

# Synology DS923+ DiskStation Owner's Manual

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Synology DS923+ DiskStation

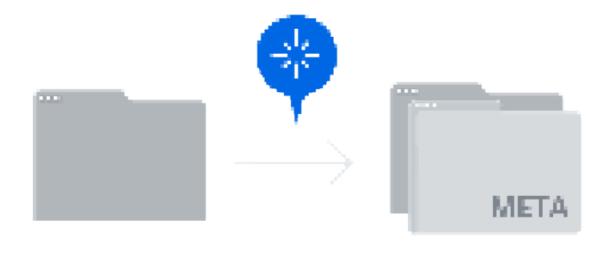


## Flexible File Sharing and Storage for Homes and Small Business

The Synology DS923+ is a capable 4-bay NAS solution that can be adjusted and expanded as your needs change, with optional support for up to nine drives, faster networking, and NVMe SSDs for caching or additional storage pools. Powered by Synology DiskStation Manager (DSM), it offers a flexible all-in-one solution for data sharing, synchronization, backup, and surveillance.

### **Highlights**

- Dependable Performance
   Up to 625/559 MB/s sequential read/write throughput makes file operations quick and efficient1
- Versatile Network Storage
   Leverage built-in file and photo management, data protection, virtualization, and surveillance solutions
- Fast and Stable Connectivity
   Two 1GbE ports for simple integration into existing environments with optional 10GbE connectivity2 to tackle more specialized, bandwidth-heavy applications
- Easy Capacity Expansion
   Add 5 extra drive bays with one DX517 expansion unit for a maximum of 9 storage drives3
- Extendable Product Support
   Backed by Synology's 3-year limited hardware warranty, extendable to 5 years in select markets4,5



#### **Next-Generation File System**

Btrfs is a modern file system designed to safeguard data integrity through metadata mirroring, file self-healing, and fast snapshot replication.

## **Versatile Storage for Any Purpose**

The DS923+ comes out of the box with intuitive and comprehensive file management, media organization, and backup options, making it ideal for IT enthusiasts, creative professionals, and business owners looking for a powerful and compact storage system.

- Up to 625 MB/s sequential read and 559 MB/s sequential write performance1 enables fast file sharing, syncing, streaming, and backup for multiple users
- Supports 4 x 3.5" or 2.5" SATA HDD/SSD,6 expandable to 9 drives with one Synology DX517 expansion unit3
- Up to 32 GB DDR4 ECC memory offers protection against potential crashes and inadvertent changes in data through automatic correction of data errors
- Two Gigabit RJ-45 ports can be bonded using Link Aggregation to provide automatic network failover and load balancing
- Maximize return on investment by upgrading your storage platform as more demanding needs arise with two built-in M.2 NVMe SSD slots7 and an optional 10GbE RJ-45 Network Upgrade Module2

### **Built for Data Protection and Integrity**

Safeguard your critical data with the powerful storage management features of Synology DSM, built on the advanced Btrfs file system.

- Advanced snapshot technology provides schedulable and near-instantaneous data protection for shared folders and LUNs
- File and folder-level data restoration enables recovery of specific files or folders
- Flexible storage quota system helps admins manage available space by specifying storage limits for shared folders
- File self-healing detects and recovers corrupted files using mirrored metadata and RAID configurations
- Inline compression minimizes storage consumption and extends the life of drives by compressing data before it is written to the storage pool



### **Synology Backup Solutions**

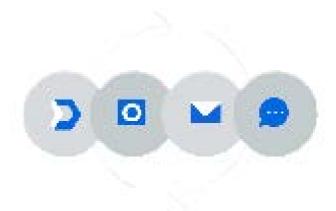
DSM backup solutions are designed to be low-maintenance, with different RPO/RTO targets, storage efficiency,

and backup destinations available depending on your requirements.

### **Complete Data and Device Backup Solutions**

Synology DSM comes standard with a complete package of backup solutions available at no extra cost.

