



DiskStation

# DS2419+II



## Reliable Data Management for Business Workloads

Synology DiskStation DS2419+II is a cost-effective 12-bay desktop NAS with file management, file sharing, and backup capabilities. Specifically designed for small to medium-sized businesses and remote office deployments, the unit is powered by Synology's DiskStation Manager (DSM), that includes essential business software solutions. For added performance, it can be expanded with 12 additional drive bays, NVMe SSD cache, and 10GbE networking.

### Highlights

- **Solid Performance**  
Delivers up to 1,737 MB/s read and 655 MB/s write performance<sup>1</sup>
- **Flexible Expansion**  
Add an extra 12 drives for a total of 24 by attaching a DX1215(II)<sup>2</sup> expansion unit.
- **Performance Upgrades**  
Add 10GbE networking<sup>3</sup> or fast NVMe SSD Cache<sup>4</sup> with PCIe add-in cards
- **Synology High Availability**  
Maximizes service uptime by combining two devices into a high-availability cluster with minute-level failover
- **Extendable Warranty**  
Includes a 3-year limited warranty with an optional extension to 5 years<sup>5</sup>

## Versatile and Reliable Storage Platform

The DS2419+II is a capable storage system combining performance and scalability to deliver a cost-effective data management solution.

- Up to 1,737/655 MB/s sequential read/write performance for multi-user file sharing, infrastructure backup, and warm storage environments<sup>1</sup>
- 12 SATA HDD/SSD 2.5"/3.5" bays, expandable to 24 drives with a Synology [DX1215II](#) expansion unit<sup>2</sup>



### 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.*

## Optimized for Data Protection and Integrity

Synology's [DSM](#) operating system and the [Btrfs](#) file system work together to safely guard your data with data protection technologies.

- **Advanced snapshot technology** provides schedulable and near-instantaneous data protection for shared folders and LUNs
- **File and folder-level data restoration** enables restoration 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** compresses data before it is written to the drive, reducing write commands and optimizing storage space



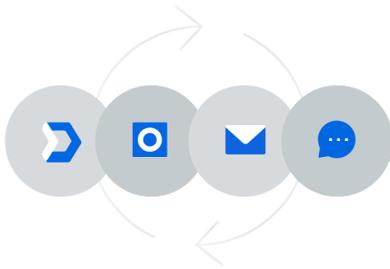
## Synology Backup Solutions

*DSM backup solutions are designed to be low-maintenance, with different RPO/RTO targets, storage efficiency, and backup destinations available depending on your requirements.*

## Data Backup Solutions for IT Infrastructure

**Synology Active Backup Suite** is a collection of license-free backup solutions built to protect Windows PCs and servers, VMs, other file servers, and SaaS applications:

- **Active Backup for Business (ABB)** consolidates backup tasks for physical and virtual environments with rapid restoration of files, entire physical machines, and VMs.
- **Active Backup for Google Workspace** allows users to back up Google Workspace data from Gmail, Contacts, Calendar, and Drive.
- **Active Backup for Microsoft 365** provides complete backup of Microsoft 365 application data from OneDrive for Business, SharePoint Online, emails, contacts, and calendar.



## Synology Collaboration Suite

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

## Remote and On-Premises Collaboration

Synology's collaboration suite provides a private cloud solution for on-premises 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.

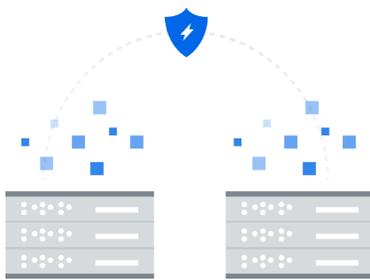
**Synology MailPlus**<sup>6</sup> provides a secure, reliable, and private email server.

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



## Always On Guard

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



## Flexible Virtualization

Whether providing VM storage through iSCSI or NFS, or running VMs directly on the DS2419+II using Virtual Machine Manager, Synology DSM provides comprehensive tools to protect your virtual machines.

