Synology®

DiskStation
DS1621+

Data management and protection, for anyone

Synology DiskStation DS1621+ is a powerful 6-bay network-attached storage solution designed to store and protect critical data assets. The growing amount of unstructured data requires smarter and increasingly higher performance methods of storing, accessing, and sharing. DS1621+ is a compact desktop form-factor NAS that is beyond evolutionary, featuring over 110K, or 174% higher 4K random read IOPS,[1] compared to its predecessor. Designed for scalability, the DS1621+ enables you to start small, then expand as your data grows.

Highlights

- **Accelerated Performance**
  174% higher 4K random read IOPS and 76% faster sequential write speeds compared to its predecessor[1]
- **Maximize Performance**
  Turbocharge HDD arrays without occupying drive bays using dual built-in M.2 slots for NVMe SSD cache
- **Easy Storage Expansion**
  Scale-up on-demand to 16 drives with two DX517 expansion units[2]
- **Includes Everything to Protect Your Data**
  Back up critical data to and from public clouds, Windows PCs and servers, virtual machines, and data on the NAS with Synology Active Backup suite, Hyper Backup, and Snapshot Replication
- **Ready for 10/25GbE**
  Supports 10GbE SFP+ / RJ-45 and 25GbE SFP28 NICs to instantly increase network bandwidth based on your infrastructure[3]

Versatility and Raw Power in a Single Solution

Synology DS1621+ can be a multi-purpose powerhouse, suitable for a wide range of usage environments. The compact, 11.5L desktop form-factor makes it easy to store away whether it is at home or in a quiet office environment.

- Up to **110,608** 4K random read IOPS and **2317 MB/s** sequential read speeds[1] for demanding workloads
- Dual **M.2 2280 slots for NVMe SSD** let you maximize performance and capacity efficiently[4]
- Features 6 bays for 2.5" and 3.5" SATA HDD/SSD drives, and can be expanded to 16 bays with two Synology DX517 expansion units
- Powered by **Synology DiskStation Manager** (DSM), Synology's unified operating system built for data management
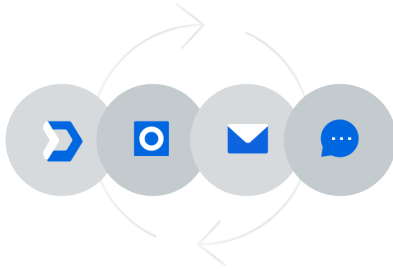
Robust Data Protection with Btrfs

DS1621+ supports a Btrfs file system optimized by Synology to offer both high reliability and high performance. Btrfs supports advanced storage technologies that meet the needs of modern business:

- **Advanced snapshot technology** provides schedulable and near-instantaneous data protection for shared folders and LUNs
- **File and folder-level data restoration** offers users who wish to restore only a specific file or folder more flexibility
- **Flexible shared folder and user quota system** provides comprehensive quota control for all user accounts and shared folders
- **File self-healing** allows Btrfs file systems to autodetect corrupted files using mirrored metadata and to restore broken data using RAID configurations
- **Inline compression** compresses data before writing it to the drive, to optimize storage use and reduce write commands to the drives

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.

Synology Collaboration Suite

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

On-Premises Collaboration

Synology Collaboration Suite allows businesses to host their own essential IT services for file sharing, concurrent document editing, emails, instant messaging, and more. Create a multi-user collaborative environment while leveraging private cloud infrastructure to reduce privacy concerns. Multi-layered security enables secure access to files and services, even for a distributed or remote workforce across Windows®, macOS®, Linux®, Android™, and iOS platforms.

- **Synology Drive** enables data access, synchronization, and backup via web portal and desktop applications across Windows®, macOS®, and Linux® platforms. Intelliversioning saves historical versions while minimizing storage space usage and supports on-demand data restoration.

- **Synology Office** includes Documents, Spreadsheets, and Slides. The online collaborative editing environment allows multiple users to edit, comment on, and share documents together.