- Active Backup Suite consolidates backup tasks and offers rapid restoration of Windows and Linux endpoints,
   VMs, Synology NAS, and SaaS applications
- Snapshot Replication creates point-in-time copies of shared folders and LUNs to protect them from accidental modifications or ransomware incidents
- Hyper Backup backs up your NAS data to multiple destinations securely and efficiently with integrity checks and powerful deduplication, compression, and versioning options
- C2 Storage for Hyper Backup offers a dedicated secure public cloud destination for Synology NAS backup data8



### **Synology Productivity Suite**

A powerful and secure private cloud solution that lets teams collaborate, sync files, and communicate with others anytime, anywhere.

## **Powerful Collaboration and Sharing Tools**

Synology's productivity suite provides a private cloud solution for on-site and remote workers to concurrently edit documents, share files, manage emails, send instant messages, and more.

- Synology Drive is a cloud file management solution that supports file sharing, remote data access, cross-device and cross-site synchronization, on-demand file restoration, and backup
- The Synology Office extension lets users collaborate on documents, spreadsheets, and presentation slides in real time, supported by convenient options such as file versioning for easy restoration and password protection
- Synology Photos serves as a media organization hub for enthusiasts and professionals looking to efficiently manage and share their photos and videos through intuitive browsing options and secure sharing methods
- Synology Hybrid Share combines reliable on-premises storage and efficient syncing of shared folders in the cloud to enable seamless cross-site synchronization and local file access at LAN speed8



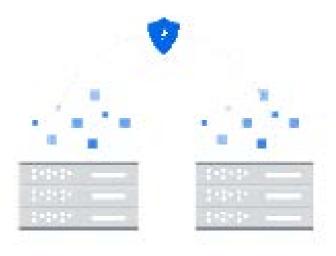
### **Always On Guard**

Protect your premises with Synology's reliable and intuitive video management system (VMS) solution. Surveillance Station combines intelligent monitoring and robust management features for flexible deployment scenarios.

### **Private Video Surveillance**

Synology Surveillance Station transforms the DS923+ into a powerful Network Video Recorder solution with support for up to 40 IP cameras.9

- 8,300+ supported camera models
- ONVIF support for a broader selection of cameras
- · Private, subscription-free storage of recordings
- Access through web browsers, desktop clients, or mobile apps
- Event-based rules to trigger specific actions
- · Email, SMS, and push notification options



## Flexible Virtualization

Whether providing VM storage through iSCSI and NFS or running VMs directly on the DS923+ using Virtual Machine Manager, Synology DSM provides comprehensive tools to protect your VMs.

## **Virtualization and Certified Storage Certified Storage**

Your DS923+ can serve as virtual machine storage, VM backup server, and a lightweight container and VM host. It is fully certified as storage for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack environments.

Synology Storage Console for VMware or Windows platforms
 lets you manage VM storage components directly from your hypervisor. VMware VAAI integration and Windows

ODX help offload storage operations and speed up data transfer

 Host light containers and VMs for testing, sandboxing, and emergency recovery purposes with Docker and Synology Virtual Machine Manager, a native hypervisor that supports Windows, Linux, and Virtual DSM10

## **Hardware Overview**

## **Front**



### Rear



1	Status Indicator	2	Drive Status Indicators	3	Drive Tray Locks	4	USB 3.2 Gen 1 Port
5	Power Button and In dicator	6	Drive Trays	7	1GbE RJ-45 Ports	8	Reset Button
9	Expansion Port	10	Power Port	11	Network Upgrade Slot	12	USB 3.2 Gen 1 Port
1	Fan	14	Kensington Securi ty Slot				