## Private Video Surveillance

With [Synology Surveillance Station](#), the DS2419+II becomes a powerful Network Video Recorder solution with support for up to 40 IP cameras.<sup>7</sup>

- 7,600+ [supported camera models](#)
- ONVIF support prevents vendor lock-in
- Private, subscription-free storage of recordings
- Access through web browsers, desktop clients, or mobile apps
- Event-based rules to trigger specific actions
- Email, SMS, or push notification options

## Virtualization and Certified Storage

DSM streamlines provisioning for and management of virtual machines with full certification for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack virtualization environments.

Synology Storage Console for VMware or Windows platforms lets you manage storage directly from your hypervisor. VMware VAAI integration and Windows ODX help offload storage operations and speed up data transfer.

[Synology Virtual Machine Manager \(VMM\)](#) is a hosted hypervisor for virtual machines running Windows®, Linux®, or virtualized versions of DSM with recovery mechanisms that ensure data protection on each VM.<sup>8</sup>

# Hardware Overview

DS2419+II (Front)



DS2419+II (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	USB 3.2 Ports	12	Reset Button
13	Console Port	14	Expansion Port	15	1GbE RJ-45 Ports		

## Technical Specifications

### Hardware

CPU	Intel Atom® C3538 quad-core 2.1GHz
Hardware encryption engine	Yes (AES-NI)
Memory	4 GB DDR4 non-ECC SODIMM <sup>15</sup> (expandable up to 32 GB)
Compatible drive types <sup>9</sup>	12 x 3.5" or 2.5" SATA HDD/SSD (drives not included)
Hot swappable drives	Yes
External ports	<ul style="list-style-type: none"> <li>• 2 x USB 3.2 Gen 1 ports</li> <li>• 1 x Expansion port (Infiniband)</li> </ul>
Form factor	Desktop
Size (HxWxD)	<ul style="list-style-type: none"> <li>• 270 x 300 x 340 mm</li> </ul>
Weight	<ul style="list-style-type: none"> <li>• 9.5 kg</li> </ul>
LAN ports	4 x 1GbE RJ-45
Wake on LAN/WAN	Yes
PCIe Expansion	<ul style="list-style-type: none"> <li>• 1x8 width slot, Gen 3.0 x8 lanes</li> <li>• Supports network interface cards,<sup>3</sup> and M.2 NVMe or SATA SSD adapter cards for SSD cache<sup>4</sup></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, VPN (PPTP, OpenVPN™, L2TP)
File systems	<ul style="list-style-type: none"><li>• Internal: Btrfs, ext4</li><li>• External: Btrfs, ext4, ext3, FAT32, NTFS, HFS+, exFAT<sup>10</sup></li></ul>
Supported RAID types	Synology Hybrid RAID, Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
Storage management	<ul style="list-style-type: none"><li>• Maximum single volume size: 108 TB</li><li>• Maximum system snapshots: 65,536<sup>11</sup></li><li>• Maximum internal volumes: 512</li></ul>
SSD cache <sup>4</sup>	<ul style="list-style-type: none"><li>• Read/write cache support</li><li>• 2.5" SATA SSD support</li><li>• M.2 NVMe or SATA SSD support</li></ul>
File sharing capabilities	<ul style="list-style-type: none"><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>12</sup></li></ul>
Privileges	Windows® Access Control List (ACL), 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®
Security	Firewall, shared folder encryption, SMB encryption, FTP over SSL/TLS, SFTP, rsync over SSH, login auto block, Let's Encrypt support, HTTPS (customizable cipher suite)
Supported clients	Windows® 7 onwards, macOS® 10.12 onwards
Supported browsers	Chrome®, Firefox®, Edge®, Internet Explorer® 10 onwards, Safari® 10 onwards, Safari (iOS 10 onwards), Chrome (Android™ 6.0 onwards) 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 & Synchronization

Drive	Synchronizes files across Windows®, macOS®, Linux®, Android™ and iOS. The built-in cross-platform portal allows access to data anytime and anywhere. <ul style="list-style-type: none"><li>• Maximum number of hosted files: 1,000,000</li><li>• Maximum number of concurrent connections for PC clients: 550</li></ul>
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.
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 through the exclusive SITA technology between Synology NAS and desktop.
Cloud Sync	Offers one or two-way synchronization with public cloud storage providers including Alibaba Cloud OSS, Amazon S3-compatible storage, 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	Enables global search of applications and files.