- **Synology MailPlus**[5] enables you to set up a secure, reliable, and private email server, with an intuitive web-based client to boost productivity.

- **Synology Chat** enables instant conversations and optimizes team communications with powerful features including message encryption, pinning, forwarding, reminders, and scheduling.

- **Synology Calendar** helps teams keep track of what is important, with easy-to-use sharing and scheduling functions keeping everyone on the same page.

Virtualization Flexibility

Whether providing VM storage through iSCSI and NFS, or running VMs directly on the DS1621+ using Virtual Machine Manager, Synology DSM provides comprehensive tools to protect your virtual applications.

Running and Protecting Virtual Machines

Synology Virtual Machine Manager (VMM) is a hosted hypervisor that lets users easily set up virtual machines running Windows® or Linux®-based platforms and a virtualized version of Synology DSM, Virtual DSM, on the DS1621+. Users can set up a cluster environment with multiple Synology systems for flexibility to perform online migration based on load balancing and resource allocation requirements. High-performance snapshots, replication, cloning, and recovery mechanisms enable comprehensive management and data protection on each VM.[6]

DSM also simplifies the provisioning and management of storage for virtual machines. Certified for VMware® vSphere™, Microsoft® Hyper-V®, Citrix® XenServer™, and OpenStack, Synology systems can integrate with your virtualization platform of choice through iSCSI or NFS protocols. Install Synology Storage Console for VMware/Windows for additional ease of management and functionality right in the hypervisor.
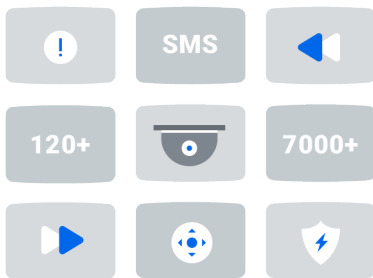
Synology Backup Solutions

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

Comprehensive Data Protection Options

DS1621+ includes a range of free backup solutions to protect local, remote, and cloud-based applications. Easily set up automated backups and even enable self-serve functionality to reduce maintenance and upkeep.

- **Back up data on Synology NAS:** Snapshot Replication enables lightning-fast snapshots for point-in-time file versioning, great for rolling back unintended file modifications and protecting your data against ransomware attacks. Hyper Backup offers a wide range of destinations for backups of your NAS, including to on-premises devices and cloud storage providers.

- **Back up business infrastructure:** Synology Active Backup suite is a collection of powerful backup solutions built to protect Windows PCs and servers, VMware and Hyper-V VMs, other file servers, and even Google Workspace and Microsoft 365 cloud applications.

Always On Guard

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

Private Video Surveillance

With Synology Surveillance Station, DS1621+ becomes a powerful VMS solution. With support for up to 40 IP cameras, you can easily cover large installations.[7]

- **7,900 supported cameras and counting:** Find a compatible camera from our constantly updated compatibility lists to match your video requirements and budget. ONVIF support prevents vendor lock-in.

- **Private and subscription-free:** Unlike cloud-based cameras, you can keep your recordings private and on premises. Simple per-camera licensing means no subscriptions are needed to access your data.

- **Flexible monitoring & control:** Access your surveillance system from a web browser, dedicated desktop clients, or from the DS cam mobile app. Internet access is optional.

- **Automation & notification:** Set up rules to trigger specific actions when an event occurs, such as automatically taking a picture when motion detection is triggered. Get notified by email, SMS, or push notification so that you can act quickly.