## **Technical Specification**

#### **Hardware**

CPU	AMD Ryzen™ R1600 dual-core (4-thread), max. boost clock up to 3.1 GHz
Hardware encryption engine	AES-NI
Memory	4 GB DDR4 ECC SODIMM (expandable up to 32 GB)
Compatible drive types	<ul> <li>4 x 3.5" or 2.5" SATA HDD/SSD (drives not included)</li> <li>2 x M.2 2280 NVMe SSD (drives not included)</li> <li>Synology only guarantees full functionality, reliability, and performance for Synology drives listed on the compatibility list<sup>6</sup></li> </ul>
Hot swappable drives	Yes
External ports	<ul> <li>2 x USB 3.2 Gen 1 ports</li> <li>1 x Expansion port (eSATA)</li> </ul>
Form factor	Desktop
Size (HxWxD)	166 x 199 x 223 mm
Weight	2.24 kg
LAN ports	2 x 1GbE RJ-45
Wake on LAN/WAN	Yes
Network expansion	Supports E10G22-T1-Mini 10GbE RJ-45 Network Upgrade Module <sup>2</sup>
Scheduled power on/off	Yes
System fans	2 x (92 x 92 x 25 mm)
AC input power voltage	100 V to 240 V AC
Power frequency	50/60 Hz, single phase
Operating environment	<ul> <li>Temperature: 0°C to 40°C (32°F to 104°F)</li> <li>Relative humidity: 8% to 80% RH</li> </ul>
Storage environment	<ul> <li>Temperature: -20°C to 60°C (-5°F to 140°F)</li> <li>Relative humidity: 5% to 95% RH</li> </ul>
Maximum operating altitude	5,000 m (16,400 ft)

## **General DSM Specifications**

Networking protocols	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, and VPN (PPTP, OpenVPN™, L2TP)
File systems	Internal: Btrfs, ext4  External: Btrfs, ext4, ext3, FAT32, NTFS, HFS+, exFAT
Supported RAID types	Synology Hybrid RAID (SHR), Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, and RAID 10
Storage management	<ul> <li>Max. single volume size: 108 TB</li> <li>Max. number of system snapshots: 65,536<sup>11</sup></li> <li>Max. number of internal volumes: 64</li> </ul>
SSD cache	Read/write cache support     M.2 NVMe and 2.5" SATA SSD support
File sharing capabilities	<ul> <li>Max. number of local user accounts: 2,048</li> <li>Max. number of local groups: 256</li> <li>Max. number of shared folders: 512</li> <li>Max. number of concurrent SMB/NFS/AFP/FTP connections: 1,00012</li> </ul>
Privileges	Windows® Access Control List (ACL) and application privileges
Directory services	Connects with Windows® AD/LDAP servers enabling domain users to login via SMB/NFS/AFP/FTP/File Station using their existing credentials
Virtualization	VMware vSphere®, Microsoft Hyper-V®, Citrix®, OpenStack, and Kubernetes
Security	Firewall, shared folder encryption, SMB encryption, FTP over SSL/TLS, SFTP, rsync over SSH, login auto block, Let's Encrypt support, and HTTPS (customizable cipher suite)
Supported browsers	Google Chrome®, Firefox®, Microsoft Edge®, Safari® 13 and later, and Safari (iOS 13.0 and later) on iPad, Chrome (Android™ 11.0 and later) on tablets
Interface languages	English, Deutsch, Français, Italiano, Español, Dansk, Norsk, Svensk, Nederlands, Русский, Polski, Magyar, Português do Brasil, Português Europeu, Türkçe, Český, ภาษาไทย, 日本語, 한국어, 繁體中文, 简体中文

