

(<https://www.asustor.com/en/>)



## ARMed to the Max

Affordable personal cloud bringing high performance for individuals and families.

# AS3302T

- Realtek RTD1296 Quad-Core 1.4 GHz CPU
- Uses 2 GB DDR4 – 40% more efficient
- Superfast 2.5-Gigabit Ethernet
- Enjoy, download, upload and stream content with 4K transcoding.
- Supports Wake on LAN and Wake on WAN
- New Rose Gold logo
- Tool-free installation

**PLEX** (<https://docs.google.com/spreadsheets/d/1MfYoJkiwSqCXg8cm5-Ac4oOLPRtCkgUxU0jdj3tmMPc/edit#gid=314388488>)



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Home > Best Products > Storage > Network Attached Storage

## The Best NAS (Network Attached Storage) Devices for 2022

Network attached storage is the most versatile storage, but that's just one of the many benefits of buying a NAS device. We've tested the top connected drives to tell you which one will work best for your home or small business.

By John Burch Updated December 28, 2021

Related Network Attached Storage Picks:

- Best External Hard Drives
- Best External SSDs
- Best Cloud Storage
- Best Routers
- Best Wi-Fi 6 Routers

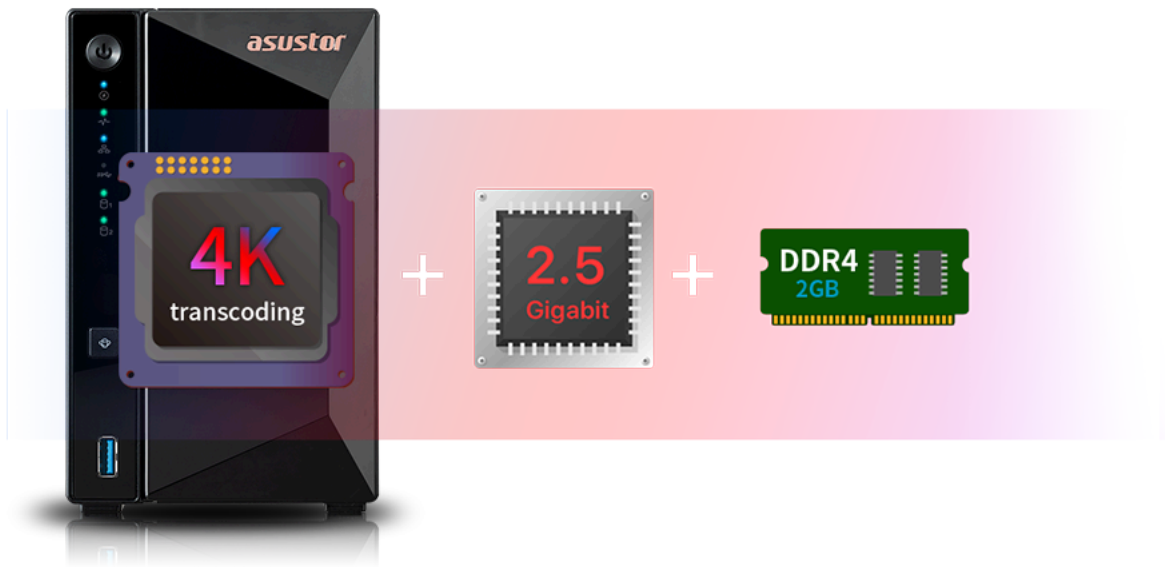
OUR 12 TOP PICKS

Best Budget NAS Device for First-Time Buyers	Best Two-Bay NAS Device	Best Media Server NAS Device	Best Four-Bay NAS Device	A Solid A
Asustor Driverstor 2 AS1102T	Asustor Lockerstor 2 (AS6602T)	Asustor Driverstor 2 Pro AS3302T	Asustor AS5304T	AS1102T
\$189.99 at Amazon	\$399.00 at Amazon	\$389.99 at Amazon	\$449.00 at Best Buy	

"The Best NAS (Network Attached Storage) Devices for 2021 & 2022"

## All New Hardware – Same Great Case

- 2.5-Gigabit Ethernet – More than twice the performance of Gigabit
- Realtek RTD1296 Quad-Core CPU at 1.4Ghz
- DDR4 RAM – 40% more efficient
- High performance, 4K decoding
- Supports Wake on LAN and Wake on WAN



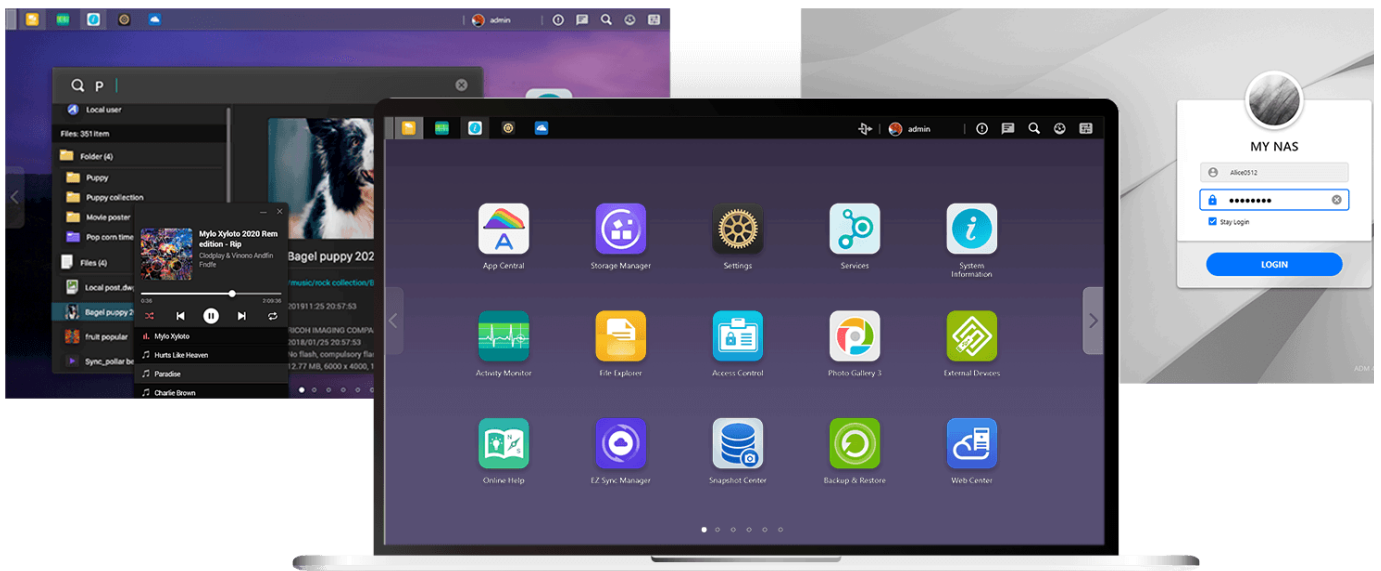
# Holistic Backup Solution

- Phone backup
- PC backup
- NAS data preservation
- Cloud to NAS backup
- NAS to NAS backup
- USB backup



## Brand-New ADM 4.0

ADM 4.0 is here and brings a whole host of intuitive design changes to ADM OS. The upgraded UI brings a new aesthetically-pleasing dark mode that help and preserve OLED displays. ADM 4.0 introduces a new login page that contains a variety of customizable elements, a more convenient and easier-to-use search feature and new custom themes. Under the hood, ADM 4.0 brings improvements to performance, compatibility and security as the new version of C plugs vulnerabilities found in previous versions, increasing security while efficiency improvements bring better performance.



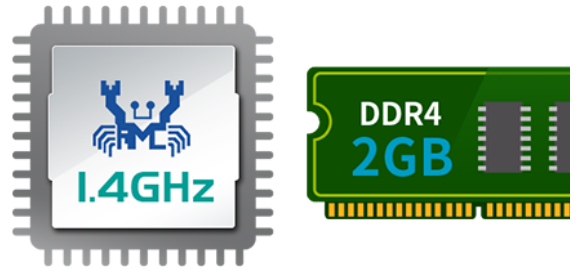
## Rose Gold Coloring

The all-new Rose Gold Logo is elegant and distinct, enabling easy distinction between ASUSTOR NAS models.



## Realtek Quad-Core CPU and DDR4 RAM

The Drivestor 2 Pro and Drivestor 4 Pro are equipped with a Realtek RTD1296 1.4GHz Quad-Core 64-bit CPU. Transcode, stream and play multimedia in 4K, transfer files and easily multitask with the Drivestor Pro series. The Drivestor Pro handles multitasking with ease by utilizing its 2 GB of DDR4 memory ensuring that virtually any task on an ASUSTOR NAS is executed smoothly.



