## **Syno**logy®

DiskStation

DS2422+



# Compact, Reliable, and Powerful Storage for SMBs

Synology DiskStation DS2422+ is a compact 12-bay desktop NAS that takes file sharing and management to the next level. The unit can be scaled to 24 drive bays and excels at serving large data sets in multiuser environments. It comes with powerful file management, surveillance, and backup capabilities, and can serve as high-quality video and VM storage. With support for up to 32 GB of memory, NVMe SSD cache, and 25GbE network cards, the DS2422+ is ready for large-scale business applications.

#### Highlights

- Accelerated Performance
   Delivers up to 2,201 MB/s read and 1,383 MB/s sequential write performance<sup>1</sup>
- Easy Capacity Expansion

  Double storage capacity to 24 drive bays<sup>2</sup> with one 12-bay DX1222 expansion unit
- Supports Demanding Applications
   Leverage up to 32 GB memory, 10/25GbE networking,<sup>3</sup>
   or NVMe SSD Cache<sup>4</sup> to boost read and write speed

#### Versatile and Reliable Storage Platform

The DS2422+ is a capable storage system combining performance with scale to deliver a cost-effective data management solution.

- Up to 2,201 MB/s sequential read and 1,383 MB/s sequential write performance<sup>1</sup> for multi-user file sharing, infrastructure backup, and warm storage environments
- Supports 12 x SATA HDD/SSD 2.5" and 3.5" drives,<sup>5</sup> expandable to 24 drives with a Synology DX1222 expansion unit<sup>2</sup>
- Comfortably run compute-intensive processes (indexing, compression, deduplication, file synchronization) and applications (Synology Drive, Hyper Backup, Active Backup for Business) with a powerful quad-core AMD Ryzen™ processor
- Support more client file sharing connections, backup processes, or virtual machines with up to 32 GB DDR4 ECC memory
- Boost bandwidth with 10GbE SFP+/RJ-45 and 25GbE SFP28 NICs, drive down latency with NVMe SSD cache,<sup>4</sup> or add both 10GbE and NVMe SSD with a combination card using the PCle Gen 3.0 slot

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

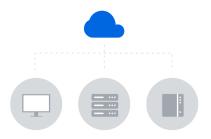
Btrfs is a modern file system designed to safeguard data integrity through metadata mirroring, file selfhealing, and fast snapshot replication.

#### Optimized for Data Protection and Integrity

Safeguard your data with **user management** and **system administration** tools on Synology's **DiskStation Manager (DSM)** coupled with powerful **storage technology** and support for the **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 lowmaintenance, with different RPO/RTO targets, storage efficiency, and backup destinations available depending on your requirements.



#### Synology Productivity Suite

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

#### Complete IT Infrastructure Backup Solutions

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

Active Backup Suite includes backup solutions for Windows® and Linux® computers, VMs, other file servers, 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 data.<sup>6</sup>

#### **Remote Work and Collaboration 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.

By leveraging private cloud infrastructure, businesses can ensure complete data ownership and multi-layered security.

**Synology Office** lets multiple users edit, comment on, and share files together using Synology Documents, Spreadsheets, and Slides.

**Synology Drive** is a cloud file management solution that supports remote data access, synchronization, on-demand file restoration, and backup.

**Synology Chat** brings teams together with one-on-one chats, group chats, and encrypted private channels over multiple platforms.

**Synology MailPlus**<sup>7</sup> provides a secure, reliable, and private email server.

**Synology Calendar** helps teams keep track of what is most important with convenient event sharing and scheduling.

**Synology Hybrid Share** offloads synchronization processes from the NAS to Synology C2 cloud storage, removing the need for direct data transfers between branches while reducing bandwidth costs.





#### Always on Guard

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



#### Flexible Virtualization

Whether providing VM storage through iSCSI and NFS or running VMs directly on the DS2422+ using Virtual Machine Manager, Synology DSM provides comprehensive tools to protect your VMs.

#### Private Video Surveillance

**Surveillance Station** transforms the DS2422+ into a powerful Network Video Recorder solution with support for up to 40 IP cameras.<sup>8</sup>

- 7,900+ 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

#### Virtualization and Certified Storage

Your DS2422+ can serve as **virtual machine storage**, host its own virtual machines (VMs) using **Virtual Machine Manager (VMM)**, and run Docker containers.

Virtualization solutions in DSM streamline provisioning for and management of VMs with full certification for VMware vSphere™, Microsoft Hyper-V®, Citrix XenServer™, and OpenStack® virtualization environments.

- VMM is a hosted hypervisor for virtual machines running Windows®,
   Linux®, or virtualized versions of DSM with recovery mechanisms that ensure data protection for each VM9
- 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



#### **Hardware Overview**

#### DS2422+ (Front)



#### DS2422+ (Rear)



1	Status Indicator	2	Alert Indicator	3	Power Button	4	LAN Indicators
5	Drive Status Indicators	6	Drive Trays	7	Drive Tray Locks	8	Power Port
9	Fans	10	PCIe Expansion Slot	11	Reset Button	12	USB 3.2 Gen 1 Ports
13	Console Port	14	Expansion Port	15	1GbE RJ-45 Ports		

