimedia library and turns it into a centralized multimedia center. Powered by a hardware transcoding engine, DS416play provides a real-time transcoding solution for 4K Ultra HD videos, giving you a smooth and high-quality streaming experience to various devices. Synology DiskStation DS416play is backed with Synology's 2-year limited warranty.

### Highlights

- Ideal 4-bay NAS as home multimedia center
- Dual-core CPU burst up to 2.48 GHz delivers 225.68 MB/s reading, 186.67 MB/s writing
- Rapid encryption over 224.91 MB/s reading and 142.56 MB/s writing by AES-NI hardware encryption engine<sup>1</sup>
- Offering Link Aggregation with dual Gigabit LAN ports to a home-level switch<sup>2</sup>
- Single H.264 4K or triple Full HD 1080p video transcoding on the fly<sup>3</sup>
- Multimedia streaming via DLNA-certified media server
- Everywhere access with iOS/Android™/Windows ready mobile apps
- Brightness adjustable front LED indicators with schedule control

### Massive Storage Capacity with Utmost Fun

Synology DS416play is born to be your ideal, centralized multimedia center with large storage capacity. Equipped with four drive bays, DS416play supports up to **32 TB** storage size and allows you to store and share all your favorite videos, photos, and music. DS416play comes with an **Intel® Celeron® dual-core CPU** and **1GB RAM**, delivering outstanding performance – **225.68 MB/s reading** and **186.67 MB/s writing** – under RAID 5 configuration in a Windows® environment.<sup>1</sup> With the powerful built-in **AES-NI hardware encryption engine**, its encrypted data transmission can be boosted over **224.91 MB/s in reading** and **142.56 MB/s in writing**.

DS416play comes with **three USB 3.0 ports** for high speed external storage exchange. **Dual Gigabit LAN** with failover support and **hot-swappable drive tray** design ensure continual service uptime during drive replacement or unexpected LAN failure. **Adaptive Load Balancing** optimizes the network traffic received and sent by DS416play without any particular network switches. **Brightness-adjustable front LED with schedule control** provides flexible LED settings that best suit your environment.

### 4K Ultra HD Multimedia Bank

Synology DiskStation DS416play features real-time H.264 **single-channel 4K Ultra HD** or **triple-channel Full HD<sup>2</sup>** video transcoding, supporting the latest multimedia formats and allowing easy file sharing across Windows, Mac®, and Linux® platforms. With **Video Station**, you can watch movies and TV shows online or directly through the **DS video** app on Apple TV. **Photo Station's** intuitive design allows you to effortlessly organize photos into customized categories, smart albums and blog posts, and link them to social networking websites within a few clicks. **Audio Station** comes with Internet radio, support for lossless audio formats, and versatile playback capability via DLNA, AirPlay®, and Bluetooth devices (a Bluetooth dongle required).

### DLNA®-Certified Media Server

A certified **DLNA DMS** (Digital Media Server), DS416play serves also as a ready media server with the capability to host digital multimedia contents for remote playback. DLNA-compliant devices can access the shared contents on your DS416play in the same local area network without the fuss over privilege settings. DS416play makes your multimedia bank available without any preconfiguration. With Synology mobile apps, your mobile device can even turn into a remote control and stream movies, photos, and music on your DiskStation to the TV or speakers, right from the palm of your hand.



### 4K Ultra HD Multimedia Bank

Real-time H.264 4K video transcoding provides hassle-free high quality video playback among various devices.



### Anytime Availability

Access your DiskStation anywhere using Synology mobile apps.

## Btrfs: Next-Generation Storage Efficiency

DS416play adopts the **Btrfs file system**, bringing the most advanced storage technologies to meet the management needs of modern businesses:

- **Built-in data integrity check** detects data and file system corruption with data and meta-data checksums and improve overall stability.
- **Flexible shared folder/user quota system** provides comprehensive quota control on all user accounts and shared folders.
- **Advanced snapshot technology** with customizable backup schedule allows up to **256 copies** of shared folder backups in a minimum **5-minute interval** without occupying huge storage capacity and system resources.
- **File or folder level data restoration** maximizes user convenience and reduces time in restoring specific files or folders.
- **Cloud Station with file versioning** halves storage space usage when compared with the ext4 file system.

