

# DiskStation DS224+



**Brand:** Synology

**Product Code:** DS224+

**Availability:** 10

**Weight:** 1.30kg

**Dimensions:** 232.20mm x 108.00mm x  
165.00mm

**Call for Price:**

## Short Description

Synology 2-Bay DiskStation DS224+ (Diskless)

## Description

**Keep your data on-site**



**Consolidate and safeguard**

Protect all your data with integrated security features and centralized access.



## **Manage important data**

Share, back up, and access files, photos, surveillance video, and more.



## **Minimize energy impact**

15 watts under full operation keeps operating costs low.

## **Simply faster**

DS224+ is faster at indexing files in Synology Drive and Synology Photos and more capable of running demanding web applications compared to previous-generation systems.

**Web applications 62% more responses per second**

**Synology Drive 52% faster file indexing**

## **Synology Photos 28% faster image indexing**

### **Store, share, and protect**

Manage all your documents, images, and other files, back up applications and devices, and protect your property with professional video surveillance.

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### **Private cloud for data sharing**

Hybrid work in the private cloud

Store, sync, access, and share data from any device, wherever you are. Work together seamlessly across different platforms, accessing files through mobile apps, desktop clients, or a browser-based interface. Quickly and easily roll back files in case of unwanted deletion or modification thanks to smart versioning.

### **Keep your photos organized**

**Synchronize data between sites**

## **Manage data with the power of the cloud**



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## **Multi-layered backup**

Back up workstations, smartphones, cloud apps, and more

Consolidate and automate backup tasks for workstations, file servers, VMs, SaaS applications, and more with Active Backup Suite. Administer device backups remotely through a centralized portal and quickly restore specific files or entire devices to keep

your business up and running. Take advantage of built-in remote backup solutions designed to protect your data with seamless 3-2-1 backup configurations.

**Perform full Synology system backups**

**Protect folders and LUNs with snapshots**



# Smart surveillance management

## Synology Surveillance Station

Protecting your business has never been easier, with centralized management, support for over 8,300 IP camera models, and remote monitoring and playback. Synology's video management system provides all the tools you need for live monitoring, investigation, management, and backup.

## Dual recording to the cloud



## Btrfs: advanced file system for data protection

The Synology DiskStation Manager (DSM) operating system that powers the DS224+ uses the advanced Btrfs file system, which safeguards your data against corruption and allows for the reversal of unintended or malicious changes through the use of snapshot technology.



### Software

DSM Specifications

#### [Storage Management](#)

Maximum Single Volume Size 108 TB

Maximum Internal Volume Number 64

SSD TRIM

Supported RAID Type

- Synology Hybrid RAID
- Basic
- JBOD
- RAID 0
- RAID 1

RAID Migration

Volume Expansion with Larger HDDs

- Basic to RAID 1
- Synology Hybrid RAID
- RAID 1

Volume Expansion by Adding a HDD

- Synology Hybrid RAID

Notes

- 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 depend on drive sizes used, the number of drive bays available, and the RAID configuration.

## File System

Internal Drives

- Btrfs
- ext4

External Drives

- Btrfs
- ext4
- ext3
- FAT
- NTFS
- HFS+
- exFAT

## File Services

File Protocol

- SMB
- AFP
- NFS
- FTP
- WebDAV
- Rsync

Maximum Concurrent SMB/AFP/FTP Connections 500

Maximum Concurrent SMB/AFP/FTP Connections (with RAM expansion) 1,500

Windows Access Control List (ACL) Integration

NFS Kerberos Authentication

Notes

- Regarding data concerning tests with RAM expansion, all memory slots are installed with the maximum capacity of supported RAM.



- The testing standard was based on the maximum number of concurrent 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.

<a href="#">Account &amp; Shared Folder</a>	Maximum Local User Accounts	2,048
	Maximum Local Groups	256
	Maximum Shared Folder	256
	Maximum Shared Folder Sync Tasks	8
<a href="#">Hybrid Share</a>	Maximum Hybrid Share Folders	10
<a href="#">Hyper Backup</a>	Folder and Package Backup Entire System Backup Notes	Full-system backup requires DSM 7.2 or later.
<a href="#">High Availability Log Center</a>	Synology High Availability Syslog Events per Second	800
<a href="#">General Specifications</a>	Supported Protocols	SMB1 (CIFS), SMB2, SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, HTTP, HTTPS, FTP, SNMP, LDAP, CalDAV
	Supported Browsers	<ul style="list-style-type: none"> <li>• Chrome</li> <li>• Firefox</li> <li>• Edge</li> <li>• Safari</li> </ul>
	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 supported browser versions, check the [DSM Technical Specifications](#).

