

Product Specifications

DS423+

Synology

Hardware Specs

CPU	
CPU Model	Intel Celeron J4125
CPU Quantity	1
CPU Core	4
CPU Architecture	64-bit
CPU Frequency	2.0 (base) / 2.7 (turbo) GHz
Hardware Encryption Engine	v
Memory	
System Memory	2 GB DDR4 non-ECC
Total Memory Slots	1
Maximum Memory Capacity	6 GB (2 GB + 4 GB)
Notes	• Synology reserves the right to replace memory modules with the same or higher frequency based on supplier's product life cycle status. Rest assured that the compatibility and stability have been strictly verified with the same benchmark to ensure identical performance. • Please select Synology memory modules for optimum compatibility and reliability. Synology will not provide complete product warranty or technical support if non-Synology memory modules are used for memory expansion.
Storage	
Drive Bays	4
M.2 Drive Slots	2 (NVMe)
Drive Type (See all supported drives)	• 3.5" SATA HDD • 2.5" SATA SSD

- M.2 2280 NVMe SSD
-

Hot Swappable Drive*	v
Notes	The hot swappable drive feature is not supported by M.2 SSD slots.
External Ports	
RJ-45 1GbE LAN Port	2
USB 3.2 Gen 1 Port	2
Notes	This device's 1GbE LAN ports have a maximum transmission unit (MTU) size of 1,500 bytes.
Appearance	
Size (Height x Width x Depth)	166 mm x 199 mm x 223 mm
Weight	2.18 kg
Others	
System Fan	92 mm x 92 mm x 2 pcs
Fan Speed Mode	• Full-Speed Mode • Cool Mode • Quiet Mode
Brightness Adjustable Front LED Indicators	v
Power Recovery	v
Noise Level*	19.8 dB(A)
Scheduled Power On / Off	v
Wake on LAN / WAN	v
Power Supply Unit / Adapter	90 watts
AC Input Power Voltage	100V to 240V AC
Power Frequency	50/60 Hz, Single Phase
Power Consumption*	28.3 watts (Access) 8.45 watts (HDD Hibernation)

British Thermal Unit	96.5 BTU/hr (Access) 28.81 BTU/hr (HDD Hibernation)
Notes	- For more information on how power consumption is measured, refer to this article. - Noise testing was conducted with the Synology system fully installed with Synology SATA HDDs and in an idle state. Two G.R.A.S. Type 40AE microphones are placed at a 1 m distance from the front and rear of the device. Background noise: 16.49-17.51 dB(A); Temperature: 24.25-25.75°C; Humidity: 58.2-61.8%

Temperature

Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-20°C to 60°C (-5°F to 140°F)
Relative Humidity	5% to 95% RH

Certification

- FCC
- CE
- BSMI
- VCCI
- RCM
- UKCA
- EAC
- CCC
- KC
- BIS

Warranty

3-year hardware warranty, extendable to 5 years with [EW201](#) or [Extended Warranty Plus](#)

Notes

- The warranty period starts from the purchase date as stated on your purchase receipt. ([Learn more](#))
- [Extended Warranty Plus](#) is only available in Europe and North America. [EW201/EW202](#) is only available in Asia, Africa, and Oceania. For exact availability information please visit their respective websites.

Environment

RoHS Compliant

Packaging Content

- Main Unit X 1
- Accessory Pack X 1
- AC Power Adapter X 1
- AC Power Cord X 1
- RJ-45 LAN Cable X 2
- Quick Installation Guide X 1

Optional Accessories

- DDR4 non-ECC SODIMM: [D4NESO-2666-4G](#)
- Enterprise Series 3.5" SATA HDD: [HAT5300 Series](#)
- Plus Series 3.5" SATA HDD: [HAT3300 Series](#)
- Enterprise Series 2.5" SATA SSD: [SAT5200 Series](#)
- Enterprise Series M.2 2280 NVMe SSD: [SNV3400 Series](#)

Software Specs

DSM Specifications

Storage Management	
Maximum Single Volume Size	108 TB
Maximum Internal Volume Number	64
M.2 SSD Storage Pool Support*	v
SSD Read/Write Cache (Determining cache size)	v
SSD TRIM	v
Supported RAID Type	• Synology Hybrid RAID • Basic • JBOD • RAID 0 • RAID 1 • RAID 5 • RAID 6 • RAID 10
RAID Migration	• Basic to RAID 1 • Basic to RAID 5 • RAID 1 to RAID 5 • RAID 5 to RAID 6
Volume Expansion with Larger HDDs	• Synology Hybrid RAID • RAID 1 • RAID 5 • RAID 6 • RAID 10
Volume Expansion by Adding a HDD	• Synology Hybrid RAID • JBOD • RAID 5

Global Hot Spare Supported RAID Type	• Synology Hybrid RAID • RAID 1 • RAID 5
Notes	• Each internal volume (may consist of multiple drives) is expandable up to 108TB. • Actual maximum storage pool and volume sizes depend on drive sizes used, the number of drive bays available, and the RAID configuration. • 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. • 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)

