# DiskStation® DS1522+



**Brand:** Synology

**Product Code:** DS1522+

**Availability:** 10 **Weight:** 2.70kg

**Dimensions:** 223.00mm x 230.00mm x

166.00mm

**Call for Price**:

#### **Short Description**

Synology 5-bay DiskStation DS1522+ (Diskless)

#### **Description**

# Flexible data management for homes and small business

The 5-bay Synology DiskStation DS1522+ is easy to scale and expand as your needs change, with optional support for up to 15 drives, 10GbE networking, and NVMe SSD caching. Powered by Synology DiskStation Manager (DSM), it offers a flexible all-inone solution for data sharing, synchronization, backup, and surveillance.



Over 736/796 MB/s sequential read/write<sup>1</sup>



# 8 GB DDR4 ECC (max. 32 GB)

Memory



Four built-in 1GbE ports with easy 10GbE option<sup>2</sup>

Connectivity



Up to 15 drive bays with 2 DX517 expansion units<sup>2</sup>
Scalability

Synology has won the Readers' Choice & Business Choice for best NAS devices in 2024 from PCMag. This is the 13th consecutive year Synology has won the Readers' Choice award and 10th overall win for Business Choice award.

# Simply faster

DS1522+ can handle more demanding application workloads and a greater number of concurrent users compared to prior-generation systems. Experience faster file indexing in Synology Drive, photo organization in Photos, and concurrent file transfers.

Synology Drive 24% faster file indexing

Synology Photos 25% faster photo indexing

Multiple file transfers

# 32% faster random write

# Flexible networking options

Reduce transfer times with the DS1522+, designed to accelerate your workloads. Easily add faster networking and NVMe drives to further boost performance.

Up to 736/796 MB/s read/write

Up to 10GbE networking

2 x M.2 NVMe cache & storage pool

Everything you need for your home office

Make the most of high-performance networking and file access without taking up unnecessary space. DS1522+ comes equipped with 5 bays and can scale up to 15 bays with 2 DX517 expansion units as your data needs grow.

5 bays 80 TB

-

15 bays 240 TB

# Store, share, and protect

Manage all your documents, photos, and other files, back up applications and devices, or protect your assets with professional video surveillance.





Multi-Layered Backup



**Smart Surveillance** 

### **File Server**

Store and access files from all your devices, and protect them with smart versioning. Sort, manage, share, and sync your data across locations.

#### A private cloud for all your devices

Store, sync, and access data from any device, wherever you are with Synology's private cloud solution. Sync data between different platforms and devices, and access your files through mobile apps, desktop clients, and a browser-based interface. Leverage smart versioning to back up important data via desktop and mobile applications.

### Dependable and secure network storage

Use shared folders on your Synology device as reliable storage available from anywhere on your local network over all common protocols (SMB/NFS/WebDAV/FTP). Protect your files against accidental changes and removal or even malware attacks with built-in snapshot technology and other backup options.

# Sort, manage, and share your files

Rely on our file, photo, and multimedia management apps to sort your data by metadata, filters, and labels. Safely share files and folders with family, colleagues, or business customers thanks to granular access and sharing permissions. Create convenient sharing links and secure shared files with expiration dates and individual passwords. Let friends or clients review photos remotely and give easy feedback through star ratings.

#### Sync files and folders between sites

Benefit from two efficient ways to keep files and folders synchronized between different locations — such as your home and your business, or teams in different countries. Sync folders one or two-way between Synology devices using Synology Drive ShareSync, a free site-to-site solution. Or choose to leverage our secure data centers to store your data in the cloud, while keeping a cache of frequently accessed or manually pinned files on your DS1522+ with Synology Hybrid Share. Such hybrid cloud storage lets you access data at LAN speeds without being limited by your local storage size or bandwidth.

### **Multi-Layered Backup**

Back up files, folders, physical devices, VMs, and SaaS applications with free solutions, and protect your NAS with built-in technologies.

#### Protect full endpoints, servers, and VMs

Securely back up Windows clients and servers, Linux endpoints, VMware<sup>®</sup> and Hyper-V<sup>®</sup> virtual machines, and other Synology devices. Leverage built-in deduplication technology to greatly reduce backup sizes and multi-versioning restore systems to a time point of your choice.

### Make local backups of your cloud apps

Protect business Microsoft 365 and Google Workspace accounts by maintaining complete offline copies of your crucial information and configurations with Active Backup for Microsoft 365 and Active Backup for Google Workspace.

### Back up documents and multimedia

Set up backup tasks to protect important folders on your PC and macOS device with Synology Drive. On your mobile device, automatically save another copy of the photos and videos you take, and easily organize and share them through Synology Photos.