## Media Mode

The Drivestor 2 Pro and 4 Pro come with 2 GB of memory. Media Mode is a new feature that efficiently reserves 512 MB of RAM for multimedia tasks as a tasks require large amounts of RAM. With dedicated RAM for multimedia, video playback remains smooth and is not interrupted by other tasks.



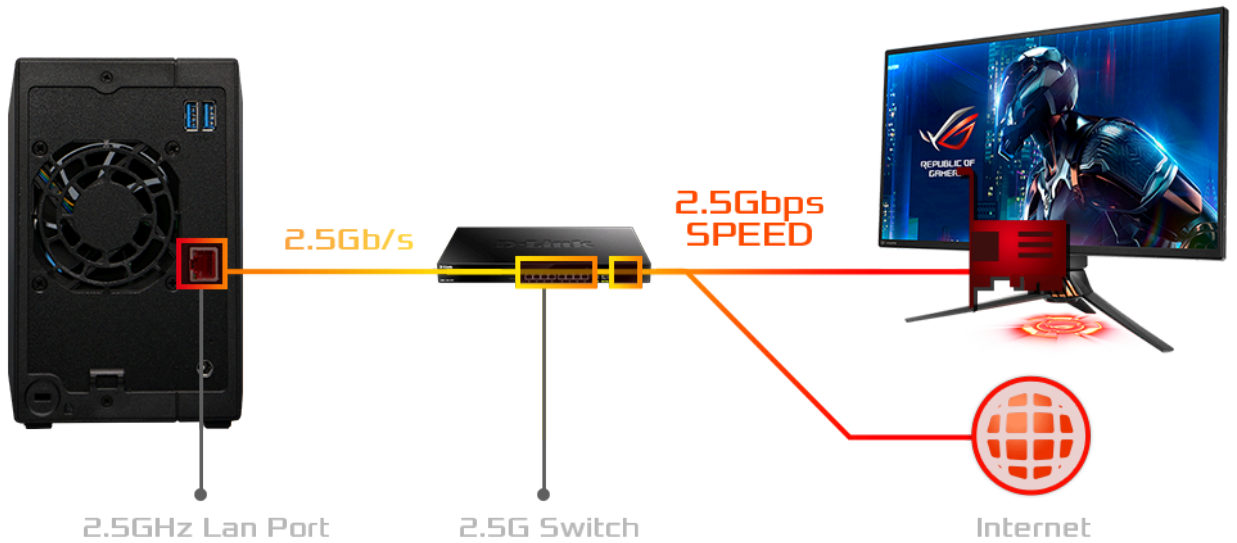
## Efficient and Powerful

The Drivestor 2 Pro and 4 Pro are ASUSTOR's highest value devices ever. Transcode 10-bit 4K H.265 media with hardware decoding easily that enables unbelievably smooth video playback in LooksGood.



## 2.5-Gigabit Ethernet – Double Speed

The Drivestor 2 Pro, despite being extremely affordable contains 2.5-Gigabit Ethernet and more than doubles the performance of comparable Gigabit-class



## Tool-free Installation

ASUSTOR's Driverstor Pro Gen2 series introduces its new tool-free caddies as a way to simplify installation of hard drives. Each NAS comes included with to install the drive easily. On the Driverstor Pro Gen2 series, hot-swapping of hard drives is supported, allowing you to change hard drives easily without po down the NAS.



## Silent and Efficient

The Driverstor 2 Pro and 4 Pro emit only 19 decibels of sound with SSDs ensuring that the NAS remains inaudible even when recording for content creation



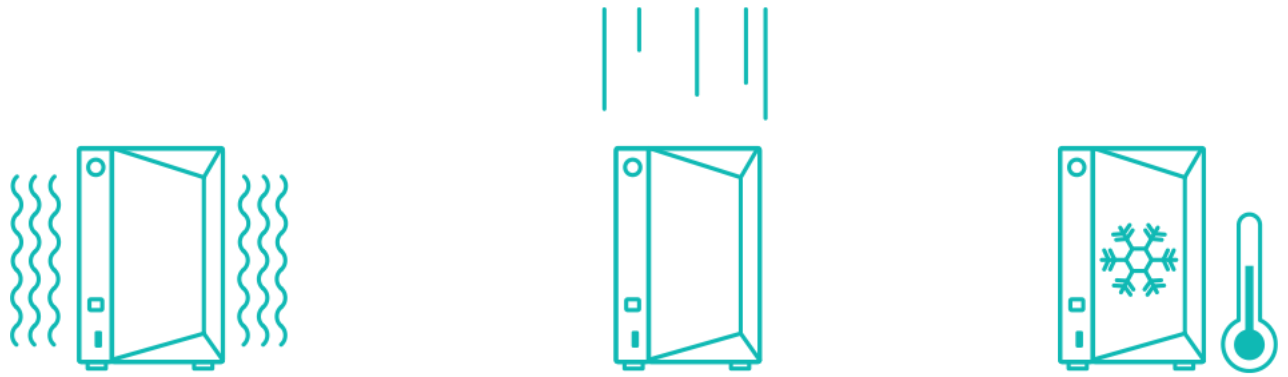
## Free exFAT

exFAT is now supported free of charge in ADM 4.0 due to a policy change by Microsoft.



## 24/7 Reliability and Durability

All ASUSTOR NAS are designed for and are suitable for 24/7 use. ASUSTOR NAS devices have also undergone rigorous tests, such as drop tests and burn test durability in extreme conditions. Heatsinks were added to sensitive components to dissipate heat, helping to maintain the longevity of the device.



## Protected From the Inside and Out

Protect your data from loss, damage and attacks with the ASUSTOR NAS. An ASUSTOR NAS is better protected by running the Linux-based ADM, employed in firewall, ClamAV Antivirus, MyArchive and ADM's various backup tools help protect ransomware even better.

### Network Attack Protection

- Firewall
- ADM Defender
- Cloud Backup Center offsite backups

### Secure Data Transmission

- VPN connection
- SSL certificate connection
- Automatic logout

### Internal Data

- MyArchive on and offsite backups
- AES-256 folder encryption
- Antivirus software

### Access Control

- File/folder/app isolation
- 2-Step Verification
- Wake-on-LAN (WOL)
- Wake-on-WAN (WAN)

\*MyArchive not applicable: AS10, AS11(Drivestor)





# Comprehensive Backup Solutions

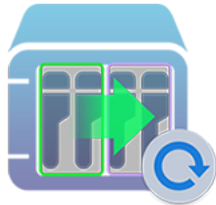
ASUSTOR's comprehensive backup solution provides more than twelve backup options, including, but not limited to Amazon S3, Dropbox, Google Drive, a OneDrive. ASUSTOR Backup Plan for Windows as well as Time Machine for macOS provides easy backups for desktops and laptops.



1. Transfer mobile data to NAS



2. Computer data to NAS



3. NAS local backup



4. Public cloud and NAS data backup



5. NAS to NAS



6. NAS backup to external device

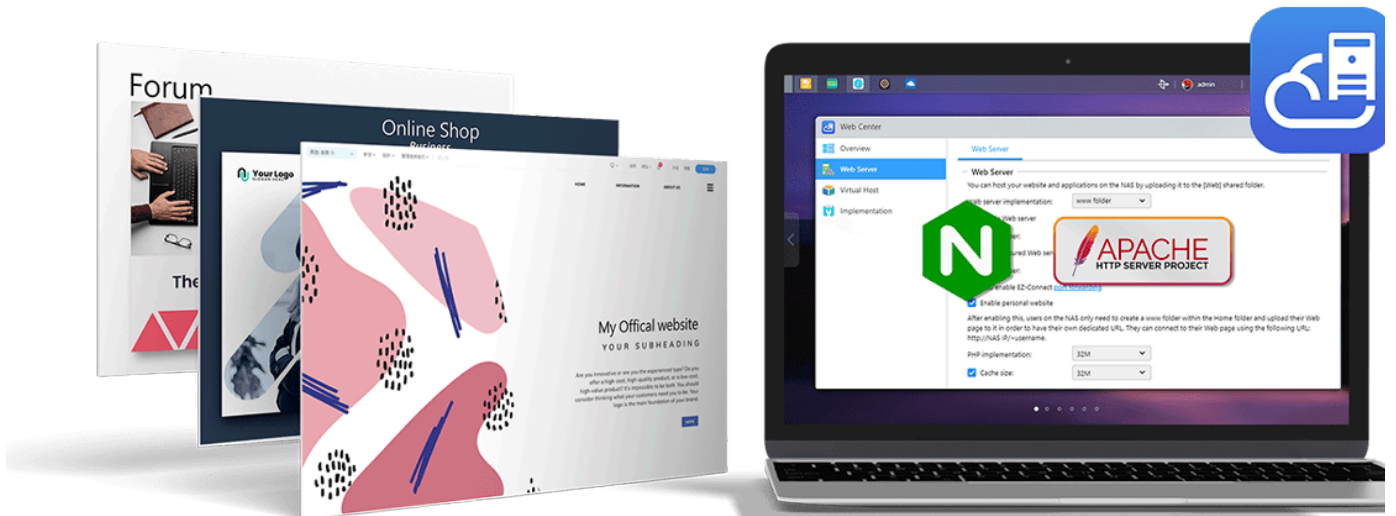
## Exclusive MyArchive Cold Backup Technology Unlimited Capacity Expansion