# **Packages and Applications**

File Server & Synchron	ization
Drive	Synchronizes files across Windows®, macOS®, Linux®, Android™, and iOS. The built-in cross-platform portal allows access to data anytime and anywhere  • Max. number of hosted files: 5,000,000  • Max. number of concurrent connections for PC clients: 350
File Station	Provides virtual drives, remote folders, Windows® ACL editor, compression/extraction of archived files, bandwidth control for specific users/groups, creation of sharing links, and transfer logs
Hybrid Share <sup>8</sup>	Efficiently synchronizes files across sites by keeping shared data on Synology C2 Storage and streaming files to Synology NAS worldwide on request. Frequently requested files are cached at each site for low-latency access
FTP Server	Supports bandwidth control for TCP connections, custom FTP passive port ranges, anonymous FTP, FTP over TLS/SSL and SFTP protocols, network booting with TFTP and PXE support, and transfer logs
Presto File Server <sup>13</sup>	Enables high-speed data transfer over WAN between Synology NAS and desktop platforms through the exclusive SITA technology
Cloud Sync	Offers one or two-way synchronization with public cloud storage providers including Alibaba Cloud OSS, Backblaze B2, Baidu Cloud, Box, Dropbox, Google Cloud Storage, Google Drive, hubiC, MegaDisk, Microsoft OneDrive, OpenStack Swift-compatibl storage, Tencent COS, WebDAV servers and Yandex Disk
Universal Search	Search through files, metadata, and more on your NAS. Integration with Windows Search and macOS Spotlight makes it easy to find files
Migration Assistant	Migrates data, system setting, and applications seamlessly from one Synology NAS to another to ensure maximum service availability
SAN Storage & Virtuali:	zation
SAN Manager	Max. number of iSCSI targets: 128     Max. number of LUNs: 256     LUN clone/snapshot support
Virtual Machine Manager <sup>10</sup>	Supports running Windows®, Linux®, and Virtual DSM-based virtual machines on Synology NAS
Data Protection & Back	cup Solutions
Hyper Backup	Supports local backup, network backup, and data backup Synology servers, other devices, and public clouds, including C2 Storage <sup>8</sup>
Backup tools	<ul> <li>DSM configuration backup, macOS® Time Machine® support, Synology Drive Client desktop application</li> <li>Shared folder sync supports a maximum of 32 tasks</li> </ul>
Data Protection & Back Hyper Backup Backup tools	Supports local backup, network backup, and data backup Synology servers, other devices, and public cloud Storage <sup>8</sup> • DSM configuration backup, macOS® Time Machine® support, Synology Drive Client desktop application
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Snapshot Replication	<ul> <li>Max. number of snapshots for shared folders: 1,024</li> <li>Max. number of replications: 32</li> </ul>
Synology High Availability	Reduces service downtime by combining two identical NAS into a high-availability cluster
Active Backup for Business	An all-in-one backup solution designed for heterogeneous business IT environments. It enables IT admins to remotely manage and protect PCs, servers, Synology systems, and VMs from one centralized console
Active Backup for Google Workspace	Supports backup and restoration of Google Workspace My Drive, Team Drive, Gmail, Contacts, and Calendar
Active Backup for Microsoft 365	Supports backup and restoration of Microsoft 365 OneDrive for Business, Outlook, Contacts, and Calendar
Productivity & Collaboration	
Collaboration tools	Collaborate with instant messaging service Synology Chat, online documents editor Synology Office, and scheduling assista Synology Calendar  • Max. number of concurrent users for Chat: 100  • Max. number of users for Office: 1,200  • Calendar supports CalDAV and access via mobile devices
Note Station	A note taking platform that supports rich text, note organization and versioning, encryption, sharing, media embedding, and attachments
Synology MailPlus Server <sup>14</sup>	A secure, reliable, and private mail solution featuring high-availability, load balancing, security, and filtering options
Synology MailPlus	An intuitive webmail interface for Synology MailPlus Server with configurable mail labels, filters, and user interface
Multimedia	
Synology Photos	An efficient photo management solution for professional and amateur photographers. Automated tools allow users to groufilter, organize, and share content while keeping their photos safe and secure
Other packages	Video Station, Audio Station, and iTunes® Server

