DiskStation **DS716+II**

Fulfill your needs for safe data storage and ultra high definition video sharing with Synology DiskStation DS716+II. Compact yet powerful, DS716+II features an Intel® quad-core CPU with AES-NI hardware encryption engine and 2GB RAM, providing outstanding performance and data encryption acceleration along with real-time transcoding of 4K Ultra HD source content. Synology DiskStation DS716+II is backed with Synology's 3-year limited warranty.

Highlights

- **Quad-core CPU with AES-NI hardware encryption engine**
- **Encryption performance at over 226.09 MB/s reading, 138.04 MB/s writing**[1]
- **Scale up to 7 drives with Synology DX513**[2]
- **Advanced snapshot technology for data protection**
- **Introduced Btrfs file system with built-in data integrity check**
- **Single H.264 4K or triple Full HD video transcoding on the fly**[3]
- **Dual 1GbE LAN with failover and Link Aggregation support**
- **A versatile storage server for small offices**

Compact Storage Server with Outstanding Performance

Synology DiskStation DS716+II is designed for small offices pursuing a compact yet powerful shared storage solution, featuring an **Intel® Celeron® quad-core CPU**, built-in **AES-NI hardware encryption engine**, **2GB DDR3 RAM**, and storage scalability up to 7 drives with Synology Expansion Unit DX513[2]. With Link Aggregation enabled, DS716+II delivers up to an average **226.1 MB/s reading** and **141.19 MB/s writing** speed under RAID 1 configuration in a Windows® environment, and an encrypted data transmission at over **226.09 MB/s reading** and **138.04 MB/s writing**.[1]

DS716+II comes with **3 USB 3.0 ports** both on the front and rear panel, providing fast and convenient data transfer and backup to external storage devices. **Dual Gigabit LAN** with failover support and hot-swappable drive tray design ensure continual service uptime during drive replacement or unexpected LAN failure. **High Availability Manager** ensures seamless transition between clustered servers in the event of server failure with minimal impact to applications to decrease the risk of unexpected interruptions and costly downtime.

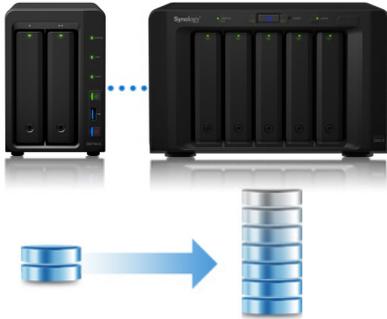## Btrfs: Next Generation Storage Efficiency

DS716+II introduces 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 **1024 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** brings huge convenience and saves time for users who wish to restore only a specific single file or folder.
- **Cloud Station with file versioning** reduces down to half of storage consumption when compared with the Ext4 file system.

Next Generation Storage Efficiency

The Btrfs file system brings storage management to the next level by providing more efficient storage utilization, scheduled shared folder snapshot, and file/folder-level data restoration.

Flexible Scalability

DS716+II can expand its capacity on-the-fly and enlarge volumes across its expansion unit for storage or backup.

Comprehensive Business Applications

Powered by the innovative Synology DiskStation Manager (DSM), DS716+II comes fully-equipped with business applications and features:

- Easy integration with existing business network environments through **Windows® AD** and **LDAP** directory services without recreating user accounts.
- **Windows ACL** support provides fine-grained access control and efficient privilege settings, allowing DS716+II to fit seamlessly into current infrastructure.
- Complete backup applications protect information assets by regularly backing up files and iSCSI LUNs locally and remotely.

4K Ultra HD Multimedia Bank

Synology DiskStation DS716+II features real-time H.264 **1-channel 4K Ultra HD** or **3-channel Full HD**[3] video transcoding, bringing more complete support to the latest multimedia file formats and contents and allowing easy file sharing across Windows, Mac®, and Linux® platforms. With **Video Station**, you can organize personal digital video library with comprehensive media information, watch 4K Ultra HD movies and films, or record TV programs with a DVB-T/DVB-S stick. **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 and lossless audio formats support and provides music playback via DLNA, AirPlay®, and Bluetooth devices (a Bluetooth dongle is required).
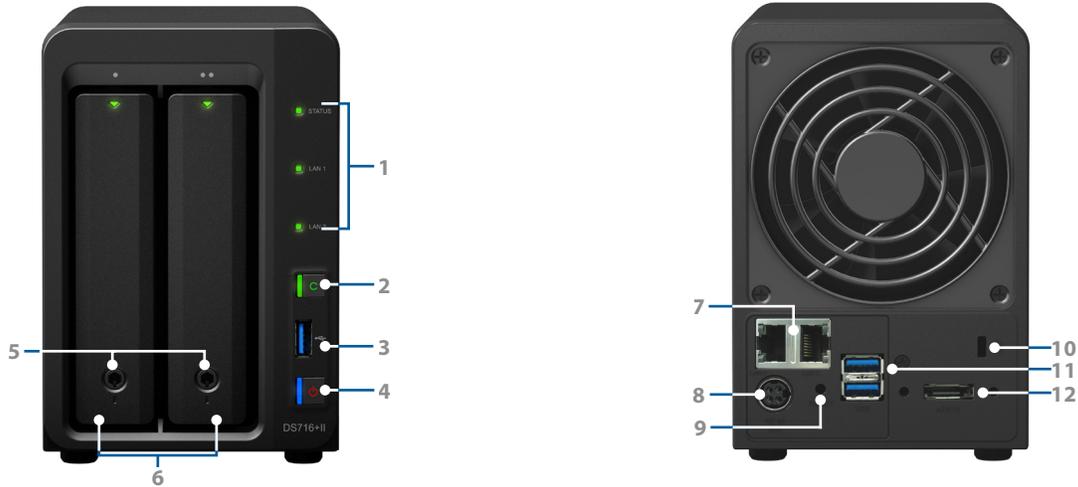
Virtualization Ready