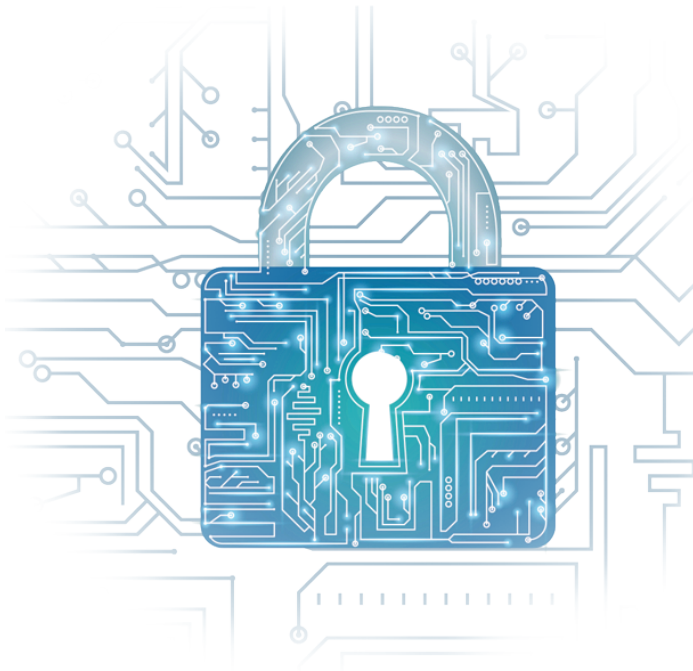
MyArchive cold storage technology turns NAS hard drives into removable storage archive drives. Directly insert a MyArchive hard drive into a free bay inside NAS to easily access, backup and share terabytes of content.



## Web Center

Easily set up a website with Web Center. Install Apache or Nginx or almost any other web server implementation and add multiple website portals for an ea web server experience.





## Protected From Ransomware

The ASUSTOR NAS comes with the most up-to-date version of ADM to protect against ransomware attacks. Snapshot Center provides the ability to efficiently create snapshots to protect and easily restore lost data from its volumes. Other security features found on the ASUSTOR NAS are the ability to create one or more replacement administrator accounts, a firewall by Active Defender that features blacklists and whitelists, the ability to change default settings to disable SSH and Terminal to prevent remote attacks.

## Photo Gallery 3 + AiFoto 3

The all new Photo Gallery 3 and AiFoto 3 have been revamped and brings a variety of new features to make photo organization easier than ever. New features of Photo Gallery 3 include, but are not limited to custom folder selection, timelines, smart albums, and new photo modes. Easily blow up photos to up to twice their original size, play songs on slideshows, performance enhancements and customized share links make for an even better photo viewing and sharing experience.



# ASUSTOR EZ Sync



ASUSTOR EZ Sync Learn more about this > ([https://www.asustor.com type=2&subject=4&sub=143](https://www.asustor.com/type=2&subject=4&sub=143))

1. All new UI. Simpler and easier to operate. View NAS information quickly
2. More complete settings - offering detailed folder lists. Easily select folders not in a folder.
3. Notifications for abnormal status
4. Support 2-step verification increase account safety.
5. Improve NAS connecting and file sync system stability for better user experience

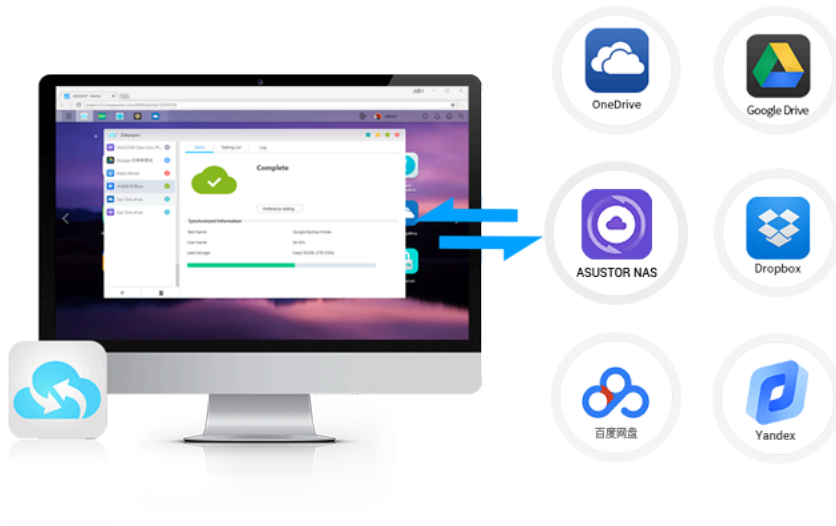
# Cloud Backup Center

Cloud Backup Center brings support for various business cloud services including, but not limited to Amazon S3, Backblaze B2, Baidu Cloud, IBM Cloud, Facebook Cloud Files, Microsoft Azure Blob Storage, Alibaba Cloud, Google Cloud Storage, Box, hcloud S3, Lyve Cloud, SFTP and WebDAV. Control your data with instant and scheduled backups as well as using Cloud Backup Center to create a hybrid cloud that keeps your data online and offline, keeping your data protected



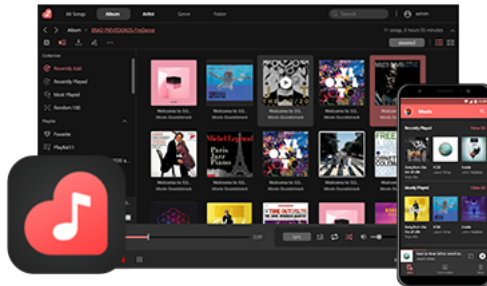
# DataSync Center

DataSync Center combines multiple cloud services into a single app. DataSync Center includes, but is not limited to Google Drive, Dropbox, OneDrive and supports multitasking as well as multiple accounts. Control your data with instant and scheduled backups as well as using Cloud Backup Center to create a hybrid cloud that keeps your data online and offline, keeping your data protected.



# Create the Ultimate Home Multimedia Center

Enjoy electrifying digital entertainment on demand with ASUSTOR NAS. Through ASUSTOR's App Central, you can install additional multimedia server Apps like UPnP Media Server and OwnTone giving your NAS the ability to stream multimedia content to your computers, TVs and mobile devices.



SoundsGood  
+  
AiMusic

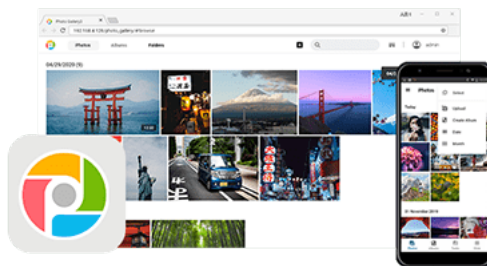
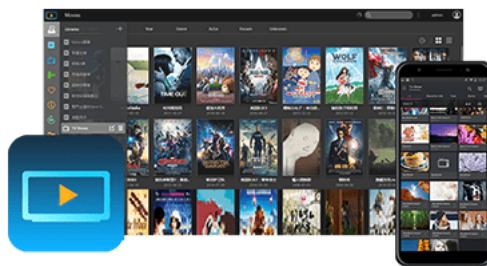


