Synology

Product Specifications

# DS224+

Last updated: Aug 6, 2026

# Hardware Specs

| CPU | |
|---|---|
| CPU Model | Intel Celeron J4125 |
| CPU Quantity | 1 |
| CPU Cores | 4 |
| CPU Threads | 4 |
| CPU Architecture | 64-bit |
| CPU Frequency | 2.0 (base) / 2.7 (turbo) GHz |
| Hardware Encryption Engine | v |

| Memory | |
|---|---|
| System Memory | 2 GB DDR4 non-ECC |
| Total Memory Slots | 1 |
| Maximum Memory Capacity | 6 GB (2 GB + 4 GB) |
| Notes | • Synology may revise pre-installed memory module specifications in response to component lifecycle and supply conditions. All revised components undergo the same rigorous validation to ensure equivalent compatibility, stability, and performance.<br>• Please select Synology memory modules for optimum compatibility and reliability. Synology will not provide complete product warranty or technical support if non-Synology memory modules are used for memory expansion. |

| Storage | |
|---|---|
| Drive Bays (See all supported drives) | 2 × 3.5" SATA HDD or 2.5" SATA SSD |
| Hot Swappable Drive* | v |

| External Ports | |
|---|---|
| RJ-45 1GbE LAN Port | 2 |
| USB 3.2 Gen 1 Port | 2 |
| USB Copy | v |
| Notes | This device's 1GbE LAN ports have a maximum transmission unit (MTU) size of 1,500 bytes. |

| Appearance | |
|---|---|
| Size (Height × Width × Depth) | 165 mm × 108 mm × 232.2 mm |
| Weight | 1.30 kg |

| Others | |
|---|---|
| System Fan | 92 mm × 92 mm × 1 pcs |
| Fan Speed Mode | • Full-Speed Mode<br>• Cool Mode<br>• Quiet Mode |
| Brightness Adjustable Front LED Indicators | v |
| Power Recovery | v |
| Noise Level | 22 dB(A) |
| Scheduled Power On / Off | v |
| Wake on LAN / WAN | v |
| Power Supply Unit / Adapter | 60 watts |
| AC Input Power Voltage | 100V to 240V AC |
| Power Frequency | 50/60 Hz, Single Phase |
| Power Consumption | 14.69 watts (Access)<br>4.41 watts (HDD Hibernation) |
| British Thermal Unit | 50.09 BTU/hr (Access)<br>15.04 BTU/hr (HDD Hibernation) |
| Notes | • For more information on how power consumption is measured, refer to this article.<br>• Noise testing was conducted with the Synology system fully installed with Synology SATA HDDs and in an idle state. Two G.R.A.S. Type 40AE microphones are placed at a 1 m distance from the front and rear of the device. Background noise: 16.49-17.51 dB(A); Temperature: 24.25-25.75°C; Humidity: 58.2-61.8% |

| 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) |
| Operating Humidity | 8% to 80% RH |
| Storage Humidity | 5% to 95% RH |

### Certification

- FCC
- CE
- BSMI
- VCCI
- RCM
- UKCA
- CCC
- KC
- BIS

### Warranty

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

| | |
|---|---|
| Notes | • The warranty period starts from the purchase date as stated on your purchase receipt. (Learn more)<br>• Extended Warranty Plus is only available in Europe and North America. EW201/EW202 is only available in Asia, Africa, and Oceania. For exact availability information please visit their respective websites. |

### Environment

RoHS Compliant

## Packaging Content

- Main Unit × 1
- Accessory Pack × 1
- AC Power Adapter × 1
- AC Power Cord × 1
- RJ-45 LAN Cable × 2
- Quick Installation Guide × 1

## Optional Accessories

- DDR4 non-ECC SODIMM: D4NS01-4G
- Plus Series 3.5" SATA HDD: HAT3300 Series

| | |
|---|---|
| Notes | All memory modules will operate at the maximum frequency specified by the CPU manufacturer. |