## Anywhere/Anytime Availability

**QuickConnect** and **EZ-Internet** configure your DS416play to be accessed over the Internet with minimal effort. Multimedia content is downright accessible via Synology's popular mobile apps like **DS photo**, **DS audio**, and **DS video**. **DS download**, **DS file**, and **DS cloud** allow file download/access/synchronization from anywhere at anytime.

## Running on Synology DiskStation Manager (DSM)

**Synology DiskStation Manager (DSM)** is a web-based operating system that provides private cloud service. It is designed to make your everyday living easier.

The built-in **Package Center** allows you to download and install the packages designed specifically for your unique needs. All will happen with just a few clicks.

The simple, smooth interface allows you to obtain and configure storage capacity with minimal friction. It provides you with complete control of your personal cloud and lets you access it anywhere. Synology DSM will help you maximize productivity and get more out of your digital assets with minimal fuss.

## Energy Efficient and Easy Management Design

Synology DS416play is designed with energy efficiency in mind. It provides dual 92 X 92 fans with smart airflow to keep the system running cool 24/7 and, with the noise-dampening design, makes itself really quiet compared to PCs. The support for Wake on LAN/WAN, hard drive hibernation, and schedulable power-on and power-off 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



1	LED indicator	2	USB 3.0 port	3	Power button	4	Reset button
5	LAN port	6	Power port	7	Kensington Security Slot	8	USB 3.0 port

## Technical Specifications

### Hardware

CPU	Intel Celeron N3060 dual-core 1.6GHz, burst up to 2.48GHz
Floating point unit	Yes
Hardware encryption engine	Yes (AES-NI)
Hardware transcoding engine	Supported codec: H.264 (AVC), MPEG-2 and VC-1; maximum resolution: 4K (4096 x 2160); maximum frame rate per second (FPS): 30
RAM size	DDR3 1GB
Compatible drive type	3.5"/2.5" SATA III/II x 4 (hard drives not included)
Maximum internal raw capacity	32 TB (8 TB HDD x 4) (The actual capacity will differ according to volume types)
Hot swappable drive	Yes
External ports	USB 3.0 ports x 3
Size (HxWxD)	165 mm x 203 mm x 233.2 mm
Weight	2.04 kg
LAN	Gigabit (RJ-45) x 2
Wake on LAN/WAN	Yes
Wireless support	Yes (wireless dongles not included)
AC input power voltage	100V to 240V
Power frequency	50Hz to 60Hz, single phase
Operating temperature	5°C to 40°C (40°F to 104°F)
Storage temperature	-20°C to 60°C (-5 °F to 140 °F)
Relative humidity	5% to 95% RH

### General

Networking protocols	CIFS, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
File system	Internal: Btrfs, ext4 External: Btrfs, ext4, ext3, FAT, NTFS, HFS+
Storage management	Maximum single volume size: 108TB, Maximum internal volume: 256, Maximum iSCSI Target: 32, Maximum iSCSI LUN: 256
Supported RAID type	Synology Hybrid RAID, Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
File sharing capability	Maximum user account: 2048, Maximum group: 256, Maximum shared folder: 256, Maximum concurrent CIFS/AFP/FTP/File Station connection: 256
Privilege	Windows Access Control List (ACL)
Directory service	Windows AD Integration: Domain Users login via Samba (CIFS)/AFP/FTP/File Station, LDAP integration
Security	FTP over SSL/TLS, IP auto-block, firewall, encrypted network backup over rsync, HTTPS connection
Utilities	Synology Web Assistant, Cloud Station Drive, Cloud Station Backup, Synology Cloud Sync Decryption Tool, Evidence Integrity Authenticator, Photo Station Uploader, Snapshot Manager for VMware, Snapshot Manager for Windows, NFS Plug-in for VMware VAAI