File System

Internal Drives	• Btrfs • ext4
External Drives	• Btrfs • ext4 • ext3 • FAT32 • NTFS • HFS+ • exFAT

File Services

File Protocol	• SMB • AFP • NFS • FTP • WebDAV • Rsync
Maximum Number of SMB Connections (FSCT-Based) with RAM Expansion	10
Windows Access Control List	v

(ACL) Integration	
NFS Kerberos Authentication	v
Notes	• Connection value of this model is tested with Synology SATA HDD fully populated and all onboard network ports • SMB performance was evaluated using Microsoft File Server Capacity Tool (FSCT) version 1.3, with the following configuration: ◦ Test workload: HomeFolder scenario provided by the FSCT tool ◦ Test duration: 600 seconds ◦ Domain controller & FSCT controller: Windows Server 2022 ◦ FSCT clients: 8 × Windows 10 machines ◦ SMB feature: Directory leasing enabled

Account & Shared Folder

Maximum Local User Accounts	512
Maximum Local Groups	128
Maximum Shared Folder	128
Maximum Shared Folder Sync Tasks	4

Hybrid Share

Maximum Hybrid Share Folders	10
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Hyper Backup

Folder and Package Backup	v
Entire System Backup	v
Notes	Full-system backup requires DSM 7.2 or later.

High Availability

Synology High Availability

v

Log Center

Syslog Events per Second

800

Virtualization

VMware ESXi 6.5 and VAAI

v

Windows Server 2022

v

Citrix Ready

v

OpenStack

v

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, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文

Notes

For an updated list of supported browser versions, check the [DSM Technical Specifications](#).

Add-on Packages [view the complete package list](#)

Central Management System

v

Synology Chat

Maximum Number of Users

100

Notes

- 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 the maximum supported quantity installed.

Download Station

Maximum Concurrent
Download Tasks

80

SAN Manager

Maximum iSCSI Target
Number

2

Maximum LUN

2

LUN Clone/Snapshot,
Windows ODX

v

Synology MailPlus / MailPlus Server

Free Email Accounts

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

Maximum Number of Users

20

Notes

- The suggested maximum number of users is based on the following workload: 20% of users with a 20,000 item mailbox randomly performing actions and receiving 240 emails per day, and 80% of users receiving 20 emails per day. [Learn more](#)
- Models with SSD support are tested with a single SSD volume.
- Models with expandable memory are tested with the maximum supported quantity installed. [Learn more about memory requirements.](#)
- Operating in high-availability mode will incur additional overhead.
- Features enabled during evaluation: anti-spam, anti-virus, DNSBL, greylist, content scanning, and full-text

search (English).

Media Server

DLNA Compliance

v

Synology Photos

Facial Recognition

v

Object Recognition

v

Notes

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

Snapshot Replication

Maximum Snapshots per Shared Folder

128

Maximum of System Snapshots

256

Surveillance Station

Default Licenses

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

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

- 1080p: 40 channels, 800 FPS
- 3M: 35 channels, 350 FPS
- 5M: 28 channels, 280 FPS
- 4K: 17 channels, 170 FPS

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

- 1080p: 40 channels, 1200 FPS
- 3M: 40 channels, 600 FPS
- 5M: 40 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.
- The number of streams that can be viewed simultaneously is twice the suggested maximum

number of cameras. For example, if the suggested maximum number of cameras for a model is 10 under H.264, 1080p, the model can support up to 20 streams of the same specification at the same time.

Synology Drive

Maximum Number of Users	20
Maximum Number of Hosted Files	500,000 (applies to files indexed or hosted by Synology Drive . For file access through other standard protocols, refer to the File Services section above)
Notes	• The suggested maximum number of users is based on the following workload: 20% of users randomly perform file operations (upload, download, move, and delete), and 80% of users are logged in but idle. Learn more • Models with SSD support are tested with a single SSD volume. • Models with expandable memory are tested with the maximum supported quantity installed. • Exceeding the recommended numbers above will not block application operations, but may result in longer response time. • Btrfs file system and non-encrypted shared folders were used during the aforementioned testing.

Synology Office

Maximum Number of Users	20
Notes	• The suggested maximum number of users is based on the following workload: 20% of users are executing random actions at an average of 30-second intervals, and 80% of users are logged in and viewing a file. Learn more • Models with SSD support are tested with a single SSD volume. • Models with expandable memory are tested with the maximum supported quantity installed. • Client performance may affect maximum simultaneous editing users. Client PCs used for testing: Intel Core i3-3220 / 8GB RAM

Virtual Machine Manager

Recommended Virtual Machine Instances	2 (Learn more)
Recommended Virtual DSM	2 (including 1 Free License)

Number (Licenses required)	
Notes	The specifications vary depending on system configuration and memory size.
VPN Server	
Maximum Connections	4