# Synology



# DiskStation DS1513+

With its superior performance, scalability, resilience, and comprehensive features, Synology<sup>®</sup> DS1513+ is the ideal storage solution for your growing SMB. The DS1513+ can help to simplify data management, providing a centralized destination for storage, backup, and sharing - with minimal setup and the freedom to expand capacity at any time. The DS1513+ is backed by Synology's 3-year limited warranty.

## **Highlights**

- 202.34 MB/sec Writing, 350.94
  MB/sec Reading
- Four LAN Ports with Link
  Aggregation Support
- Scale Up to 60TB with Synology DX513
- Expandable RAM Module (Up to 4GB)
- CPU Passive Cooling Technology
  & System Fan Redundancy
- VMware<sup>®</sup>, Citrix<sup>®</sup>, Microsoft<sup>®</sup>
  Hyper-V<sup>®</sup> Ready
- High Availability and Automatic Failover by SHA
- Powered by Synology DiskStation Manager (DSM)

## **Superior Performance**

The Synology DS1513+ is built for speed. With dual core CPU and expandable RAM capacity, the DS1513+ is ideal for the mission critical tasks of SMBs as well as the most intensive applications from data-encryption to video-transcoding. With link aggregation, Synology DS1513+ can deliver up to an average 350.94 MB/sec reading and 202.34 MB/sec writing speed under RAID 5 configuration in a Windows® environment.<sup>1</sup>

## **Resilient and Reliable**

In addition to superior performance, the DS1513+ is built for reliability. Four LAN ports provide redundancy in the event of unexpected hardware failure while hot swappable drives also help to minimize system downtime during drive replacement. Furthermore, passive cooling technology eliminates the dependency upon a dedicated processor cooling fan. Should a fan fail, built-in redundancy mechanisms will spin up functional fan(s) to improve ventilation.

Uninterrupted availability is a critical goal for all businesses; however, many businesses worldwide still remain unprepared for disaster. Synology High Availability (SHA) can ensure 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.

## **Unparalleled Flexibility**

As your data storage needs grow, Synology's DS1513+ can grow with you . The DS1513+ can be connected to dedicated expansion units for additional storage on the fly, growing capacity with minimal effort. When paired with two DX513 expansion units<sup>2</sup> through specially designed eSATA connectors, raw capacity can be as high as 60 TB.



Figure 1) Superior Performance

Multiple LAN ports with link aggregation support allows D\$1513+ to deliver superior performance.



Figure 2) Resilient and Reliable

With multiple redundant LAN ports, DS1513+ is resilient enough to be entrusted with your most mission critical tasks.

### Feature-Rich Business Applications

Put your data to work with Synology's DS1513+. With Windows ACL and LDAP support DS1513+ fits easily into any existing workgroup environment, providing detailed access control and efficient privilege settings. A wealth of SMB applications including printer sharing, VPN server, ERP software, mail server, web server, anti-virus, and network video surveillance, allows a single Synology DS1513+ to replace several pieces of traditional hardware and helps to maximize your productivity while keeping cost and effort to a minimum.

### **Easy Backup Solutions**

To protect your critical business data, DS1513+ can become a centralized backup target for consolidating fragmented and unstructured information across your network through a range of options. PC users can backup to DS1513+ with Synology's Data Replicator, while DS1513+ also fully supports Mac OS X®'s native Apple® Time Machine®. Synology's own backup wizard can back up information to another Synology NAS or any rsync server, with the option of using an encrypted connection, or to an external hard drive via USB 3.0 or eSATA. The wizard can also back up your information to the cloud, including Amazon® S3, Glacier, and STRATO HiDrive.