Surveillance			
Surveillance Station <sup>9</sup>	Max. number of IP cameras: 40, for a total of 1,200 FPS at 720p (H.264)		
Management & Administration			
Synology Directory Server	Provides a flexible and cost-effective domain controller solution		
Central Management System	Provides a single interface to manage and monitor multiple Synology NAS		
VPN Server	<ul> <li>Max. number of connections: 40</li> <li>Supported VPN protocols: PPTP, OpenVPN™, L2DTP/IPSec</li> </ul>		
Active Insight <sup>15</sup>	Monitor health statistics, login activity, and backup statuses for your Synology servers worldwide, and receive notifications and advice from our centralized cloud-hosted management platform		
Storage Analyzer	Displays volume and quota usage, total size of files, volume usage and trends based on past usage, size of shared folders, large files, most recently modified files, and least recently accessed files		
Antivirus Essential	Provides full system scans, scheduled scans, white list customization, and auto-update of virus definitions		
Web Station	Enables hosting for up to 30 websites with support for PHP/MariaDB® and 3rd-party applications		
Other packages	DNS Server, RADIUS Server, and Log Center		
Others			
iOS/Android™ applications	Synology Drive, Synology MailPlus, Synology Secure SignIn, Synology Chat, Synology LiveCam, Synology Active Insight, DS cam, DS file, DS finder, and DS note		
Other packages	Additional 3rd-party packages are available in the Package Center		

### **Environment and Packaging**

## Environmental safety / RoHS compliant

## **Package contents**

- 1 x DS923+ main unit
- 1 x Quick Installation Guide
- 1 x Accessory pack
- 1 x AC power adapter
- 1 x AC power cord
- 2 x RJ-45 LAN cables

## **Optional accessories16**

- DDR4 ECC SODIMM: D4ES02-4G / D4ES02-8G / D4ES01-16G
- Synology Network Upgrade Module: E10G22-T1-Mini
- M.2 2280 NVMe SSD: SNV3400 series
- 2.5" SATA SSD: SAT5200 series
- 3.5" SATA HDD: HAT5300 series
- Expansion Unit: DX517
- MailPlus License Pack14
- Surveillance Device License Pack9
- Virtual DSM License Pack10
- Extended Warranty: EW201, Extended Warranty Plus5

## Warranty

## 3 years4,5

Note: Specifications are subject to change without notice. Please refer to the model's specifications page for the

most up to date information.

- 1. Performance figures obtained through internal testing by Synology. Actual performance may vary depending on the testing environment, usage, and configuration. See performance charts for more information.
- 2. One 10GbE Rj-45 port can be added to the DS923+ with Synology E10G22-T1-Mini Network Upgrade Module.
- 3. DS923+ supports up to 9 drives with the Synology DX517 expansion unit, sold separately.
- 4. The warranty period starts from the date of purchase as stated on your purchase receipt. Learn more about our limited product warranty policy.
- 5. Up to 5 years of warranty are available as an additional bundle with Extended Warranty Plus or Extended Warranty, both 2-year extended warranty service add-ons available in select regions. Check availability for Extended Warranty EW201 or Extended Warranty Plus.
- 6. Check our compatibility list for supported drives.
- 7. Synology SNV3400/3410 series M.2 NVMe SSD drives can be installed through the built-in M.2 slots to enable SSD caching or create SSD storage pools. Drives are sold separately.
- 8. C2 Storage for Hyper Backup and Hybrid Share requires purchase of an annual or monthly subscription. A free trial is available for each newly registered device.
- 9. Surveillance Station includes two free licenses. Connecting more cameras and devices requires additional licenses. Learn more
- Certain advanced features require Virtual Machine Manager Pro. One Virtual DSM license is included.
   Additional Virtual DSM instances require the purchase of Virtual DSM Licenses.
- 11. System snapshots include snapshots taken by SAN Manager, Snapshot Replication, and Virtual Machine Manager.
- 12. Maximum concurrent connections can be increased to 2,000 by installing at least 8 GB of RAM memory.
- 13. Presto File Server license can be purchased separately through the application.
- 14. Five MailPlus email accounts are included. Additional email accounts can be added with the purchase of Synology MailPlus License Packs. Learn more
- 15. Synology Active Insight is currently in Beta with all features available for evaluation. Certain functionalities may require a subscription upon official release.
- 16. Please refer to our compatibility list for the latest optional accessories list.

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Synology may make changes to specification and product descriptions at anytime, without notice.

DS923+-2022-ENU-REV001

#### **Documents / Resources**



Synology DS923+ DiskStation [pdf] Owner's Manual DS923 DiskStation, DS923, DiskStation

Manuals+, home privacy