#### **Back up your NAS to multiple destinations**

Protecting the data on your Synology system, and your server itself, means storing frequent emergency copies to multiple locations. Built-in tools in Synology DSM let you efficiently back up files, folders, or your entire system from your device to remote servers, external drives, or Synology and third-party cloud storage, with space-saving deduplication technology reducing total backup sizes, and customizable backup and retention schedules for maximum flexibility.

#### **High-frequency protection with snapshots**

Take point-in-time snapshots of shared folders and LUNs at intervals of down to 5 minutes to protect against data loss, accidental deletion, or malware attacks. Set a custom retention schedule and roll back files and VMs to a version that is unaffected.

#### **Smart Surveillance**

Transform your Synology device into a full-featured video management system for a wide range of compatible IP cameras.

#### Wide compatibility

Connect up to 40 IP cameras from a selection of over 8,300 validated models thanks to wide camera compatibility and ONVIF support in Synology Surveillance Station.

### **Secure and private**

Footage stored locally can be protected from unauthorized access by industry-standard AES-256 encryption.

## 24/7 everywhere access

Monitor live streams or watch recordings from web browser, desktop client, or the DS cam mobile app.

#### **Software**

**DSM Specifications** 

Storage Management Ma

Maximum Single Volume

108 TB

Size

Maximum Internal Volume 64

Number

M.2 SSD Storage Pool

Support\*

SSD Read/Write Cache

(Determining cache size)

SSD TRIM

Supported RAID Type

- Synology Hybrid RAID
- Basic
- JBOD
- RAID 0
- RAID 1
- RAID 5
- RAID 6
- RAID 10

**RAID Migration** 

• Basic to RAID 1

Volume Expansion with Larger HDDs

Volume Expansion by Adding a HDD

Global Hot Spare Supported RAID Type

**Notes** 

- Basic to RAID 5
- RAID 1 to RAID 5
- RAID 5 to RAID 6
- Synology Hybrid RAID
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- Synology Hybrid RAID
- JBOD
- RAID 5
- RAID 6
- Synology Hybrid RAID
- RAID 1
- RAID 5
- RAID 6
- RAID 10
- Creating M.2 storage pools requires the use of Synology-verified SSDs, which are rigorously tested under extreme temperature conditions. Thermal parameters for SSDs and NAS units are fine-tuned to ensure optimal management of thermal conditions under I/O-intensive environments. (Learn more)
- Usable capacity for each volume will be lower than the maximum volume size and is dependent on the filesystem and

the amount of system metadata stored.

- Actual maximum storage pool and volume sizes vary depending on drives used, the number of drive bays available, and the RAID configuration.
- Each internal volume (may consist of multiple drives) is expandable up to 108TB.

File System

**Internal Drives** 

**External Drives** 

• Btrfs

• ext4

Btrfs

• ext4

• ext3

• FAT

• NTFS

• HFS+

• exFAT

• SMB

• AFP

• NFS

• FTP

• WebDAV

• Rsync

Maximum Concurrent

2,000

SMB/AFP/FTP Connections

2,000

SMB/AFP/FTP Connections

(with RAM expansion)

Maximum Concurrent

Windows Access Control

List (ACL) Integration

NFS Kerberos Authentication

Notes

 Regarding data concerning tests with RAM expansion, all memory slots are

File Services

File Protocol

installed with the maximum capacity of supported RAM.

 The testing standard was based on the maximum number of concurrent connections supported

connections supported by this model. During the testing, 25% of the connections were used to transfer files concurrently. The transfer process guaranteed that the connections were not interrupted; the minimum transfer speed was not

guaranteed.

Account & Shared Folder M.	Iaximum Local User	2,048
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Accounts

Maximum Local Groups 256 Maximum Shared Folder 512 Maximum Shared Folder 32

Sync Tasks

Hybrid ShareHybrid Share Folder Number 10Hyper BackupFolder and Package BackupEntire System Backup

Notes Full-system backup requires

DSM 7.2 or later.

High Availability Synology High Availability

Log CenterSyslog Events per Second800VirtualizationVMware ESXi 6.5 and VAAI

Windows Server 2022

Citrix Ready OpenStack

General Specifications Supported Protocols SMB1 (CIFS), SMB2,

SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, HTTP,

HTTPs, FTP, SNMP, LDAP,

CalDAV

Supported Browsers • Chrome

• Firefox

• Edge

• Safari

Supported Language English, Deutsch, Français,

> Italiano, Español, Dansk, Norsk, Svenska, Nederlands, ??????, Polski, Magyar,

Português do Brasil,

Português Europeu, Türkçe, ?eský, ??????, ???, ???,

????, ????

For an updated list of Notes

> supported browser versions, check the **DSM** Technical

Specifications.

Add-on Packages view the complete package list

Central Management System

Synology Chat Suggested Users

Notes

100

 Measured with simulated users, each with an average record of 20,000 messages, emojis, or stickers. The required server response time is below ten seconds.