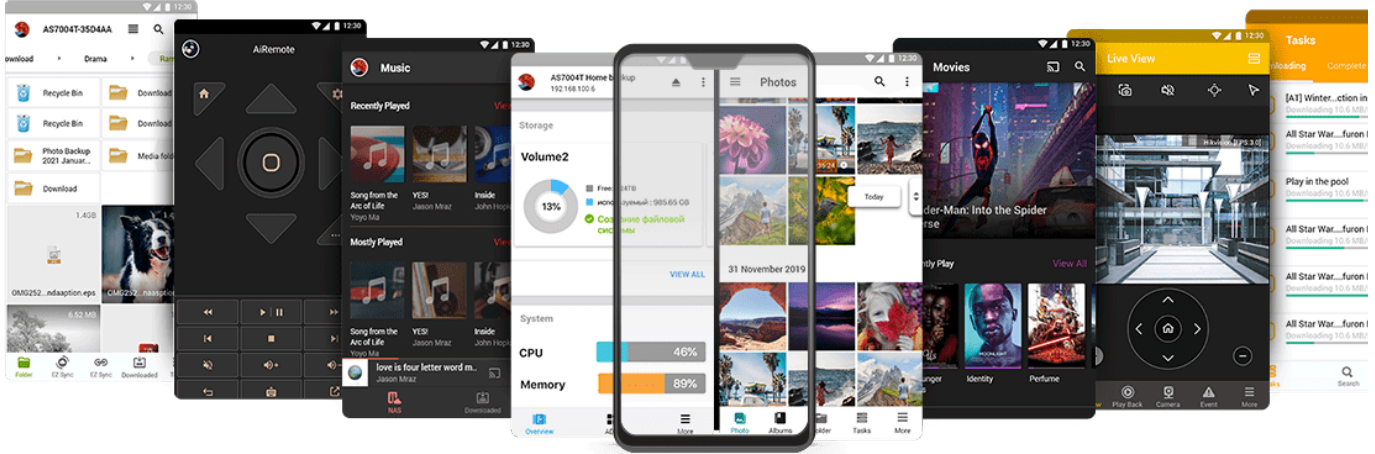
Photo Gallery 3  
+  
AiFoto 3



LooksGood  
+  
AiVideos

# Mobile Apps

ASUSTOR's exclusive EZ Connect technology allows you to connect to your NAS from anywhere with your Mobile device in order to access and share your ASUSTOR mobile apps. ASUSTOR mobile apps provide pass code lock functions in order to protect your privacy and data. You can also make use of HTTPS connections for even added security.



AiData



AiRemote



AiMusic



AiMaster



AiFoto 3



AiVideos



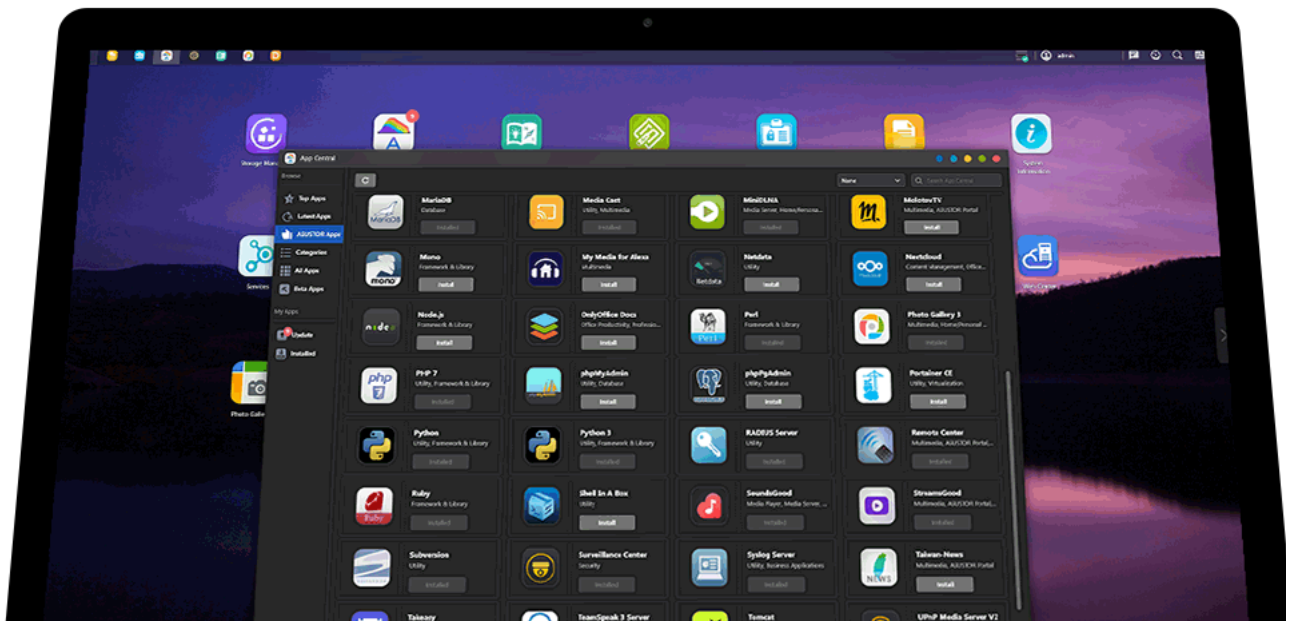
AiSecure



AiDown

# App Central

Unleash the unlimited potential of ASUSTOR NAS. The applications that come pre-installed with each ASUSTOR NAS device are just the beginning. At your convenience, you can browse through and download any applications that pique your interest from App Central. Whether your interests lie in business, web construction or even digital home entertainment, App Central has got you covered. With over 200 unique Apps, App Central provides you with the bundles applications that you require to satisfy your digital lifestyle needs. Explore the unlimited potential of ASUSTOR NAS devices while creating a personalized N for yourself.



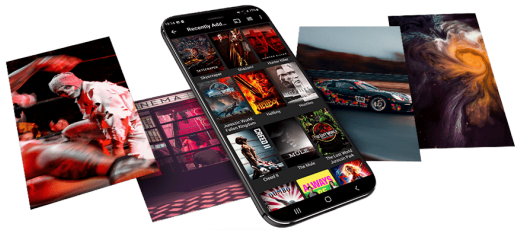




## First-Class Product Warranty

All ASUSTOR NAS products come with a 3-year warranty. ASUSTOR c make customer service a priority in providing the highest standard of aft service and technical support.

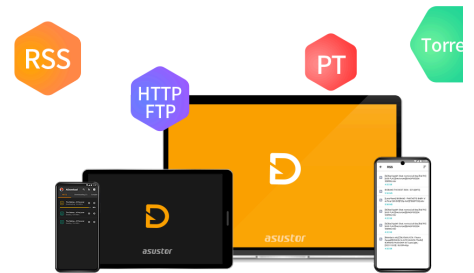
## A movie theater in the palm of your hand



AiVideos brings you the smoothest mobile video viewing experience from NAS. Bro through the video collection on your NAS without needing to wait for long downloads Internet. Enjoy high-definition video streaming with just one click. AiVideos also supp multilingual subtitles and different audio channels to make enjoying films in different easy. Use AiVideos to bring the theater to your phone, tablet and set top box.

## Download on the go

Imagine the convenience of downloading while on the go and then having your downloads ready as soon as you get home. With ASUSTOR's AiDownload, all this is possible and more. AiDownload is a mobile app that works with ASUSTOR's Download Center to provide you with download management on mobile. Searching, downloading, configuring and monitoring can all be done with AiDownload. Torrent\* magnets also automatically add download tasks to AiDownload, making downloading easier than ever!



## Your mobile device as your remote



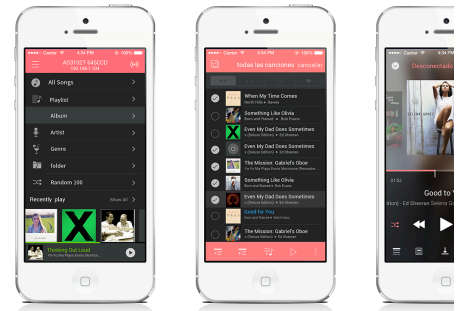
Now your phone can become a remote control for the ASUSTOR Portal.

AiRemote allows you to control all types of functionality on the ASUSTOR Portal. Fr basic up, down, left, right controls used with the ASUSTOR Portal interfaces to the p rewind, fast forward and volume controls used when playing videos, AiRemote has c covered.

Furthermore, when using the web browser in ASUSTOR Portal, AiRemote provides Touchpad Mode giving you intuitive control over your web browsing.

# Terabytes of music in the palm of your hand

AiMusic allows you to stream music from your NAS to your mobile device, letting you enjoy your entire music collection while on the go.



## A variety of listening experiences



Play music from playlists that you create yourself for an optimal listening experience listening to random songs? AiMusic's Random songs play mode is your best friend! only select it once to create a random playlist from your entire music collection, allow enjoy a new listening experience each and every time.

## Listen to your favorite songs while offline

AiMusic also allows you to download songs from your NAS to your mobile device for offline listening. No matter if it is a single song, an album or an entire playlist, all can be easily downloaded to your mobile device for convenient listening.



## External Optical Drive Support



After connecting an external optical drive (CD, DVD, Blu-ray) to your NAS via USB, you can use File Explorer to directly access any files that you have backed up to optical media or even transfer files from your optical media to your NAS via drag and drop for future use.

