$\textbf{Syno}logy^{^{\!\!\!\circ}}$

Product

DS423+



Hardware Specs

CPU	
CPU Model	Intel Celeron J4125
CPU Quantity	1
CPU Architecture	64-bit
CPU Frequency	4-core 2.0 (base) / 2.7 (burst) GHz
Hardware Encryption Engine (AES-NI)	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. For more information about the recommended memory configurations, please check the Hardware Installation Guide of your Synology product.
Storage	
Drive Bays	4
M.2 Drive Slots	2 (NVMe)

Compatible Drive Type* (See all supported drives)	3.5" SATA HDD2.5" SATA SSDM.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 (with Link Aggregation / Failover support)	
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 ModeCool ModeQuiet 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 W
Redundant Power Supply	-
AC Input Power Voltage	100V to 240V AC
Power Frequency	50/60 Hz, Single Phase
Power Consumption	28.3 W (Access) 8.45 W (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)

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.
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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 (White Paper)	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 RAIDJBODRAID 5
Global Hot Spare Supported RAID Type	Synology Hybrid RAIDRAID 1RAID 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	SMBAFPNFSFTPWebDAVRsync	
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	ChromeFirefoxEdgeSafari
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. When applicable, systems are tested configured with maximum memory and set to allow the maximum number of connections. 	
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)	
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 	
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 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)
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	

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