### **Technical Specifications**

#### Hardware

CPU	AMD Ryzen <sup>™</sup> V1500B quad-core 2.2 GHz
Hardware encryption engine	Yes (AES-NI)
Memory	4 GB DDR4 ECC SODIMM (expandable up to 32 GB with 2 x D4ES01-16G)
Compatible drive types <sup>5</sup>	<ul> <li>12 x 3.5" or 2.5" SATA HDD/SSD (drives not included)</li> <li>Only drives listed on the compatibility list can be used to create storage pools</li> </ul>
Hot swappable drives	Yes
External ports	<ul> <li>2 x USB 3.2 Gen 1 ports</li> <li>1 x Expansion port (Mini-SAS HD)</li> </ul>
Form factor	Desktop
Size (HxWxD)	270 x 300 x 340 mm
Weight	9.5 kg
LAN ports	4 x 1GbE RJ-45
Wake on LAN/WAN	Yes
PCIe expansion	<ul> <li>1 x 8 width slot, Gen 3.0 x4 lanes</li> <li>Supports network interface cards,<sup>3</sup> M.2 NVMe adapter cards for SSD cache,<sup>4</sup> and combination cards</li> </ul>
Scheduled power on/off	Yes
System fans	2 x (120 x 120 x 25 mm)
AC input power voltage	100 V to 240 V AC
Power frequency	50/60 Hz, single phase
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
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	<ul> <li>Internal: Btrfs, ext4</li> <li>External: Btrfs, ext4, ext3, FAT32, NTFS, HFS+, exFAT</li> </ul>
Supported RAID types	Synology Hybrid RAID, Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, and RAID 10.
Storage management	<ul> <li>Maximum single volume size: 108 TB</li> <li>Maximum system snapshots: 65,536<sup>10</sup></li> <li>Maximum internal volumes: 64</li> </ul>
SSD cache <sup>4</sup>	<ul> <li>Read/write cache support</li> <li>M.2 NVMe or 2.5" SATA SSD support</li> </ul>
File sharing capabilities	<ul> <li>Maximum local user accounts: 2,048</li> <li>Maximum local groups: 256</li> <li>Maximum shared folders: 512</li> <li>Maximum concurrent SMB/NFS/AFP/FTP connections: 1,000<sup>11</sup></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®, and OpenStack®.
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	Chrome®, Firefox®, Edge®, Internet Explorer® 10 and later, Safari® 10 and later, Safari® (iOS 10 and later), Chrome® (Android™ 6.0 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**

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File Server & Synchroniza	tion
Drive	Synchronizes files across Windows®, macOS®, Linux®, Android™ and iOS. The built-in cross-platform portal allows access to data anytime and anywhere.  • Maximum number of hosted files: 50,000,000  • Maximum number of concurrent connections for PC clients: 550
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	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>12</sup>	Enables high-speed data transfer over WAN through the exclusive SITA technology between Synology NAS and desktop platforms.
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-compatible 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 & Virtualizat	tion
SAN Manager	<ul> <li>Maximum iSCSI targets: 128</li> <li>Maximum LUNs: 256</li> <li>LUN clone/snapshot, Windows ODX support</li> </ul>
Virtual Machine Manager	Supports running Windows®, Linux®, and Virtual DSM-based virtual machines on Synology NAS.
Data Protection & Backu	p Solutions
Hyper Backup	Supports local backup, network backup, and data backup to other devices, Synology NAS, and public clouds including C2 Storage.
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 16 tasks</li> </ul>



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#### **Environment and Packaging**

Environmental safety	RoHS compliant
Package contents	<ul> <li>1 x DS2422+ main unit</li> <li>1 x Quick Installation Guide</li> <li>1 x Accessory pack</li> </ul>
	<ul> <li>1 x AC power cord</li> <li>2 x RJ-45 LAN cables</li> </ul>
Optional accessories <sup>13</sup>	<ul> <li>DDR4 ECC SODIMM: D4ES02-4G / D4ES02-8G / D4ES01-16G</li> <li>10GbE Network Interface Cards: E10G21-F2 / E10G18-T2 / E10G18-T1</li> <li>25GbE Network Interface Cards: E25G21-F2</li> <li>M.2 SSD &amp; 10GbE Combo Adapter Card: E10M20-T1</li> <li>M.2 SSD Adapter Cards: M2D20</li> <li>2.5" SATA SSD: SAT5200</li> <li>3.5" SATA HDD: HAT5300</li> <li>Expansion Unit: DX1222</li> <li>MailPlus License Pack<sup>7</sup></li> <li>Surveillance Device License Pack<sup>8</sup></li> <li>Virtual DSM License Pack<sup>9</sup></li> </ul>
Warranty	3 years <sup>14</sup>

Note: Model specifications are subject to change without notice. Please refer to www.synology.com for the latest 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. DS2422+ supports up to 24 drives with one Synology DX1222 expansion unit, sold separately.
- 3. For the most up-to-date list of compatible NICs, please check our compatibility list.
- 4. SSD cache can be enabled using SNV3400/SNV3500 M.2 NVMe SSDs with M2D20 or E10M20-T1 adapter cards or by using compatible 2.5" SATA SSDs in built-in drive bays. All devices sold separately.
- 5. Check our **compatibility list** for supported drives.
- 6. C2 Storage for Hyper Backup requires purchase of an annual or monthly subscription. A 30-day free trial is available for each newly registered device.
- 7. Five MailPlus email accounts are included with the DS2422+. Additional email accounts can be added with the purchase of Synology MailPlus License Packs.
- 8. Surveillance Station includes two free licenses. Connecting more cameras and devices requires additional licenses. Learn more
- 9. 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.
- 10. System snapshots include snapshots taken by SAN Manager, Snapshot Replication, and Virtual Machine Manager. Availability of these packages varies by model.
- 11. Maximum concurrent connections can be increased to 2,000 with maximum installed memory of 32 GB RAM.
- 12. Presto File Server license can be purchased separately through the application.
- 13. Please refer to our **compatibility list** for the latest optional accessories list.
- 14. The warranty period starts from the date of purchase as stated on your receipt. Learn more about our limited product warranty policy.

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