Note:

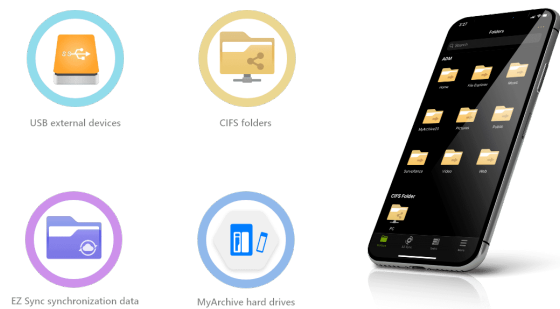
1. This function only provides data access and does not support the audio and video playback of optical media.
2. Certain optical drives will require additional power in order to operate properly. If you find that your optical drive is not spinning or reading correctly, please use a USB Y-cable with additional power.

# A cost-effective and efficient mail service solution

The ability to send and receive email is fundamental to all businesses. However, expensive implementation costs and complicated management create barriers for most small and medium sized businesses. ASUSTOR's Mail Server offers a comprehensive and cost-effective solution that allows any business to easily maintain their own dedicated mail server.



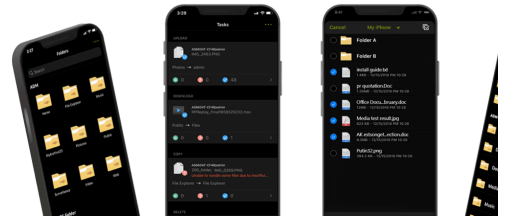
## Your Data at your Fingertips



In addition to browsing files in an ASUSTOR NAS with a web browser, shared folder directly accessible on your phone or tablet through AiData. Mounted CIFS folders, U external devices, MyArchive hard drives and EZ Sync synchronization data are all s and can be easily accessed, moved or copied from within AiData.

## Easy File Management

AiData provides a variety of file management features. AiData supports downloading and uploading files for backups. When browsing a large amount of data on the NAS, AiData supports both grid and list views to display, sort and manage files for better organization.



## Downloading AiData

AiData is available for both Android and iOS devices. You can search for AiData in the App Store and Google Play or scan the QR codes below to download the app.

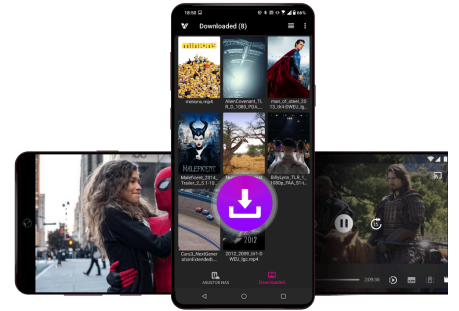


(<https://apps.apple.com/app/id685976952>) ([play.google.com/store/apps/details?id=com.asustor.aidata.plus](https://play.google.com/store/apps/details?id=com.asustor.aidata.plus)) ([https://www.asustor.com/ai-data/ai-data.html#product\\_id=69#ai-data](https://www.asustor.com/ai-data/ai-data.html#product_id=69#ai-data))



# Offline Playback

Use your wireless network to download videos on your NAS to your phone or tablet with AiVideos. AiVideos supports offline video playback for enjoyment of movies when away from the house without using mobile data that may have bandwidth limits or poor reception.



# Keep an eye on it



Worried about leaving your home unattended? Keep an eye on the most important t Surveillance Center. Surveillance Center's fully optimized interface allows you to simultaneously view live feeds from up to 4 IP cameras, take snapshots and control and zoom functions of all cameras giving you complete peace of mind.

# Stay Connected to Everything You Care About with AiSecure

AiSecure allows you to easily keep an eye on everything that is happening at home. In addition to monitoring live views of particular locations, AiSecure also features instant push notifications that can be sent to your mobile device when specified events occur, allowing you to grasp all the latest developments in the palm of your hand.



# Simple to Set Up



AiSecure dramatically simplifies the connection process to your surveillance feeds.\* enabling Cloud Connect on your NAS, you will be able to use your dedicated Cloud connect to Surveillance Center, allowing you to easily monitor all the important thing: life from any corner of the world.

\*AiSecure provides 3 different connection methods:

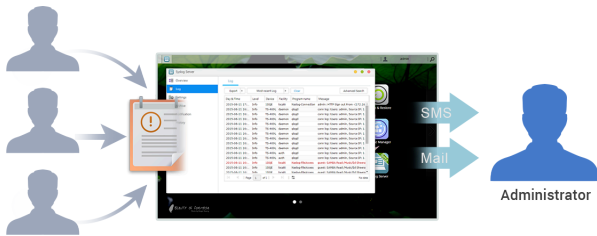
- 1. Connecting via Cloud ID.
- 2. Connecting via Auto Discovery to ASUSTOR devices on the same network.
- 3. Connecting via IP/Hostname.

# iSCSI LUN Snapshots Stable, fast and capacity-saving

ASUSTOR's snapshot technology provides almost instantaneous creation of snapshots. It saves a significant amount of time and storage capacity when compared with traditional LUN backups. Should files become damaged or corrupted, the simple and intuitive interface allows administrators to quickly restore data, completing disaster recovery in the fastest time possible and providing uninterrupted service.



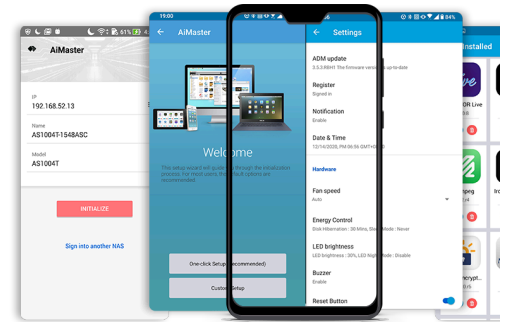
## Effectively simplifying network management



Syslog Server supports standard Syslog protocols and can centrally aggregate systems that are spread out over various network devices for storage and management. Furthermore, Syslog Server integrates with the NAS's Instant Notification function, allowing administrators to receive e-mails or SMS notifications when specified events occur, in order to quickly take appropriate measures.

## Easily Set Up Your NAS

AiMaster enables you to initialize and activate your NAS immediately through your phone or tablet. Easily monitor your ASUSTOR NAS, add users, download and install apps, update ADM settings, making the new AiMaster easier than ever.



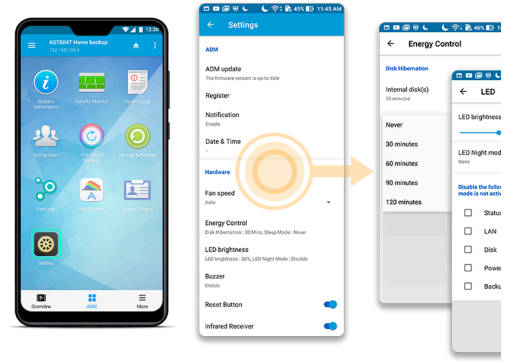
## All-New Login Page



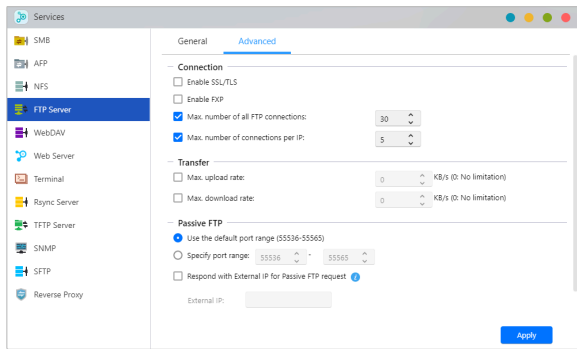
The all-new login page can share login information between other installed ASUSTOR apps, eliminating the need to enter login info multiple times. NAS devices that support LAN or WAN can directly be woken up by AiMaster.

## Easily Set Up ADM

AiMaster is an app for phones and tablets for controlling and adjusting ADM settings.



## Your own FTP server



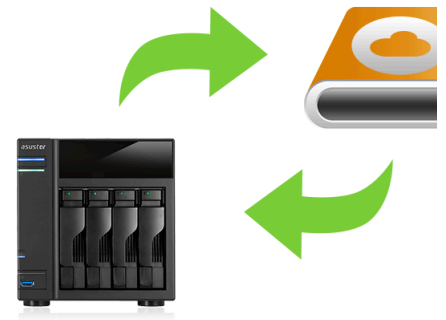
FTP is one of the most widely used and popular transfer protocols in the world. Ever ASUSTOR NAS has a built-in FTP server feature that allows you to create a person server in just a matter of seconds. Hosting your own FTP server will instantly give you power to share and exchange files over the internet.