Hardware Overview

Front
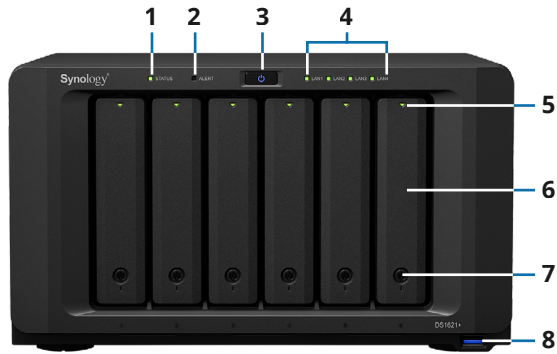
Rear
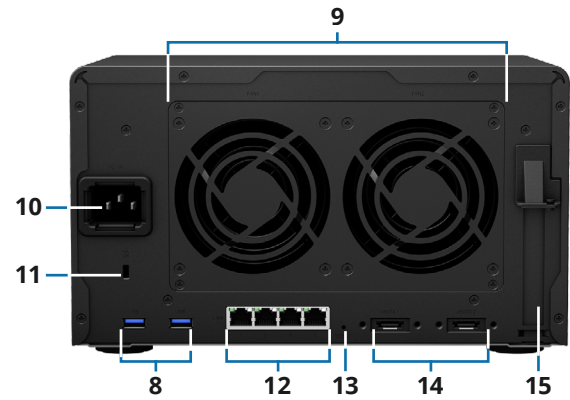
1	Status indicator	2	Alert indicator	3	Power button and indicator	4	LAN indicator
5	Drive status indicator	6	Drive tray	7	Drive tray lock	8	USB 3.2 Gen 1 port
9	System fan	10	Power port	11	Kensington Security Slot	12	1GbE RJ-45 port
13	Reset button	14	Expansion port	15	PCIe expansion slot		

Technical Specifications

Hardware

CPU	AMD Ryzen™ V1500B quad-core 2.2 GHz
Hardware encryption engine	Yes (AES-NI)
Memory	4 GB DDR4 ECC SODIMM (expandable up to 32 GB)
Compatible drive types[8]	• 6 x 3.5" or 2.5" SATA HDD/SSD (drives not included) • 2 x M.2 2280 NVMe SSD (drives not included)
Hot swappable drives	Yes
External ports	• 3 x USB 3.2 Gen 1 • 2 x eSATA
Size (HxWxD)	166 x 282 x 243 mm
Weight	5.1 kg
LAN ports	4 x 1GbE RJ-45
Wake on LAN/WAN	Yes
PCIe 3.0 slots	• 1 x 4-lane x8 slot • Supports 10/25GbE network interface cards[3]
Scheduled power on/off	Yes
System fans	2 (92 x 92 x 25 mm)
AC input power voltage	100 V to 240 V AC
Power consumption	• Access: 51.22 W • HDD Hibernation: 25.27 W
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 specification

Networking protocols	SMB, AFP, NFS, FTP, WebDAV, CalDAV, iSCSI, Telnet, SSH, SNMP, VPN (PPTP, OpenVPN™, L2TP)
File systems	• Internal: Btrfs, ext4 • External: Btrfs, ext4, ext3, FAT32, NTFS, HFS+, exFAT[9]
Supported RAID types	Synology Hybrid RAID (SHR), Basic, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
Storage management	• Maximum single volume size: 108 TB • Maximum system snapshots: 65,536[10] • Maximum internal volumes: 64
SSD cache[4]	• Read/write cache support • 2.5" SATA SSD support • M.2 NVMe SSD support
File sharing capabilities	• Maximum local user accounts: 2,048 • Maximum local groups: 256 • Maximum shared folders: 512 • Maximum concurrent SMB/NFS/AFP/FTP connections: 1,000
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® 6.5, 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 and later, macOS® 10.12 and later
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. • Maximum number of hosted files: 1,000,000 • 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.
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[11]	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	• Maximum iSCSI targets: 128 • Maximum iSCSI LUNs: 256 • iSCSI LUN clone / snapshot support
Virtual Machine Manager	Deploys and runs virtual machines on 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	• DSM configuration backup, macOS® Time Machine® support, Synology Drive Client desktop application • Shared folder sync supports a maximum of 16 tasks
Snapshot Replication	• Maximum of snapshots for shared folders: 1,024 • Maximum number of replications: 32
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.
Active Backup for Microsoft 365	Supports backup and restoration of Microsoft 365 OneDrive for Business, mail, contacts, and calendar.
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, and VMs from one centralized console.

