Product

DS423+

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)

Compatible 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. • "Compatible drive type" indicates drives that have been tested to be compatible with Synology products. This term does not indicate the maximum connection speed of each drive bay.

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. • The USB 3.0 standard was renamed to USB 3.2 Gen 1 by the USB Implementers Forum (USB-IF) in 2019.

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 stae. 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

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

Notes	All memory modules will operate at the maximum frequency specified by the CPU manufacturer.

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 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	- 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 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	v

NFS Kerberos Authentication	v
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.

Account & Shared Folder

Maximum Local User Accounts	2,048
Maximum Local Groups	256
Maximum Shared Folder	512
Maximum Shared Folder Sync Tasks	8

Hybrid Share

Maximum Hybrid Share Folders	10

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

Antivirus by McAfee (Trial)
v

Central Management System
v

Synology Chat	
Suggested Concurrent 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. • For tested models with expandable memory, the maximum amount of RAM was installed.

Download Station

Maximum Concurrent Download Tasks	80

SAN Manager

Maximum iSCSI Target Number	128
Maximum LUN	256
LUN Clone/Snapshot, Windows ODX	v

Synology MailPlus / MailPlus Server

Free Email Accounts	5 (Additional accounts require purchase of licenses)
Suggested Maximum Users	500
Suggested Concurrent Users	100
Maximum Server Performance	1,224,000 emails per day, approx. 37GB
Notes	• Models with more than 4 bays were installed with two SSDs for SSD cache. • For tested models with expandable memory, the maximum amount of RAM was installed. • 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

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	1,024
Maximum of System Snapshots	65,536

Surveillance Station

Default Licenses	2 (Additional cameras require purchase of licenses)
Suggested Maximum IP Cameras and Total FPS (H.264)	720p: 40 channels, 1200 FPS 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)	720p: 40 channels, 1200 FPS 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 maximum number of camera stream outputs is 2 times the suggested maximum number of IP cameras.

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)
Recommended Number of Hosted Files	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)
Notes	• Exceeding the recommended numbers above will not block application operations, but may result in longer response time. • Utilizing SSD cache can significantly improve performance. • For tested models with expandable memory, the maximum amount of RAM was installed. • Btrfs file system and non-encrypted shared folders were used during the aforementioned testing.

Synology Office

Suggested Maximum Users	3,000
Suggested Concurrent Users	1,200
Notes	• Multiple files were opened for testing and each file was edited by 30 users simultaneously. • For tested models with expandable memory, the maximum amount of RAM was installed. • Client performance may affect maximum simultaneous editing users. Client PCs used for testing: Intel Core i3-3220 / 8GB RAM

Video Station

v

Virtual Machine Manager

Recommended Virtual Machine Instances	2 (Learn more)
Recommended Virtual DSM Number (Licenses required)	2 (including 1 Free License)
Notes	The specifications vary depending on system configuration and memory size.

VPN Server

Maximum Connections	40