With iSCSI support in DSM, DS716+II provides seamless storage solutions for virtualization environments, including VMware®, Citrix®, and Hyper-V®. With VMware vSphere 5 and VAAI integration, DS716+II helps offload specific storage operations and optimizes computation power for unparalleled performance and efficiency in VMware environments. It is the ideal alternative to SAN solution for businesses. Affordable and cost-effective, iSCSI allows SMB users to consolidate storage into data center storage arrays while providing hosts with the illusion of locally-attached disks.

Energy Efficient and Easy Management Design

Synology DS716+II is designed and developed with energy efficiency in mind. Compared with the average storage server counterparts, DS716+II consumes only 19.14W in regular operation. The support of Wake on LAN/WAN and scheduled power on and off can further reduce power consumption and operation cost. HDD hibernation can be configured to take effect automatically when the system has been inactive for a specified period of time. This not only saves energy but also extends the lifespan of the hard disks.

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 copy button	3	USB 3.0 port	4	Power button
5	Tray lock	6	Drive tray	7	Gigabit (RJ-45) LAN port	8	Power port
9	Reset button	10	Kensington Security Slot	11	USB 3.0 port	12	eSATA port

Technical Specifications

Hardware

CPU	Intel Celeron N3160 quad-core 1.6GHz, burst up to 2.24GHz
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 2GB
Compatible drive type	3.5"/2.5" SATA III/II x 2 (hard drives not included)
Maximum internal raw capacity	16TB (8TB HDD x 2) (actual capacity dependent on volume types)
External ports	USB 3.0 port x 3, eSATA port x 1
Size (HxWxD)	157 mm x 103.5 mm x 232 mm
Weight	1.75 kg
LAN	Gigabit (RJ-45) x 2
Wireless support	Yes (wireless dongles not included)
Wake on LAN/WAN	Yes
Scheduled power on/off	Yes
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: 512, Maximum iSCSI Target: 32, Maximum iSCSI LUN: 256, iSCSI LUN clone/snapshot support; SSD read/write cache support
Supported RAID type	Synology Hybrid RAID (SHR), Basic, JBOD, RAID 0, RAID 1; with Synology Expansion Unit DX513/DX213: RAID 5, RAID 6, RAID 10
File sharing capability	Maximum user account: 2048, Maximum group: 256, Maximum shared folder: 512, Maximum concurrent CIFS/AFP/FTP/File Station connection: 512
Privilege	Windows Access Control List (ACL)
Directory service	Windows AD Integration: Domain Users login via Samba (CIFS)/AFP/FTP/File Station, LDAP integration
Virtualization	VMware vSphere 5, Microsoft Hyper-V, Citrix ready
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, 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 and Mac OS X® 10.10 onwards
Supported browsers	Chrome™, Firefox®, Internet Explorer® 8 onwards, Safari® 7 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, Český, 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: 8
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
High Availability Manager	Combines two DS716+II into one high-availability cluster
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: 512, 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 task: 80
Log Center	SSL connection, log rotation: 6 months, 1 year, 2 years, 3 years, email notification
MailPlus	Intuitive webmail interface for MailPlus Server; customizable mail labels, filters and user interface
MailPlus Server	Secure, reliable, and private mail server solution with High-availability, load balancing, security and filtering design (Including free MailPlus licenses for 5 mail accounts. Procurement of additional licenses is required.)
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: 40 (total of 1200 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	DS716+II main unit, Welcome note, accessory pack, AC power adapter, RJ-45 LAN cable x 2
Optional accessories	Camera License Pack, VS360HD, Synology Expansion Unit DX513/DX213
Warranty	3 Years

*Model specifications are subject to change without notice. Please refer to www.synology.com for the latest information.
  1. Performance figures could vary on different environments.
  2. DS716+II supports one Synology Expansion Unit DX513/DX213, sold separately.
  3. DS716+II can transcode 4K video to 1080p or lower. The concurrent channels of Full HD video transcoding may vary depending on the video codec, resolution, bitrate and FPS.

DS716+II-2016-ENU-REV001