Productivity & Collaboration

Collaboration tools	Users can collaborate through the instant messaging service Synology Chat, the online editor Synology Office, and the scheduling assistant Synology Calendar. • Maximum users for Chat: 1,500 • Maximum users for Office: 1,800 • 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	A secure, reliable, and private mail solution featuring high-availability, load balancing, security, and filtering.[5]
Synology MailPlus	An intuitive webmail interface for Synology MailPlus Server with customizable mail labels, filters, and user interface.

Multimedia

Moments	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.
Other packages	Video Station, Photo Station, Audio Station, iTunes® Server

Surveillance

Surveillance Station	Maximum IP cameras: 40, for a total of 1,200 FPS at 720p (H.264)[7].

All-in-One Servers

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	• Maximum connections: 30 • Supported VPN protocols: PPTP, OpenVPN™, L2TP/IPSec
Mail Server	• Supported Mail Server protocols: POP3, SMTP, IMAP • LDAP/AD account support
Mail Station	A webmail interface for Mail Server to receive emails from multiple POP3 mailboxes and SMTP servers.
Web Station	Enables hosting for up to 30 websites with support for PHP/MariaDB® and 3rd-party applications.
Other packages	DNS Server, RADIUS Server, Log Center

Others

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.
iOS/Android™ applications	Synology Drive, Synology MailPlus, Synology Chat, Synology LiveCam, Moments, DS audio, DS photo, DS video, DS cam, DS file, DS finder, DS note
Other packages	Additional 3rd-party packages available on Package Center.

Environment and Packaging

Environmental safety	RoHS compliant
Package content	• 1 x DS1621+ main unit • 1 x Quick Installation Guide • 1 x Accessory pack • 1 x AC power cord • 2 x RJ-45 LAN cable

Synology®

Optional accessories[12]	• DDR4 ECC SO-DIMM: D4ES01-4G/D4ES01-8G/D4ECSO-2666-16G • 10GbE Network Interface Cards: E10G21-F2/E10G18-T2/E10G18-T1/E10G17-F2 • 25GbE Network Interface Card: E25G21-F2 • 2.5" SATA SSD: SAT5200 • 3.5" SATA HDD: HAT5300 • M.2 2280 NVMe SSD: SNV3400 • Expansion Unit: DX517 • VisualStation: VS960HD/VS360HD • Surveillance Device License Pack • MailPlus License Pack • Virtual DSM License Pack
Warranty	3 years[13]

*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. Comparisons are done against the DS1618+ under specific testing conditions.
2. DS1621+ supports up to two Synology DX517 expansion units, sold separately.
3. Requires a supported NIC, Synology E25G21-F2, E10G21-F2, E10G18-T2, E10G18-T1, E10G17-F2, or other **compatible models.**
4. SSD cache can be enabled by using SAT5200 2.5" SSD drives or without occupying drive bays by installing Synology SNV3400 M.2 NVMe SSD drives into the built-in M.2 slots. Drives are sold separately.
5. Five MailPlus licenses are included, licenses required for additional user accounts. **Learn more** about licenses.
6. Certain advanced features require **Virtual Machine Manager Pro**. One **Virtual DSM license** is included, licenses are required for running additional instances.
7. Surveillance Station includes two free licenses. Connecting more cameras and devices requires **additional licenses**.
8. Check our **compatibility list** for validated drives to ensure system stability.
9. exFAT Access can be purchased separately through the DSM Package Center.
10. System snapshots include snapshots taken by iSCSI Manager, Snapshot Replication, and Virtual Machine Manager. Availability of these packages varies by model.
11. Presto File Server license can be purchased separately through the application.
12. Please refer to **compatibility list** for the latest optional accessories list.
13. 5-year warranty is available as an optional add-on with **EW201**, a 2-year warranty extension. Available only in select regions. The warranty period starts from the date of purchase as stated on your purchase receipt. **Learn more** about our limited product warranty policy.