

asustor

A blend of data protection and entertainment designed for **your home office**

The AS-304T is an exceptionally cost-effective network storage solution that features an elegant user interface, a rich variety of multimedia features and rock-solid stability.



AS - 304T

ASUSTOR AS-304T

● Seamless Cross-Platform File Sharing

ASUSTOR NAS devices provide seamless cross-platform file sharing, allowing you to easily connect to your NAS device no matter if you are using Windows, Mac OS, or Unix-like operating systems. The transfer protocols that you may use to connect to an ASUSTOR NAS device are as follows:

Windows: CIFS/SMB, FTP and WebDAV

Mac OS X: AFP, SMB, NFS, FTP and WebDAV

Linux: NFS, SMB, FTP and WebDAV

Additionally, ASUSTOR NAS devices feature our Network Recycle Bin. Any files you delete will be moved to the Recycle Bin, allowing you to restore any accidentally deleted files. Transfer protocols supported by the Recycle Bin include: CIFS/SMB, AFP, FTP and File Explorer.



● 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:

	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	2
Increased System performance	X	X	V	X	V	V	V
Maximum use of Storage space	V	V	V	X	X	X	X



● Online Capacity Expansion

Insufficient storage space forcing you to consider upgrading your NAS to one with more disk bays?

ASUSTOR NAS supports online capacity expansion¹ which means that you can easily swap out all your old disks for higher capacity ones without turning off your NAS. Now you can increase the storage capacity of your NAS without worrying about getting an entire new system.

During the capacity expansion process, while your data is being transferred over to the new disks, you will still be able to access everything on the NAS. Online capacity expansion does not require any advanced IT skills to execute and helps you to eliminate cumbersome backup and migration procedures. When it's time to upgrade your NAS's capacity, ASUSTOR simply gets the job done for you without missing a beat.

¹ You must use RAID 1, 5, 6, or 10

● Account Management

ADM's account management function allows you to easily create, edit or remove user accounts on the ASUSTOR NAS. You also have the option of creating different user groups. Configuring access rights for a group will allow the rights to be applied to all the users in the group making for efficient management. ASUSTOR's account management features not only allow you to assign different folder access rights to each user on the NAS but also gives you optimal management efficiency while ensuring the protection of your data.

● 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



● Online RAID Migration

After using your NAS for a while you may be looking to upgrade the RAID level of your storage volumes in order to reap the benefits of increased data protection. However, you may be a bit apprehensive due to concerns about backing up or migrating your data. ASUSTOR understands your needs, and provides you with online RAID migration which lets you migrate your storage volume's RAID level to a higher one while your NAS is still online. Your NAS remains completely operational and you will have full access to your files while migration is ongoing.

ASUSTOR's RAID migration provides you with a variety of flexible deployment options. If you are on a tight budget and don't want to buy a complete set of hard disks along with your NAS, you can just buy one or two disks according to your needs. Later, when your storage needs require it, you can choose to buy more disks and adjust your RAID level accordingly.

● The ultimate tool for remote backup

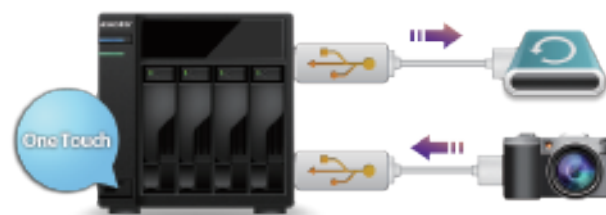
Rsync is an application originally developed for UNIX that is usually used for backup and sync between two computers. By providing block level replication, Rsync is able to offer incremental backup. Incremental backup allows for successive backup jobs (after your first backup job) to only copy data that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



● One touch and you're done

Simply plug your USB storage device or camera into the ASUSTOR NAS and push the backup button. Your data will then be copied to a location on the NAS that you specify. Your photos and data are precious - ASUSTOR NAS ensures that they are protected with just the push of a button.

One Touch Backup also allows you to back up the data on your NAS, hassle-free. ASUSTOR's 2-way transfer support allows for your NAS data to be copied to your favorite USB storage device, providing an effective disaster recovery solution.



● Your best bet for backup

FTP has always been a widely used and popular transfer protocol. ASUSTOR NAS's FTP Backup function may be used to complete tasks such as:

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

FTP Backup supports two-way data transfers, incremental backups 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.