## Regular backups of your vital data

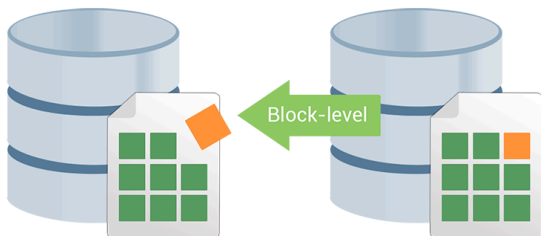
ASUSTOR's built-in RAID storage technology can provide a certain level of data protection, but regularly backing up the data on your NAS is also very important.

The External backup function supports two-way data transfers, incremental backups and also the scheduling of your NAS to perform regular backup jobs. It may be used to complete tasks such as:

- The transfer or backup of the data from your NAS to an external device.
- Initializing the copying of data from an external device to your NAS



## The ultimate tool for remote backup



Rsync is an application originally developed for UNIX that is usually used for backup between two computers. By providing block level replication, Rsync is able to offer incremental backup. Incremental backup allows for successive backup jobs (after your first backup only copy data that has changed since your last backup job. Rsync is suitable for us and data that are always changing. It lets you cut down on backup time while significantly reducing bandwidth usage.

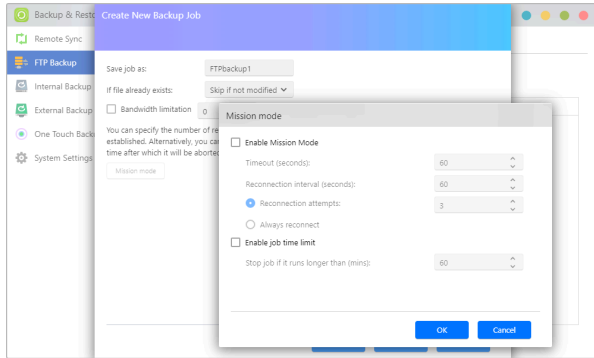
## A rich and flexible backup solution

ASUSTOR's Rsync Backup function supports two-way data transfers, incremental backup, encrypted backup and also the scheduling of your NAS to perform regular backup jobs. It effectively simplifies data backup while also substantially reducing the burden on IT staff. ASUSTOR's Rsync backup function may be used to complete tasks such as:

- The transfer or backup of data from your NAS to an Rsync compatible server
- Initiating downloads of the data from an Rsync compatible server to your NAS



## Mission Mode



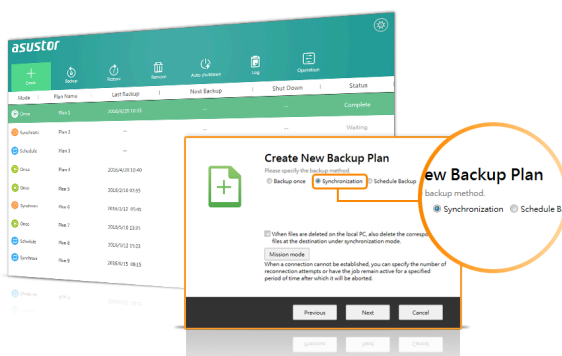
Never again worry about your critical backup jobs stopping or failing to complete because ASUSTOR NAS won't stop until it's 'mission complete'. Sometimes backup jobs may be stopped because of various connection problems with a busy server on the other end. For Rsync, FTP, external and cloud backups, ASUSTOR's Mission Mode allows you to control the number of connection attempts and time interval for connection attempts, ensuring successful completion of your backup mission. This also gives IT administrators a significant amount of flexibility when configuring backup jobs.

## Set and forget

ASUSTOR's Backup Plan software for Windows provides you with worry-free backup. Simply schedule a regular backup job of your PC to your NAS, then let Backup Plan take care of the rest. Backup Plan will work in the background to ensure that your PC is always backed up.

Mode	Plan Name	Last Backup	Next Backup	Shut Down
Once	Plan 1	2016/4/29 10:35	---	---
Synchron	Plan 2	---	---	---
Schedule	Plan 3	---	2016/4/28 0:0	None
Once	Plan 4	2016/4/28 10:40	---	---
Once	Plan 5	2016/2/10 07:35	2016/3/10 07:35	---
Synchron	Plan 6	2016/3/12 05:45	2016/2/10 07:35	---
Once	Plan 7	2016/5/10 13:35	2016/5/10 13:35	---
Schedule	Plan 8	2016/5/12 15:23	2016/4/12 15:23	---
Synchron	Plan 9	2016/6/15 08:15	2016/5/15 08:15	---

## Real time synchronization



Any data that is lost between scheduled backups is unprotected. Backup Plan lets you configure real time file synchronization for those important and ever-changing file folders. Any changes that you make to your protected files and folder will be updated in real time. You can rest assured knowing that your critical files are always protected and up to date.

## Unleash unlimited potential

The applications that come pre-installed with each ASUSTOR NAS device are just the beginning. At your convenience, you can browse through and download any applications that pique your interest from App Central. App Central allows you to explore the unlimited potential of ASUSTOR NAS devices while creating a personalized NAS device for yourself.



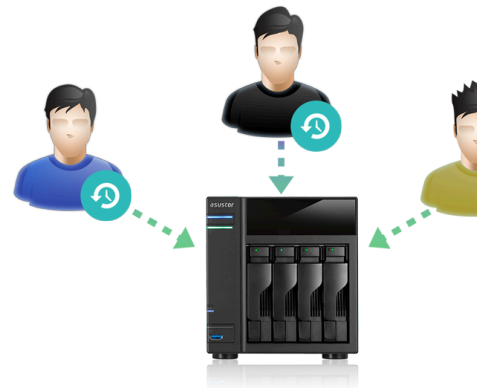
## Optimized for your Mac



Mac lovers rejoice! You can use your Mac's built-in backup, Time Machine, to easily back up your Mac to an ASUSTOR NAS. All ASUSTOR NAS devices have been optimized for Time Machine, providing Mac lovers with a familiar and easy to use backup solution.

## Multi-user support

Different Mac users can now safely backup their computers to the same NAS device. Unlike other NAS devices, ASUSTOR NAS does not just use one group account to carry out backup jobs for all Mac users, storing all their jobs under the same directory. With ASUSTOR NAS each Mac user is able to use an independent account and backup location thereby guaranteeing privacy for all.



## No more waste



Still wasting money and time burning CDs or DVDs every time you need to install software? ASUSTOR NAS supports the mounting of ISO files which provides you with an effective and environmentally friendly solution that effectively lowers CD and DVD waste.



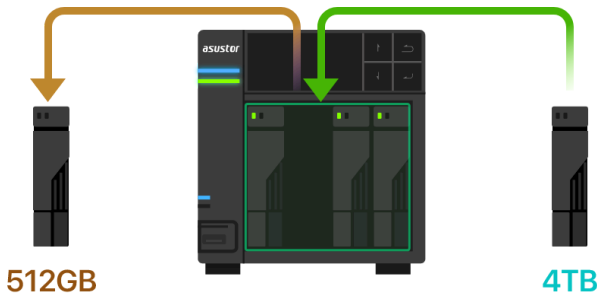
# Ultimate data protection

ASUSTOR NAS makes use of RAID storage technology to provide protection for your data. RAID mainly revolves around the core concept of combining your disks to protect the data inside. ASUSTOR offers a number of different RAID level configurations that you can choose from when creating storage volumes. Each RAID level offers a differing degree of data protection, system performance and storage space.

ASUSTOR's supported RAID levels are summarized in the chart below:

RAID LEVEL	Single	JBOD	RAID 0	RAID 1	RAID 5	RAID 6	RAID 10
Minimum number of disks	1	2	2	2	3	4	4
Faulty Disks Tolerated	x	x	x	1	1	2	1
Increased System performance	x	x	v	x	v	v	v
Maximum use of Storage space	v	v	v	x	x	x	x

# As Much Space as Needed!



Your ASUSTOR NAS supports capacity expansion. This means that you can easily add old hard drives or SSDs for higher capacity ones without deleting the volume and the storage capacity of your NAS with lots of convenience with little to no downtime.

- Only supported on RAID 1, RAID 5, RAID 6 and RAID 10 volumes.
- If replacing M.2 SSDs or hard drives without hot-swap functionality, your NAS will be powered down before removing drives.
- Hard drives or M.2 SSD can only be replaced one at a time. Attempts to replace drives simultaneously or while the NAS is synchronizing will cause data loss.

# Uninterrupted Access

When expanding capacity, you will still be able to access everything stored on the NAS. Volume capacity expansion does not require advanced IT skills to execute and as long as installed drives are in working order, keeps your data intact. When it's time to upgrade, ADM gets it done.