# Software Specs

## DSM Specifications

| Storage Management | |
|---|---|
| Maximum Single Volume Size | 108 TB |
| Maximum Internal Volume Number | 64 |
| SSD TRIM | v |
| Storage Efficiency | v |
| Supported RAID Type | • Synology Hybrid RAID<br>• Basic<br>• JBOD<br>• RAID 0<br>• RAID 1 |
| RAID Migration | • Basic to RAID 1 |
| Volume Expansion with Larger HDDs | • Synology Hybrid RAID<br>• RAID 1 |
| Notes | • Each internal volume (may consist of multiple drives) is expandable up to 108TB.<br>• Actual maximum storage pool and volume sizes depend on drive sizes used, the number of drive bays available, and the RAID configuration.<br>• 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.<br>• Storage efficiency helps reduce storage space consumption through deduplication and compression. For more information about this feature and its support requirements, please refer to this article. |

| File System | |
|---|---|
| Internal Drives | • Btrfs<br>• ext4 |
| External Drives | • Btrfs<br>• ext4<br>• ext3<br>• FAT32<br>• NTFS<br>• HFS+<br>• exFAT |

| File Services | |
|---|---|
| File Protocol | • SMB<br>• AFP<br>• NFS<br>• FTP<br>• WebDAV<br>• Rsync |
| Maximum Number of SMB Connections (FSCT-Based) | 5 |
| Windows Access Control List (ACL) Integration | v |
| NFS Kerberos Authentication | v |
| Notes | • Connection value of this model is tested with Synology SATA HDD fully populated and all onboard network ports<br>• Models with expandable memory are tested with the maximum supported quantity installed.<br>• SMB performance was evaluated using Microsoft File Server Capacity Tool (FSCT) version 1.3, with the following configuration:<br>  ◦ Test workload: HomeFolder scenario provided by the FSCT tool<br>  ◦ Test duration: 600 seconds<br>  ◦ Domain controller & FSCT controller: Windows Server 2022<br>  ◦ FSCT clients: 8 × Windows 10 machines<br>  ◦ SMB feature: Directory leasing enabled |

| Account & Shared Folder | |
|---|---|
| Maximum Local User Accounts | 512 |
| Maximum Local Groups | 128 |
| Maximum Shared Folder | 128 |
| Maximum Shared Folder Sync Tasks | 4 |

| Hybrid Share | |
|---|---|
| Maximum Hybrid Share Folders | 10 |

| Hyper Backup | |
|---|---|
| Folder and Package Backup | v |
| Entire System Backup | v |
| Notes | Full-system backup requires DSM 7.2 or later. |

| High Availability | |
|---|---|
| Synology High Availability | v |

| Log Center | |
|---|---|
| Syslog Events per Second | 800 |

| General Specifications | |
|---|---|
| Supported Protocols | SMB1 (CIFS), SMB2, SMB3, NFSv3, NFSv4, NFSv4.1, NFS Kerberized sessions, iSCSI, HTTP, HTTPs, FTP, SNMP, LDAP, CalDAV |
| Supported Browsers | • Chrome<br>• Firefox<br>• Edge<br>• Safari |
| 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

| Central Management System |
|---|
| v |

| Synology AI Console | |
|---|---|
| Third-Party AI Model Integration | v |

| Synology Chat | |
|---|---|
| Maximum Number of Users | 100 |
| Notes | • Measured with simulated users, each with an average record of 20,000 messages, emojis, or stickers. The required server response time is below ten seconds.<br>• Models with expandable memory are tested with the maximum supported quantity installed. |

| Download Station | |
|---|---|
| Maximum Concurrent Download Tasks | 80 |

| SAN Manager | |
|---|---|
| Maximum iSCSI Target Number | 2 |
| Maximum LUN | 4 |
| LUN Clone/Snapshot, Windows ODX | v |