### iSCSI Storage & Virtualization

iSCSI Manager	<ul style="list-style-type: none"><li>• Maximum iSCSI targets: 128</li><li>• Maximum iSCSI LUNs: 256</li><li>• iSCSI LUN clone/snapshot support</li></ul>
Virtual Machine Manager	Deploys and runs virtual machines on the Synology NAS, including Windows®, Linux®, and Virtual DSM.

### Data Protection & Backup Solution

Hyper Backup	Supports local backup, network backup, and data backup to public clouds.
Backup tools	<ul style="list-style-type: none"><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>
Snapshot Replication	<ul style="list-style-type: none"><li>• Maximum number of snapshots for shared folders: 1,024</li><li>• Maximum 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 Google Workspace	Supports backup and restoration of Google Workspace My Drive, Team Drive, Gmail, Contacts, and Calendar.

<b>Active Backup for Microsoft 365</b>	Supports backup and restoration of Microsoft 365 OneDrive for Business, mail, contacts, and calendar.
<b>Active Backup for Business</b>	An all-in-one backup solution designed for heterogeneous business IT environments. It enables IT admins to remotely manage and protect PCs, servers, and VMs from one centralized console.
<b>Productivity &amp; Collaboration</b>	
<b>Collaboration tools</b>	Users can collaborate through the instant messaging service Synology Chat, the online editor Synology Office, and the scheduling assistant Synology Calendar. <ul style="list-style-type: none"> <li>• Maximum users for Chat: 1,500</li> <li>• Maximum users for Office: 1,800</li> <li>• Calendar supports CalDAV and access via mobile devices</li> </ul>
<b>Note Station</b>	A note taking platform that supports rich text, note organization and versioning, encryption, sharing, media embedding, and attachments.
<b>Synology MailPlus Server<sup>6</sup></b>	A secure, reliable, and private mail solution featuring high-availability, load balancing, security, and filtering.
<b>Synology MailPlus</b>	An intuitive webmail interface for Synology MailPlus Server with customizable mail labels, filters, and user interface.
<b>Multimedia</b>	
<b>Moments</b>	A feature-rich photo management application that includes AI-powered album creation from facial and subject recognition, photo editing and sharing capabilities, similar photo detection for duplicate management, auto-editing functions such as color correction and angle adjustments, and auto-selection of the best shots. Mobile applications are available on iOS and Android™ devices.
<b>Other packages</b>	Video Station, Photo Station, Audio Station, iTunes® Server
<b>Surveillance</b>	
<b>Surveillance Station<sup>7</sup></b>	Maximum IP cameras: 40, for a total of 1,200 FPS at 720p (H.264).
<b>All-in-One Servers</b>	
<b>Synology Directory Server</b>	Provides a flexible and cost-effective domain controller solution.
<b>Central Management System</b>	Provides a single interface to manage and monitor multiple Synology NAS.
<b>VPN Server</b>	<ul style="list-style-type: none"> <li>• Maximum connections: 30</li> <li>• Supported VPN protocols: PPTP, OpenVPN™, L2TP/IPSec</li> </ul>
<b>Mail Server</b>	<ul style="list-style-type: none"> <li>• Supported Mail Server protocols: POP3, SMTP, IMAP</li> <li>• LDAP/AD account support</li> </ul>
<b>Mail Station</b>	A webmail interface for Mail Server to receive emails from multiple POP3 mailboxes and SMTP servers.
<b>Web Station</b>	Enables hosting for up to 30 websites with support for PHP/MariaDB® and 3rd-party applications.
<b>Other packages</b>	DNS Server, RADIUS Server, Log Center
<b>Others</b>	
<b>Storage Analyzer</b>	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.
<b>Antivirus Essential</b>	Provides full system scans, scheduled scans, white list customization, and auto-update of virus definitions.
<b>iOS/Android™ applications</b>	Synology Drive, Synology MailPlus, Synology Chat, Synology LiveCam, Moments, DS audio, DS photo, DS video, DS cam, DS file, DS finder, DS note
<b>Other packages</b>	Additional 3rd-party packages are available in the Package Center.