# Military Grade Encryption



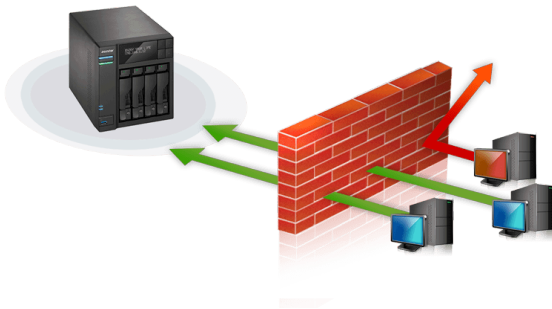
Your most important data deserves the best security. ASUSTOR NAS offers folder b military grade AES 256bit encryption, giving you the type of security and privacy that require for your most confidential data. All data stored in encrypted folders will be au encrypted and secured to the highest of standards. Should you ever lose your NAS disks, you still needn't worry about your sensitive data falling into the wrong hands.

## Folder-based efficiency

Unlike other NAS devices, ASUSTOR NAS gives you the flexibility to select the individual folders that you want to encrypt. Other NAS devices encrypt entire storage volumes which significantly slows down the system. Any encrypted portions of storage volumes will be subject to a decrease in performance. However, with ASUSTOR NAS you are free to encrypt only your most confidential data while leaving other data unencrypted, creating a perfect balance between performance and security.



## Firewall



Use ADM Defender's firewall to control access to your NAS. Ensure the security of y by deciding who has access to your NAS and who doesn't.

## Network Defender

ADM Defender's Network Defender function protects you from malicious attacks and prevents hackers from trying to access your NAS. Any client IP addresses with too many unsuccessful login attempts to your NAS within a specified time period will be blocked by Network Defender.



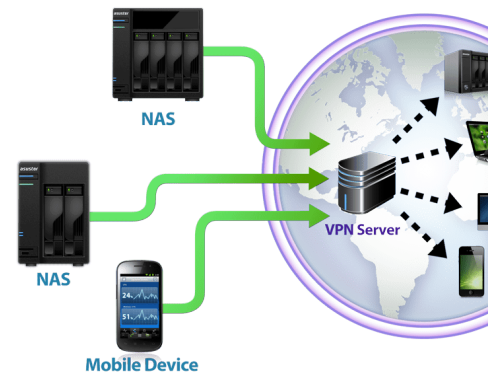
## The best things in life are free



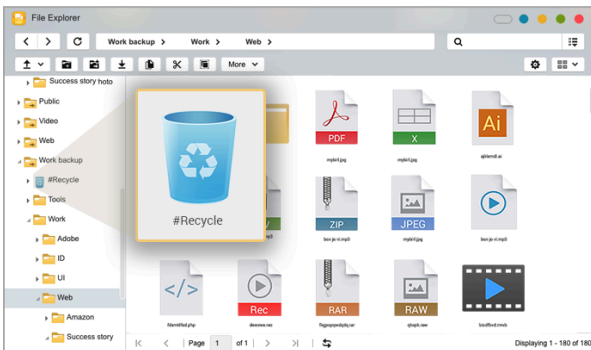
ASUSTOR's Surveillance Center comes with 4 license free channels letting you to s different network IP cameras. This significantly lowers startup costs for your surveilla system. No matter if you prefer to use Microsoft Edge, Mozilla Firefox or Google Chr Surveillance Center's easy-to-use browser based interface and quick start wizard wi to create a security surveillance system in a snap.

## Secure connections

ASUSTOR NAS supports VPN connections giving you secure access and flexible deployment options. Your NAS is able to act as a VPN client which can then connect to VPN servers via PPTP, OpenVPN or WireGuard protocols, allowing you to gain access to different virtual private networks. ASUSTOR NAS also supports the creation of multiple VPN connection profiles allowing you to easily switch connections between different VPN networks.



## Enhanced Recycle Bin mechanism



The Network Recycle Bin mechanism has been updated in ADM and is now based i individual shared folders rather than storage volumes. According to their needs, use decide whether or not to enable a Network Recycle Bin for each individual shared fo enjoying added configuration flexibility. Files that are moved to the Recycle Bin maintain their original directory structure, all added convenience should users need to search for already deleted files. The simpl restore function will restore selected files to their original directory path while conven maintaining all properties and permissions settings.

## Hardware Specifications

AS3302T

CPU	Realtek RTD1296 1.4GHz (Quad-Core) Processor
Memory	2 GB (not expandable)
HDD	2x SATA3 6Gb/s; 3.5" HDD/2.5" HDD/SSD
Maximum Drive Bays with Expansion Unit ( <a href="https://www.asustor.com/knowledge/detail/?group_id=1209">https://www.asustor.com/knowledge/detail/?group_id=1209</a> )	14
Expansion	3x USB 3.2 Gen 1
Network	1x 2.5 Gigabit Ethernet (2.5G/1G/100M)
HDMI Output	N/A
Size	170(H) x 114(W) x 230(D) mm
Power Consumption	12.3W (Operation) 6.04W (Disk Hibernation);



## Software & Features

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## Operating System

- ADM 4.1 Onwards
- Supports Online Firmware Updates

## Supported OS

- Windows XP, Vista, 7, 8, 10, 11, Server 2003, Server 2008, Server 2012, Server 2016, Server 2019, Server 2022
- mac OS 10.6 Onwards
- UNIX, Linux, and BSD

## Supported Languages

- Deutsch, English, Français, Italiano, Nederlands,Русский, 日本語, 한글, 简体中文, 繁體中文, Česká,Polški, Svenska, Dansk, Norsk, Suomi, Português,Türkçe, Español, Magyar, ไทย

## Supported Browsers

- FireFox
- Chrome
- Safari
- Microsoft Edge

## Network Protocols

- CIFS / SMB, SMB 2.0 / 3.0, AFP, NFS, FTP (Unicode Supported), TFTP, WebDAV, Rsync, SSH, SFTP, iSCSI/IP-SAN, HTTP, HTTPS, Proxy, SNMP, Syslog

## File System

- Internal Disk: EXT4
- External Disk: FAT32, NTFS, EXT3, EXT4, HFS+, exFAT

## iSCSI Read/Write (5GB file, 1GbE x 1)/IP-SAN

- Maximum Targets: 256
- Maximum LUNs: 256
- Maximum Snapshot Versions of a Single LUN: 256
- Target Masking
- LUN Mapping
- ISO File Mounting
- Supports MPIO
- Persistent (SCSI-3) Reservations

## Customized Sign In Page

- 2 Different Template Choices
- Customizable Title, Image and Background
- Image Import Function

## Disk Management

- Scheduled Bad Block Scans
- Scheduled S.M.A.R.T Scans

## Energy Control

- Configurable Disk Hibernation and Sleep Mode Wait Time
- Configurable Time Period for Sleep Mode Activation
- Automatic Sleep

## Network

- TCP/IP (IPv4 & IPv6)
- Link Aggregation: 0
- SMB Multichannel
- Jumbo Frame (MTU)
- VLAN
- EZ Connect
- Wireless Network<sup>3</sup>
- DDNS and EZ-Router
- 2.5 GbE Supports Wake-on-LAN (WOL)
- 2.5 GbE Supports Wake-on-WAN (WOW)

Q See More ([https://www.asustor.com/solution/wake\\_on\\_wan#wow](https://www.asustor.com/solution/wake_on_wan#wow))

## Backup Solutions

- Rsync (Remote Sync) Backup
- Cloud Backup
- FTP Backup
- External Backup
- One Touch Backup
- EZ Sync
- MyArchive

## System Administration

- Log Type: System Log, Connection Log, File Access Log
- Real-time Online User Monitor
- Real-time System Monitor
- User Quota
- Virtual Drive (ISO Mounting, Maximum 16)
- UPS Support

## Network Recycle Bin

- Share folder-based
- Maintains original directory structure and file permission
- On-click restore
- Supports scheduled emptying
- Filtering rules
  - File size
  - File extension
- Deletion Settings
  - File size
  - File date

## Access Control

- Maximum Number of Users: 4096
- Maximum Number of Groups: 512
- Maximum Number of Shared Folders: 512
- Maximum Number of Concurrent Connections: 512
- Supports Windows Active Directory
- Supports Windows Active Directory / LDAP

## ACL

- Provides both Windows ACL and Linux ACL permission configuration methods
- Can enable Windows ACL for specific shared folders
- Comprehensive support for Windows' 13 types of advanced permission settings
- Can view Windows ACL permission settings from within A
- Supports local users and groups
- Exclusive permission reset function allows users to quickly default permissions

## Security

- AES 256-Bit Encryption
- Firewall: Prevent Unauthorized Access
- Alert Notifications: E-mail, SMS
- Encrypted Connections: HTTPS, FTP over SSL/TLS, SSI-Rsync over SSH
- Built-in Hardware Encryption Engine: AS10/11/31/32/33/40/52/53/54/6/61/62/63/64/65/66/67/70 Series