Supported clients	Windows 7 onwards, Mac OS X® 10.10 onwards
Supported browsers	Chrome™, Firefox®, Internet Explorer®: 9 onwards, Safari® 8 onwards, Safari (iOS® 7 onwards on iPad®), Chrome (Android 4.0 onwards on tablets)
Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Česky, 日本語, 한국어, 繁體中文, 简体中文

## Applications

File Station	Virtual drive, remote folder, Windows ACL editor, compress/extract archived files, bandwidth control for specific users or groups, create sharing links, transfer logs
Backup Solutions	Network backup; local backup; desktop backup; configuration backup; OS X Time Machine; backup data to public cloud; shared folder sync - maximum task number: 4
FTP Server	Bandwidth control for TCP connections, custom FTP passive port range, anonymous FTP, FTP SSL/TLS and SFTP protocols, boot over the network with TFTP and PXE support, transfer logs
Printer Server	Maximum printer: 2, printing protocols: LPR, CIFS, IPP, iOS printing, Google Cloud Print™, multi functional print server (MFP functions are for Windows PC only)
Security Advisor	Malware detection/removal, user account/password, network, system-related security scan
iOS/Android Applications	DS cloud, DS file, DS finder, DS cam, DS note, DS audio, DS download, DS photo, DS video
Windows phone® applications	DS file, DS finder, DS audio, DS download, DS photo, DS video

## Add-on Packages

Antivirus Essential	Full system scan, scheduled scan, white list customization, virus definition auto update
Cloud Station Server	Maximum concurrent file transfers: 256, retain historical and deleted file versions
Cloud Sync	One or two-way synchronization with public cloud storage providers including Amazon Cloud Drive, Amazon S3-compatible storage, Baiduyun, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, Megafon Disk, Microsoft OneDrive, OpenStack Swift-compatible storage, WebDAV servers, Yandex Disk
DLNA/UPnP® Media Server	DLNA certified, PS3®/PS4®/Xbox 360®/Xbox One® support
Download Station	Supported download protocols: BT/HTTP/FTP/NZB/eMule Maximum concurrent download tasks : 80
Log Center	SSL connection, log rotation: 6 months, 1 year, 2 years, 3 years, email notification
Mail Server	Supported Mail Server protocols: POP3, SMTP, IMAP, support LDAP/AD account
Mail Station	Webmail interface for Mail Server; receiving mails from multiple POP3 mailboxes, customizable SMTP server
Note Station	Rich-text note organization with versioning, encryption, sharing, media embedding and attachments
Storage Analyzer	Volume and quota usage, total size of files, volume usage and trends based on past usage, size of shared folders, largest/most/least frequently modified files
Surveillance Station	Maximum IP camera: 25 (total of 750 FPS at 720p, H.264) (Including two free camera licenses. Procurement of additional licenses is required.)
VPN Server	Maximum connections: 20, supported VPN protocols: PPTP, OpenVPN, L2TP
Web Station	Virtual Host (up to 30 websites), PHP/MariaDB®, 3rd-Party applications support
Other Packages	Photo Station, Audio Station, iTunes® Server, 3rd-party packages

## Environment and Packaging

Environment	RoHS Compliant
Package content	DS416play main unit, Welcome note, accessory pack, AC power adapter, AC power cord, RJ-45 LAN cable x 2
Optional accessories	Camera License Pack, VS360HD
Warranty	2 Years

\*Model specifications are subject to change without notice. Please refer to [www.synology.com](http://www.synology.com) for the latest information.

- Performance may vary depending on the environment.
- Adaptive Load Balancing is required to optimize network traffic to/from your Synology NAS whether or not the switch supports Link Aggregation.
- DS416play can transcode 4K videos to 1080p or lower resolution. The maximal number of concurrent Full HD transcoding channels may vary depending on the video codec, resolution, bitrate and FPS.

### 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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DS416play-2016-ENU-REV001

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