## Environment and Packaging

Environment safety	RoHS compliant
Package contents	<ul style="list-style-type: none"><li>• 1 x DS2419+II main unit</li><li>• 1 x Quick Installation Guide</li><li>• 1 x Accessory pack</li><li>• 1 x AC power cord</li></ul>
Optional accessories <sup>14</sup>	<ul style="list-style-type: none"><li>• DDR4 non-ECC SODIMM: D4NESO-2666-4G / D4NESO-2400-4G / D4NS2133-4G</li><li>• DDR4 ECC SODIMM: D4ECSO-2666-16G / D4ECSO-2400-16G / RAMEC2133DDR4SO-16G</li><li>• 10GbE Network Interface Cards: E10G21-F2 / E10G18-T2 / E10G18-T1 / E10G17-F2</li><li>• M.2 SSD &amp; 10GbE Combo Adapter Card: E10M20-T1</li><li>• M.2 SSD Adapter Cards: M2D20 / M2D18</li><li>• M.2 NVMe SSD: SNV3400, SNV3500<sup>4</sup></li><li>• 2.5" SATA SSD: SAT5200-480G / SAT5200-960G / SAT5200-1920G</li><li>• 3.5" SATA HDD: HAT5300</li><li>• Expansion Unit: DX1215 or DX1215II</li><li>• VisualStation units: VS960HD, VS360HD</li><li>• MailPlus License Pack<sup>6</sup></li><li>• Surveillance Device License Pack<sup>7</sup></li><li>• Virtual DSM License Pack<sup>8</sup></li></ul>
Warranty	3 years <sup>5</sup>

Note: Model specifications are subject to change without notice. Please refer to [www.synology.com](http://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.
2. DS2419+II supports up to 24 drives with one Synology DX1215 or DX1215II 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 NVMe SSDs with M2D20 or E10M20-T1 adapter cards, SNV3400 or SATA SSDs with M2D18 adapter cards, or by using compatible 2.5" SATA SSDs. All devices sold separately.
5. The warranty period starts from the date of purchase as stated on your purchase receipt. [Learn more](#) about our limited product warranty policy. Available in select regions, an optional [EW202](#) add-on extends the 3-year warranty to 5 years.
6. Five MailPlus email accounts are included with the DS2419+II. Additional email accounts can be added with the purchase of Synology MailPlus License Packs. [Learn more](#).
7. Surveillance Station includes 2 free licenses. Connecting more cameras and devices requires additional licenses. [Learn more](#).
8. 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](#).
9. Check our [compatibility list](#) for validated drives to ensure system stability.
10. exFAT Access can be purchased separately through the DSM Package Center.
11. System snapshots include snapshots taken by iSCSI Manager, Snapshot Replication, and Virtual Machine Manager. Availability of these packages varies by model.
12. Maximum concurrent connections can be increased to 2,000 with maximum installed memory of 32 GB RAM.
13. Presto File Server license can be purchased separately through the application.
14. Please refer to our [compatibility list](#) for the latest optional accessories list.
15. The original non-ECC memory modules must be removed before the optional ECC memory modules can be installed.

### SYNOLOGY INC.

© 2021, Synology Inc. All rights reserved. Synology, the Synology logo are trademarks or registered trademarks of Synology Inc. Other product and company names mentioned herein may be trademarks of their respective companies. Synology may make changes to specification and product descriptions at anytime, without notice.

DS2419+II-2021-ENU-REV002