Notes

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 Download Tasks

80

[SAN Manager](#)

Maximum iSCSI Target Number

128

Maximum LUN LUN Clone/Snapshot, Windows ODX

256

[Synology MailPlus / MailPlus Server](#)

Free Email Accounts

5 ([Additional accounts require purchase of licenses](#))

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 pre-populated emails and receiving 240 emails per day) and 80% light users (each receiving an average of 20 emails per day). [Learn more](#)

- 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: anti-spam, anti-virus, DNSBL, greylist, content scan, full-text search (English only).

[Media Server](#)  
[Synology Photos](#)

DLNA Compliance  
Facial Recognition  
Object Recognition  
Notes

Object recognition requires an upgrade of memory capacity to a minimum of 4 GB.

[Snapshot Replication](#)

Maximum Snapshots per Shared Folder  
Maximum of System Snapshots

1,024

65,536

[Surveillance Station](#)

Default Licenses

2 ([Additional cameras require purchase of licenses](#))

Suggested Maximum IP  
Cameras and Total FPS  
(H.264)

- 720p: 25 channels, 750 FPS
- 1080p: 25 channels, 750 FPS
- 3M: 25 channels, 350 FPS
- 5M: 25 channels, 280 FPS
- 4K: 17 channels, 170 FPS

Suggested Maximum IP  
Cameras and Total FPS  
(H.265)

- 720p: 25 channels, 750 FPS
- 1080p: 25 channels, 750 FPS
- 3M: 25 channels, 600 FPS
- 5M: 25 channels, 480 FPS
- 4K: 20 channels, 200 FPS

Notes

- Performance figures are obtained from testing conducted with the device fully populated with drives, with their default memory configuration, and under a continuous recording setup. Actual system capabilities may vary based on configuration, drive performance, enabled features, and the presence of additional workloads.
- Use [NVR Selector](#) to quickly find a suitable model based on your requirements.

[Synology Drive](#)

Recommended Number of Concurrent Sync Clients	350 (the number of connections that can be maintained when the recommended number of hosted files was reached)	<ul style="list-style-type: none"><li>• The maximum number of camera stream outputs is 2 times the suggested maximum number of IP cameras.</li></ul>
Recommended Number of Hosted Files	5,000,000 (applies to files indexed or hosted by <a href="#">Synology Drive</a> . For file access through other standard protocols, refer to the File Services section above)	
Notes		<ul style="list-style-type: none"><li>• Exceeding the recommended numbers above will not block application operations, but may result in longer response time.</li><li>• Models with expandable memory are tested with their maximum supported memory.</li><li>• Btrfs file system and non-encrypted shared folders were used during the aforementioned testing.</li></ul>

[Synology Office](#)

Suggested Users	1,500	
Notes		<ul style="list-style-type: none"><li>• Suggested users is derived from testing in an environment with 60% idle users (each logging in and viewing documents)</li></ul>

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

<a href="#">Virtual Machine Manager</a>	Recommended Virtual Machine Instances	2 ( <a href="#">Learn more</a> )
	Recommended Virtual DSM Number ( <a href="#">Licenses required</a> )	2 (including 1 Free License)
	Notes	The specifications vary depending on system configuration and memory size.
<a href="#">VPN Server</a>	Maximum Connections	40

## Specification

NAS	
Compatible Drive Type	3.5
CPU Architecture	64-bit
CPU Core	4
CPU Frequency	2.0 (base) / 2.7 (turbo) GHz
CPU Model	Intel Celeron J4125
CPU Quantity	1
Drive Bays	2
Hardware Encryption Engine	YES
Hot Swappable Drive	YES
Maximum Memory	18 GB (2 GB + 16 GB)

Capacity	
Memory	2 GB DDR4 non-ECC
Power Supply Unit / Adapter	60 watts 100V to 240V AC 50/60 Hz, Single Phase
RJ-45 1GbE LAN Port	2
System Fan	92 mm x 92 mm x 1 pcs
Total Memory Slots	1
USB 3.2 Gen 1 Port	2

## **Product Gallery**