● Connect to the cloud

Now home and business users alike can back up the data from their ASUSTOR NAS to popular cloud storage service Amazon S3, further ensuring the protection of their data. This means that in the event that the data on your NAS is damaged you will be able to immediately restore it from Amazon S3. ASUSTOR NAS is able to both upload to and download from Amazon S3, letting you get backup and restoration jobs done in just a few easy steps.



● Regular backups of your vital data

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

● Windows Backup

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.

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. Now you can rest assured knowing that your critical files are always protected and up to date.

● Time Machine Backup

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 use with Time Machine, providing Mac lovers with a familiar and easy to use backup solution.

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.

● Mission Mode

Never again worry about your critical backup jobs stopping or failing to complete because your 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 configure the number of connection attempts and time interval for connection attempts, ensuring for the successful completion of your backup mission. This also gives IT administrators a significant amount of flexibility when configuring backup jobs.

● Power saving options

All ASUSTOR NAS products are designed around ecologically friendly concepts and feature a host of power saving options that can help users save on their power bills. This allows users to enjoy the conveniences of technology while helping to protect the environment at the same time.

Features such as power management schedules allow you to configure startup and shutdown times for the NAS while disk hibernation allows you to assign times for your hard disks to automatically enter hibernation mode when there is no data access to them. This helps you to save power while also prolonging the lifespan of your disks.

ASUSTOR's exclusive power saving features also include power management options for LED indicators, LCD display options which allow you to either display a custom message or the local temperature and smart fans which automatically adjust their speed according to the temperature. All ASUSTOR NAS products are fully compliant with the latest EuP standards (EuP 2.0). As a responsible citizen of the Earth, it is our mission to continue to develop superior energy saving and energy efficient products.



● System Sleep Mode and Instant Wake

ASUSTOR NAS is the first NAS in the world to feature System Sleep Mode (S3) and instant wake. Don't throw your money away to an always-on system. When your NAS is not in use you can lower its power consumption by putting it into Sleep Mode.

No longer will you have to endure those long waits while your NAS slowly starts up. With ASUSTOR NAS you get to enjoy almost instantaneous wake times. Wake your NAS up when you need it and put it to sleep when you don't. No matter what time of day or night get immediate access to your NAS when you need it the most.



● EZ-Router

Still trying to find a way to get remote access to your NAS? Struggling with router configuration and don't know where to start? ADM's built-in EZ-Router function can help you easily complete router configuration in a snap.

EZ-Router allows your NAS to quickly integrate with the cloud by helping you configure designated ports. Additionally, it also gives you the flexibility to specify the services you want enabled helping you to create a customized cloud server for yourself.

● Cloud Connect

Worried about the safety of storing your data in public cloud storage? ASUSTOR's built-in Cloud Connect function can help you to quickly create your own private cloud [1]. Sign up for a unique and personal Cloud ID and you will be able to connect to your ASUSTOR NAS from almost any corner of the world.

Once you enable Cloud Connect, you will be able to have a personalized hostname (i.e., allen.myasustor.com) and be able to use MyASUSTOR to connect to your NAS. No matter if you are in the office or on vacation, you will now be able to enjoy the convenience of cloud access from anywhere and at any time.

● DDNS

Can't remember your ever-changing IP address? Sign up for DDNS service to get an easy to remember hostname for your NAS. Further pair it with the EZ-Router function and you can get remote access to your NAS from anywhere and at any time.

ASUSTOR NAS currently supports the following DDNS providers:

- | | |
|----------------------|-----------------|
| - oray.com | - dnsexit.com |
| - freedns.afraid.org | - changeip.com |
| - no-ip.com | - DynamicDo!.jp |
| - twoDNS.de | - DynDNS |
| - 3322.net | |



● App Central

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 peak 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.



● Downloading has never been this convenient – Download Center

Spending a lot of time fiddling with torrents, trackers and BitTorrent clients? Download Center provides a one stop solution that simplifies the entire download process. Powerful features allow you to easily search for and download the files that you need in the blink of an eye.

Download Center also offers many intelligent features such as RSS downloading (broadcasting) and scheduled downloads. With RSS downloading, you can have Download Center automatically search RSS feeds for torrents of your favorite content and then have that content automatically downloaded to your AUSTOR NAS as soon as it is released. This feature is great for regularly released content like TV shows.

With the Smart Download Folder function you can specify a folder on the NAS as a Smart Download folder. For any torrents that are added to the folder, a download task will be added and Download Center will automatically begin downloading the torrent.