| Synology MailPlus / MailPlus Server | |
|---|---|
| Free Email Accounts | 5 (Additional accounts require purchase of licenses) |
| Maximum Number of Users | 20 |
| Notes | • The suggested maximum number of users is based on the following workload: 20% of users with a 20,000 item mailbox randomly performing actions and receiving 240 emails per day, and 80% of users receiving 20 emails per day. Learn more<br>• Models with SSD support are tested with a single SSD volume.<br>• Models with expandable memory are tested with the maximum supported quantity installed. Learn more about memory requirements.<br>• Operating in high-availability mode will incur additional overhead.<br>• Features enabled during evaluation: anti-spam, anti-virus, DNSBL, greylist, content scanning, and full-text search (English). |

| Media Server | |
|---|---|
| DLNA Compliance | v |

| Synology Photos | |
|---|---|
| Facial Recognition | v |
| Object Recognition | v |
| Notes | Object recognition requires an upgrade of memory capacity to a minimum of 4 GB. |

| Snapshot Replication | |
|---|---|
| Maximum Snapshots per Shared Folder | 128 |
| Maximum Snapshots per LUN | 32 |
| Maximum Snapshots per System | 1,024 |
| Maximum Replication Tasks for Shared Folders | 16 |
| Maximum Replication Tasks for LUNs | 8 |
| Maximum Replication Tasks per System | 16 |

| Surveillance Station | |
|---|---|
| Default Licenses | 2 (Additional cameras require purchase of licenses) |
| Maximum IP Cameras and Total FPS (H.264) | • 1080p: 25 channels, 750 FPS<br>• 3M: 25 channels, 350 FPS<br>• 5M: 25 channels, 280 FPS<br>• 4K: 17 channels, 170 FPS |
| Maximum IP Cameras and Total FPS (H.265) | • 1080p: 25 channels, 750 FPS<br>• 3M: 25 channels, 600 FPS<br>• 5M: 25 channels, 480 FPS<br>• 4K: 20 channels, 200 FPS |
| Notes | • Performance figures are obtained from testing conducted with the device fully populated with drives, with their default memory configuration, and under a continuous recording setup. Actual system capabilities may vary based on configuration, drive performance, enabled features, and the presence of additional workloads.<br>• Use NVR Selector to quickly find a suitable model based on your requirements.<br>• The number of video channels that can be viewed simultaneously is double the maximum number of cameras for the same codec and resolution.<br>• The values above are based on testing with RTSP streaming. If SRTP is enabled for all cameras, overall performance will decrease to 70% of the stated figures. |

| Synology Drive | |
|---|---|
| Maximum Number of Users | 10 |
| Maximum Number of Hosted Files | 100,000 (applies to files indexed or hosted by Synology Drive. For file access through other standard protocols, refer to the File Services section above) |
| Notes | • The suggested maximum number of users is based on the following workload: 20% of users randomly perform file operations (upload, download, move, and delete), and 80% of users are logged in but idle. Learn more<br>• Models with SSD support are tested with a single SSD volume.<br>• Models with expandable memory are tested with the maximum supported quantity installed.<br>• Exceeding the recommended numbers above will not block application operations, but may result in longer response time.<br>• Btrfs file system and non-encrypted shared folders were used during the aforementioned testing. |

| Synology Office | |
|---|---|
| Maximum Number of Users | 10 |
| Notes | • The suggested maximum number of users is based on the following workload: 20% of users are executing random actions at an average of 30-second intervals, and 80% of users are logged in and viewing a file. Learn more<br>• Models with SSD support are tested with a single SSD volume.<br>• Models with expandable memory are tested with the maximum supported quantity installed.<br>• Client performance may affect maximum simultaneous editing users. Client PCs used for testing: Intel Core i3-3220 / 8GB RAM |

| Virtual Machine Manager | |
|---|---|
| Recommended Virtual Machine Instances | 2 (Learn more) |
| Recommended Virtual DSM Number (Licenses required) | 2 (including 1 Free License) |
| Notes | The specifications vary depending on system configuration and memory size. |

| VPN Server | |
|---|---|
| Maximum Connections | 4 |