## **Virtualization Ready**

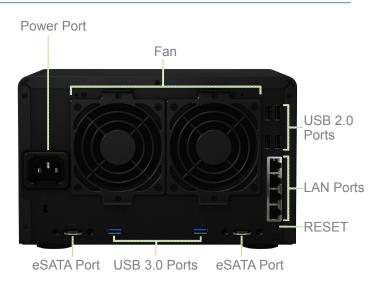
With the iSCSI support in DSM, DS1513+ provides seamless storage solutions for virtualization environments, including VMware, Citrix, and Hyper-V. VMware vSphere®5 and VAAI integration, DS1513+ helps offload specific storage operations and optimizes computation power for unparalleled performance and 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 Design**

Synology DiskStation are designed and developed with energy efficiency in mind. Compared with the average PC counterparts, Synology DS1513+ consumes only 51 watts in operation. Wake on LAN/WAN and scheduled power on/off features can further reduce power consumption and operation costs. HDD hibernation can be configured to take effect automatically when the system has been inactive for a specified period of time to save energy and extend hard disk life. All Synology products are produced with RoHS compliant parts and packed with recyclable packing materials. Synology acknowledges the responsibility of a global citizen and works continually to reduce the environmental impact of every product.

# **Connections & Buttons**





# **Technical Specifications**

### Hardware

CPU Frequency	Dual Core 2.13 GHz
Floating Point	Yes
RAM Size	DDR3 2 GB (Expandable up to 4 GB)
Internal HDD/SSD	3.5" or 2.5" SATA(II) X 5 (hard drives not included)
Max Internal Capacity	20 TB (4 TB HDD X 5) (actual capacity will differ according to volume types)
Hot Swappable HDD	Yes
External HDD Interface	USB 3.0 ports X 2, USB 2.0 ports X 4, eSATA X 2
Size (HxWxD)	157x 248 x 233 mm
Weight	4.25 kg
LAN	Gigabit X 4
Wake on LAN/WAN	Yes
Wireless Support	Yes (wireless dongles not included)
Noise Level <sup>3</sup>	22.1 dB(A)
AC Input Power Voltage	100V to 240V
Power Frequency	50 Hz to 60 Hz, 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 <sup>₄</sup>	51W (Access), 25.75W (HDD 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), Shared Folder Sync - Max Task Number: 8, 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 audio, DS cam, DS cloud, DS download, DS file, DS finder, DS photo+, DS video
Windows Phone Applications	DS audio, DS finder, DS photo+, DS video

### **Add-on Packages**

Surveillance Station	Default IP cam #: 1, MAX IP cam # (licenses required): 20 (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 : 20, 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: 8, Multiple File Versions Retained, Instant File Restoration
Cloud Station	Maximum User Accounts: 32, Retain Historical and Deleted File Versions
DLNA®/UPnP® Media Server	DLNA compliant, PS3®/Xbox 360® supported
Download Station	Supported Download Protocols: BT/HTTP/FTP/NZB/eMule Maximum Concurrent Download Tasks: 80
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: 108 TB, Max Internal Volume #: 512, Max iSCSI Target #: 32, Max iSCSI LUN#: 256; Raid Clone/Snapshot support; Supported RAID Type: Synology Hybrid RAID, Basic, JBOD, RAID 0, RAID 1 RAID 5, RAID 6, RAID 10; Synology Expansion Unit Support : DX513, DX213
File Sharing Capability	Max User Account: 2048, Max Group: 256, Max Shared Folder: 256, Max Concurrent CIFS/AFP/FTP Connections: 512
Privilege	Windows Access Control List (ACL)
Directory Service	Windows AD Domain Integration, LDAP Integration
Virtualization	VMware vSphere 4, Microsoft Hyper-V, Citrix Ready
Security	FTP over SSL/TLS, IP Auto-Block, Firewall, Encrypted Network Backup over Rsync, HTTPS Connection
Utilities	Synology Assistant, Synology Data Replicator
Supported Clients	Windows XP onward, Mac OS X 10.5 onward, Ubuntu 9.04 onward
Supported Browsers	Chrome, Internet Explorer®: 8 onwards, Firefox®, Safari®
Language	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Mag 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	D\$1513+ Main Unit, Welcome Note, Assembling Kit, AC Power Cord, RJ-45 LAN Cable X2
Optional Accessories	Remote, Camera License Pack, 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.DS1513+ supports up to two Synology DX513/DX213, sold separately. 3.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: 15.9 dB(A); Temperature: 23.5°C; Humidity: 61%; More details about dB(A) value, check http://www.memtechacoustical.com/facts.asp

4. Power consumption is measured when fully loaded with Western Digital® 2TB WD2002FYPS hard drive(s).

### 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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