● Enjoy your music collection from anywhere - SoundsGood

Sounds good is a Web music player that can play all the music stored on your NAS over the Internet. Now you can access your music from anywhere and even share your music collection with family and friends.

With SoundsGood, each user can have their own personalized music collection and playlists. Users are free to configure any folder on the NAS as a music source along with options for setting the music source as public or private.

Can't decide on what software to use to edit your ID3 tags? SoundsGood's built-in ID3 tag editor allows you to conveniently edit the ID3 tags for your entire music collection without having to use any additional software.



● All your music on all your computers - iTunes Server

Still storing your music and movie collections on different computers? Running out of disk space?

iTunes Server is what you need. Now you can store all your music and movies on your ASUSTOR NAS and have them streamed to any Mac or Windows computer within the local network. AirPlay, iOS Remote pairing and playlists are also supported.

iTunes Server also works with the amplifier on your home sound system. Use the NAS's HDMI port to connect it to your amplifier and in a snap you'll have a digital stereo system ready with all your favorite songs. Furthermore, you can utilize the iOS Remote app to turn any iOS device into a remote control for your music. Get ready to enjoy stereo surround sound from the comfort of your own home with ASUSTOR NAS and iTunes Server.



● Effortless multimedia streaming - UPnP Media Server

Still using a power consuming computer as your home's multimedia server? Each and every ASUSTOR NAS can be outfitted with the UPnP Multi Media Server App, which allows it to become your home's multimedia streaming server. As long as you have devices that support UPnP (for example, SONY BRAVIA TV or PlayStation3®), you will be able to browse and stream all multimedia stored on your ASUSTOR NAS. Don't forget that you can also use UPnP or DMP compatible applications on your mobile devices to stream multimedia from your NAS.



● The ultimate combination - Local Display

Other than becoming your home's multimedia server, ASUSTOR NAS can also become a media player through the use of the well-known multimedia player Apps Boxee and XBMC¹. Boxee and XBMC allow you to play all the multimedia content stored on your NAS on your LCD/LED TV. Simply connect your NAS to your TV using an HDMI cable and you are ready to go.

Currently, Boxee is only available on the 6 series while XBMC is only available on the 3 series.



● The NAS That's Always With You

ASUSTOR offers multiple mobile apps that give you convenient access to your NAS while on the go.



● Cloud data access from anywhere: AiData

Get access to your data in the cloud and on your NAS from the convenience of your mobile device with ASUSTOR's AiData mobile app. With its intuitive interface and incorporation of well-known cloud storage services, AiData allows you to manage all the files on your NAS and across the cloud.

AiData features a host of convenient features to enrich your digital lifestyle. Use your mobile device to rename, copy, move or delete data on your NAS. Save items as favorites for quick offline browsing while on the go or upload your photos directly from your phone to your NAS. Have a file on your NAS that you want to share? Instantly email download links to your friends and family. AiData's features truly let you take advantage of your personal cloud.

● One stop searching and downloading: AiDownload

Imagine the convenience of searching and downloading while on the go and then having your downloads ready on your NAS as soon as you get home. With ASUSTOR's AiDownload app, all this is possible and more. AiDownload is a mobile app that interfaces with ASUSTOR's Download Center to provide you with mobile download management. No matter if it's searching, downloading, configuring settings or monitoring, you can do it all with AiDownload.

AiDownload includes a push notification feature that alerts you when downloads have been completed. Now you are free to concentrate on your more important tasks knowing that you will be notified as soon as your downloads are finished.

● Stay up to date with your NAS: AiMaster

AiMaster is ASUSTOR's NAS management app for mobile devices that allows you to easily control all your NAS devices no matter if you are a home user or IT administrator.

AiMaster features real-time system event notifications allowing you to monitor your system status from the convenience of your mobile device. When certain events occur, notifications are sent to your mobile device in the form of push notifications helping you stay abreast of all the latest developments.

With AiMaster you are never far from your NAS. Manage all your services, applications, and backup jobs at any time and from any place. Execute one touch backup jobs and monitor all users and system status. Even use the Find Me function to locate your NAS among many. All this is possible and more with AiMaster.

● Your NAS multimedia player remote: AiRemote

What would a home entertainment center be without a remote control?