• Models with expandable memory are tested with their maximum supported memory.

**Download Station** Maximum Concurrent 80

**Download Tasks** 

**SAN Manager** Maximum iSCSI Target 128

Number

256 Maximum LUN

LUN Clone/Snapshot,

Windows ODX

Synology MailPlus / Free Email Accounts 5 (Additional accounts

require purchase of licenses) MailPlus Server

Suggested Users Maximum Server Performance Notes 500 1,224,000 emails per day, approx. 37GB

- Suggested users is derived from testing in an environment with 20% heavy users (each with 20,000 prepopulated emails and receiving 240 emails per day) and 80% light users (each receiving an average of 20 emails per day). Learn more
- Models with more than 4 bays were installed with two SSDs for SSD cache.
- Models with expandable memory are tested with their maximum supported memory.
- The performance of the mail system will slightly decrease in high-availability mode due to data synchronization between the two servers.
- Functions that were enabled in all of the tests above: antispam, anti-virus, DNSBL, greylist, content scan, full-text search (English only).

Media Server Synology Photos DLNA Compliance Facial Recognition Object Recognition

Snapshot Replication	Maximum Snapshots per Shared Folder	1,024
	Maximum of System	65,536
	Snapshots	,
Surveillance Station	Default Licenses	2 (Additional cameras require purchase of licenses)
	Suggested Maximum IP Cameras and Total FPS	<ul> <li>720p: 40 channels,</li> <li>1200 FPS</li> </ul>
	(H.264)	• 1080p: 40 channels, 1050 FPS
		• 3M: 40 channels, 600 FPS
		• 5M: 30 channels, 360 FPS
		• 4K: 20 channels, 200 FPS
	Suggested Maximum IP Cameras and Total FPS	• 720p: 40 channels, 1200 FPS
	(H.265)	• 1080p: 40 channels, 1200 FPS
		• 3M: 40 channels, 1000 FPS
		• 5M: 40 channels, 600 FPS
		• 4K: 30 channels, 300 FPS
	Notes	<ul> <li>Performance figures are obtained from testing conducted with the device fully populated with drives, with their default</li> </ul>
		memory configuration, and under a continuous
		recording setup.
		A , 1 ,

Actual system

based on

capabilities may vary

configuration, drive performance, enabled

features, and the

- presence of additional workloads.
- Use NVR Selector to quickly find a suitable model based on your requirements.
- The maximum number of camera stream outputs is 2 times the suggested maximum number of IP cameras.

**Synology Drive** 

Recommended Number of Concurrent Sync Clients

Recommended Number of **Hosted Files** 

350 (the number of connections that can be maintained when the recommended number of hosted files was reached) 5,000,000 (applies to files indexed or hosted by Synology Drive. For file access through other standard protocols, refer to the File Services section above)

- Exceeding the recommended numbers above will not block application operations, but may result in longer response time.
- Utilizing SSD cache can significantly improve performance.
- Models with expandable memory are tested with their maximum supported memory.
- Btrfs file system and non-encrypted shared folders were used during the

**Notes** 

aforementioned testing.

3,000

Synology Office Suggested Users

Notes

• Suggested users is derived from testing in an environment with 60% idle users (each logging in and viewing documents) and 40% active users (each executing random actions at intervals of 20 to 40 seconds) operating within documents, each document having 30 users. Learn more

- Models with expandable memory are tested with their maximum supported memory.
- Client performance may affect maximum simultaneous editing users. Client PCs used for testing: Intel Core i3-3220 / 8GB RAM

<u>Virtual Machine Manager</u> Recommended Virtual 4 (<u>Learn more</u>)

**Machine Instances** 

Recommended Virtual DSM 4 (including 1 Free License)

Number (Licenses required)

Notes The specifications vary

depending on system configuration and memory

size.

VPN Server Maximum Connections 40

**Specification** 

NAS	
Compatible Drive Type	3.5
CPU Architecture	64-bit

CPU Core	2
CPU Frequency	2.6 (base) / 3.1 (turbo) GHz
CPU Model	AMD Ryzen R1600
CPU Quantity	1
Drive Bays	5
<b>Expansion Port</b>	2
Hardware Encryption	YES
Engine	
Hot Swappable Drive	YES
M.2 Drive Slots	2 (NVMe)
Maximum Memory	64 GB (32 GB x 2)
Capacity	
Memory	8 GB DDR4 ECC SODIMM
PCIe Expansion	1 x Gen3 x2 network upgrade slot
Power Supply Unit /	120 watts 100V to 240V AC 50/60 Hz, Single
Adapter	Phase
RJ-45 1GbE LAN Port	4
RJ-45 1GbE LAN Port	2
System Fan	92 mm x 92 mm x 2 pcs
Total Memory Slots	2

# **Product Gallery**





