# **Syno**logy\*

Product

**DS423** 



# **Hardware Specs**

CPU		
CPU Model	Realtek RTD1619B	
CPU Quantity	1	
CPU Architecture	64-bit	
CPU Frequency	4-core 1.7 GHz	
Hardware Encryption Engine	V	
Memory		
System Memory	2 GB DDR4 non-ECC	
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.	
Storage		
Drive Bays	4	
Compatible Drive Type* (See all supported drives)	<ul><li>3.5" SATA HDD</li><li>2.5" SATA SSD</li></ul>	
Hot Swappable Drive*	V	
Notes	"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	<ul> <li>This device's 1GbE LAN ports have a maximum transmission unit (MTU) size of 1,500 bytes.</li> <li>The USB 3.0 standard was renamed to USB 3.2 Gen 1 by the USB Implementers Forum (USB-IF) in 2019.</li> </ul>
File System	
Internal Drives	Btrfs     EXT4
External Drives	<ul> <li>Btrfs</li> <li>EXT4</li> <li>EXT3</li> <li>FAT</li> <li>NTFS</li> <li>HFS+</li> <li>exFAT</li> </ul>
Appearance	
Size (Height x Width x Depth)	184 mm x 168 mm x 230 mm
Weight	2.21 kg
Others	
System Fan	80 mm x 80 mm x 2 pcs
Fan Speed Mode	<ul><li>Full-Speed Mode</li><li>Cool Mode</li><li>Quiet Mode</li></ul>
Brightness Adjustable Front LED Indicators	V
Power Recovery	V
Noise Level*	20.6 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	32.41 W (Access) 4.97 W (HDD Hibernation)
British Thermal Unit	110.52 BTU/hr (Access) 16.95 BTU/hr (HDD Hibernation)
Notes	<ul> <li>For more information on how power consumption is measured, refer to this article.</li> <li>Noise Level Testing Environment: Fully loaded with Seagate 2TB ST2000VN000 hard drive(s) in the idle state. Two G.R.A.S. Type 40AE microphones, each set up 1 meter away from the Synology NAS at the front and rear. Background noise: 16.49-17.51 dB(A); Temperature: 24.25-25.75°C; Humidity: 58.2-61.8%</li> </ul>

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

2-year hardware warranty, extendable to 4 years with Extended Warranty Plus

### Notes

- Availability varies by region. Before purchasing, please visit the official web pages of EW201/202 and Extended Warranty Plus for a list of eligible regions.
- 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**

- 3.5" SATA HDD: HAT5300/HAT3300
- 2.5" SATA SSD: SAT5210
- Surveillance Device License Pack

### **Software Specs**

## **DSM Specifications**

### Storage Management

Maximum Single Volume Size*	108 TB
Maximum Internal Volume Number	64
SSD TRIM	v

Supported RAID Type	<ul> <li>Synology Hybrid RAID</li> <li>Basic</li> <li>JBOD</li> <li>RAID 0</li> <li>RAID 1</li> <li>RAID 5</li> <li>RAID 6</li> <li>RAID 10</li> </ul>
RAID Migration	<ul> <li>Basic to RAID 1</li> <li>Basic to RAID 5</li> <li>RAID 1 to RAID 5</li> <li>RAID 5 to RAID 6</li> </ul>
Volume Expansion with Larger HDDs	<ul> <li>Synology Hybrid RAID</li> <li>RAID 1</li> <li>RAID 5</li> <li>RAID 6</li> <li>RAID 10</li> </ul>
Volume Expansion by Adding a HDD	<ul><li>Synology Hybrid RAID</li><li>JBOD</li><li>RAID 5</li></ul>
Global Hot Spare Supported RAID Type	<ul><li>Synology Hybrid RAID</li><li>RAID 1</li><li>RAID 5</li></ul>
Notes	<ul> <li>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.</li> <li>Actual maximum storage pool and volume sizes depend on drive sizes used, the number of drive bays available, and the RAID configuration.</li> </ul>
File Services	
File Protocol	SMB/AFP/NFS/FTP/WebDAV
Maximum Concurrent SMB/AFP/FTP Connections	200
Windows Access Control List (ACL) Integration	V
NFS Kerberos Authentication	v

N	otes	
	0103	

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.

	Speed was not guaranteed.	
Account & Shared Folder		
Maximum Local User Accounts	1,024	
Maximum Local Groups	256	
Maximum Shared Folder	256	
Maximum Shared Folder Sync Tasks	4	
Hybrid Share		
Maximum Hybrid Share Folders	5	
Hyper Backup		
Folder and Package Backup	v	
Log Center		
Syslog Events per Second	400	
General Specifications		
Networking Protocols	SMB1 (CIFS), SMB2, SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, HTTP, HTTPs, FTP, SNMP, LDAP, CalDAV	
Supported Browsers	<ul><li>Google Chrome</li><li>Firefox</li><li>Microsoft Edge</li><li>Safari</li></ul>	

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

Synology Chat		
V		
Download Station		
Maximum Concurrent Download Tasks	80	
SAN Manager		
Maximum iSCSI Target Number	128	
Maximum LUN	256	
LUN Clone/Snapshot, Windows ODX	V	
Media Server		
DLNA Compliance	V	
Synology Photos		
Facial Recognition	V	
Snapshot Replication		
Maximum Snapshots per Shared Folder	256	

Maximum of System Snapshots	4,096
Surveillance Station	
Maximum IP cam (Licenses required)	30 (including 2 Free License) (see all supported IP cameras)
Total FPS (H.264)	900 FPS @ 720p (1280×720) 600 FPS @ 1080p (1920×1080) 300 FPS @ 3M (2048×1536) 200 FPS @ 5M (2591×1944) 150 FPS @ 4K (3840×2160)
Total FPS (H.265)	900 FPS @ 720p (1280×720) 800 FPS @ 1080p (1920×1080) 500 FPS @ 3M (2048×1536) 450 FPS @ 5M (2591×1944) 200 FPS @ 4K (3840×2160)
Notes	<ul> <li>Maximum IP cameras and FPS figures are tested with the device fully populated with drives and under a continuous recording setup.</li> <li>Actual system capabilities may differ depending on system configuration, drive performance, number of features enabled, and if additional workloads are present.</li> </ul>
Synology Drive	
Recommended Number of Concurrent Sync Clients	200 (the number of connections that can be maintained when the recommended number of hosted files was reached)
Recommended 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	<ul> <li>Exceeding the recommended numbers above will not block application operations, but may result in longer response time.</li> <li>Btrfs file system and non-encrypted shared folders were used during the aforementioned testing.</li> </ul>
Synology Office	
Maximum Users	200

# Multiple files were opened for testing and each file was edited by 30 users simultaneously. Client performance may affect maximum simultaneous editing users. Client PCs used for testing: Intel Core i3-3220 / 8GB RAM Video Station V VPN Server Maximum Connections 20