## Network Defender

- Auto black list
- Trusted list
- Black/White list
  - Supports IP/IP range/geolocation

## External Devices

- Supports USB/eSATA3 External Storage Devices
- USB Wi-Fi Dongle Support
- Bluetooth Dongle/Speaker Support
- USB Printer Support
- USB DAC/IR Receiver/Keyboard/Mouse Support
- CD ROM Drive/DVD ROM Drive/Blu-Ray ROM

# Featured Apps

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## Antivirus (ClamAV)

- Scheduled Scans
- Automatic Virus Definition Updates
- Quarantine Infected Files

## Download Center

- Supports BT(Torrent & Magnet Link), HTTP and FTP Downloads
- Torrent Search
- Choose Files Before a BT Task Starts
- Customizable Download Schedule
- Bandwidth Control
- RSS Subscription and Automatic Downloading (Broadcatching)
- ASUSTOR Download Assistant for Windows & Mac
- AiDownload for Android with Push Notification
- Smart Download Function

## Cloud Backup Center

- Support Amazon S3, Backblaze B2, Microsoft Azure Blob Storage, Alibaba Cloud, Baidu Cloud, IBM Cloud and Rackspace Cloud Files, SFTP, WebDAV, Box, hicloud S3, Google Cloud Storage
- Immediate or scheduled backup
- Perform multiple backup tasks and back up multiple accounts

## DataSync Center

- Support OneDrive, OneDrive Business, Google Drive, Dropbox, and Baidu Wangpan, Yandex
- Supports file filter and bandwidth limitation
- Supported backup methods:
  - Sync
  - Directly upload files to Cloud from NAS
  - Directly download files from Cloud to NAS

## File Explorer

- Web-based File Management
- ISO File Mounting
- Share Links
- Task Monitor
- Browse Files on Local PC
- Thumbnail Previews
- Data Access via External Optical Drive
- Supports video playback<sup>10</sup>

## FTP Explorer

- Directory Structure View with Drag & Drop Transfers
- Task Monitor
- Stopping of Transmission Task & Resumption of Connection
- Encrypted Connections: Explicit over TLS, Implicit over TLS
- FTP Site Manager
- Bandwidth Control
- Maximum Simultaneous Transfer Control

## HiDrive

- Support OneDrive and OneDrive Business
- Each ADM Account is Able to Individually Log in to One HiDrive Account
- Supported Backup Methods:
  - Directly Upload Files to HiDrive from NAS
  - Directly Download Files from HiDrive to NAS
- Supported Protocols:
  - Rsync
  - FTP
  - FTPS
  - SFTP
  - Rsync + SSH

## LooksGood

- Built-in three main video library categories; movies, TV shows, home movies and smart video sorting management
- Efficient global search function allows for searches by keywords followed by the execution of more detailed searches for the purpose of finding categories of movies, TV shows, home movies and parameters such as actors, director, year, genre, writer and title
- Attractive poster wall and thumbnail display
- Automatic production of video poster thumbnails
- Centralized management and ability to configure order of favorites and playlist history
- System administrator is able to configure video library and editing permissions according to user preferences
- Can configure access permissions to share with friends and family
- Multimedia conversion feature
- Self-defined smart folder for video conversions
- Easy Streaming with Chromecast and DLNA
- Supports playback of videos in Apple TV via AiVideos tvOS version

## OwnTone

- For iTunes on Mac & Windows
- Supports AirPlay
- Supports iOS Remote Pairing
- Supported Audio Formats: AIF<sup>5</sup>, M4A (AAC & Apple Loseless), M4P, M4R, MP3, WAV<sup>5</sup>
- Supported Video Formats: M4V, MOV, MP4
- Supported Playlist Formats: M3U, WPL

## Mail Server

- Each ADM Account can Become an Independent Email Account
- Email Activity Monitor (Over 1 Week, 1/3/6 Months)
- Provides SMTP, IMAP and POP3 Mail Protocols
- Supports SMTP Relay and Verification
- SMTP-SSL Secure Connections
- Spam Filter and Black List Settings
- Antivirus Scanning for Emails

## SNMP Server

- Supports SNMP v1, v2c, v3 and trap
- ASUSTOR NAS MIB provided

## Syslog server

- Supports standard syslog protocol
- Graphical log monitoring by time and d
- Supports TCP and UDP
- Auto log archiving
- User-defined email notification

## Surveillance Center

- Up to 25 channels in 720p on single liv display
- On-screen camera controls including c PTZ, manual recordings, take snapshc configure camera settings and open M
- Up to 4 channels of synchronous and r synchronous playback with audio
- Intelligent video analytics including mol detection and foreign object detection
- Supported Browsers: Microsoft Edge, f Chrome
- Event notification supports SMS, E-ma mobile push notification
- Automated event action rules
- Role-based access control
- RTSP streaming server (video and auc
- AiSecure mobile app for iOS and Andri Push notification
- ONVIF Profile S, T supported
- CMS Lite supports connect up to 256 l Cameras from 32 NAS
- Two different camera license packages offered: single channel and 4 channels
- Maximum IP Cam (4 Free Camera Lic Additional Licenses to be Purchased)
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- Email Alias Creation and Mapping
- Monitoring of Mail Queue
- Mail Service Activity Log
- Exclusive Email Backup Mechanism
- Auto-Forwarding and Auto-Response Protocols

### Photo Gallery 3

- Quickly find and view photos from a specific date in Photo Gallery 3's timeline.
- Photo Gallery 3 sorts your photos in a smarter way. Smart albums found in Photo Gallery 3 include places, videos, recently added, favorites and duplicates.
- Supports two methods to share photos, share links to other NAS users or to friends and family. All shared albums have optional encryption to protect sensitive information.
- Easily understand photo metadata as well as edit photo descriptions to make photo identification easier.
- Easily find photos by keyword search.

### VPN Server

- Supported VPN Protocols: PPTP, OpenVPN, and L2TP/IPsec
- View Current Connections & Ability to Disconnect Suspicious Connections
- Comprehensive Connection Log

- Two different camera license packages offered: single channel and 4 channels
- Maximum IP Cam (4 Free Camera Licenses Additional Licenses to be Purchased)

Series	Maximum IP cameras
AS71	100
AS7	64
AS65	64
FS67	44
AS67	44
AS66	40
AS63/64	36
AS61/62	36
AS54	44
AS52/53	36
AS50/51	30
AS33	25
AS31/32	25
AS40	16
AS-6	16
AS11	12
AS-2TE/AS-3	8
AS-2T	8
AS10	8

- Minimum PC Client Requirements
  - CPU: Intel i5/i7 or above
  - RAM: DDR3 4G or above
  - Operating system Windows 7 and above
  - Windows browsers: Microsoft Edge, Chrome, Firefox
  - Display resolution: 1280x800 pixels or higher for best user experience
  - Network interface: Gigabit x1
  - Independent graphics card is highly recommended

### SoundsGood

- Import Personal/Public Music Collection
- Personal/Public Music Collection Permission Control
- Playlist Editor
- ID3 Tag Editor
- Local Speaker Support: HDMI, USB, A Jack
- Supported Audio Formats for Browser: WAV, Ogg
- Supported Audio Formats for Transcoding Through Browser: AIFF, Flac
- Supported Audio Formats for Local Playback: MP3, WAV, Ogg, AIFF, Flac
- ASUS DAC Support

### Takeasy

- Download from YouTube, Vimeo, Twitch, and More
- Selectable Video Type and Quality
- Automatic Downloads with Twitch Subscriptions
- Preview Downloads in Progress



- Online Playback

## UPnP Media Server

- Supports PS3 and other Digital Media Capable Devices
- Supports On-The-Fly Transcoding for RAW Images and Audio(OGG, FLAC)
- Supported Image Formats: BMP, GIF, IJG, PNG, PSD, TIF, RAW Image<sup>4</sup> (3F, CR2, CRW, DCR, DNG, ERF, KDC, MOS, MRW, NEF, NRW, ORF, PEF, RAW, RW2, SR2, X3F)

## VPN Client

- Supported VPN Protocols: PPTP, OpenVPN, L2TP/IPsec
- Transmission Package Monitor
- PPTP Authentication: PAP, CHAP, MS-CHAP, MS-CHAP2
- PPTP Encryption: No MPPE, MPPE (40 bit), Maximum MPPE (128 bit)
- OpenVPN Port Control
- OpenVPN Link Compression

### Note:

1. Metadata (e.g. title) may not be able to displayed in iTunes.
2. You must first enable real time transcoding for these files in order to play them.



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**Deal  
Sea**