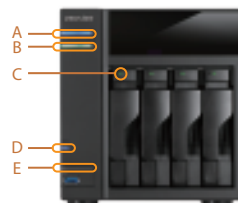
AiRemote is a mobile app that turns your mobile device into a remote control for Boxee on ASUSTOR NAS. Now you can operate Boxee wirelessly and access all the media content on your NAS from the comfort of your couch. All that's left to do is to sit back, relax and enjoy the show.

● Hardware Specification

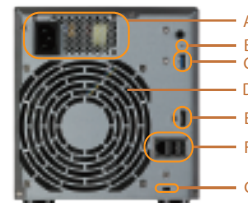
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Processor	Intel 1.6GHz Dual-Core Processor
Memory	1 GB DDR3
Internal Disk	4 x (2.5"/3.5" SATA or SSD)
External Device Interface	2 x USB 2.0, 2 x USB 3.0
Dimensions (HxWxD)	185.5 x 170 x 230 mm
Weight	3.4 kg / 7.5 lb
Power	Internal Power Supply: 150W
Operation*	36.7W
Disk Hibernation*	23W
Sleep Mode (S3)*	0.8W
HD Display	1 x HDMI 1.4

*Test HDD: WD Red 3 TB HDD



- A. Power LED Indicator
- B. System Status LED Indicator
- C. Hard Disk LED Indicator
- D. Network LED Indicator
- E. USB LED Indicator



- A. Power Supply
- B. Reset Button
- C. USB 3.0 Port
- D. System Fan
- E. HDMI Port
- F. RJ45 & USB 2.0 Port
- G. K-lock

● Software & Features

Operating System

- ADM 2.0 Onwards
- Built-in App Central for Various Apps

Supported OS

- Windows XP, Vista, 7, 8, Server 2003, Server 2008, Server 2012
- Mac OS X 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, Polski, Svenska, Dansk, Norsk, Suomi

Supported Browsers

- Internet Explorer 9 Onwards
- FireFox
- Chrome
- Safari

Network Protocols

- CIFS/SMB, AFP, NFS, FTP, WebDAV, Rsync, SSH, SFTP, iSCSI, HTTP, HTTPS

File System

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

Storage Management

- Support Multiple Volumes with Spare Disks
- Volume Type: Single disk, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
- Support for Online RAID Level Migration
- Support for Online RAID Capacity Expansion

iSCSI

- Maximum Targets: 256
- Maximum LUNs: 256
- Target Masking
- LUN Mapping
- ISO File Mounting
- Supports MCS
- Persistent (SCSI-3) Reservations

Disk Management

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

Network

- TCP/IP (IPv4 & IPv6)
- Jumbo Frame (MTU)
- VLAN
- Cloud Connect
- Wireless Network
- DDNS and EZ-Router

Backup Solutions

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

System Administration

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

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

Security

- AES 256-Bit Folder Encryption
- Firewall: Prevent Unauthorized Access
- Network Defender: Prevent Network Attacks
- Alert Notifications: E-mail, SMS
- Encrypted Connections: HTTPS, FTP over SSL/TLS, SSH, SFTP, Rsync over SSH

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- Web-based File Management
- ISO File Mounting
- Share Links

- Live Monitoring (4 Free Channels)
- Multiple Channel Playback with Audio
- Supported Browsers: Internet Explorer, Chrome, Firefox (Windows only)
- Event Notification

- Supports PS3 and other Digital Media Player Capable Devices
- Supports On-The-Fly Transcoding for Most RAW Images and Audio (OGG, FLAC)
- Supported Image Formats: BMP, GIF, ICO, JPEG, PNG, PSD, TIF, RAW Image (3FR, ARW, CR2, CRW, DCR, DNG, ERF, KDC, MEF, MOS, MRW, NEF, NRW, ORF, PEF, RAF, RAW, RW2, SR2, X3F)
- Supported Audio Formats: 3GP, AAC, AC3, AIFC, AIFF, AMR, APE, AU, AWB, FLAC1, M4A, M4R, MP2, MP3, OGG Vorbis1, PCM, WAV, WMA
- Supported Video Formats: 3GP, 3GP2, ASF, AVI, DAT, FLV, ISO, M2T, M2V, M2TS, M4V, MKV, MPv4, MPEG1, MPEG2, MPEG4, MTS, MOV, QT, SWF, TP, TRP, TS, VOB, WMV, RMVB, VDR, MPE

- 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

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

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

- 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 iOS & Android

- Play All Media Content Stored on NAS
- Video Output via HDMI
- TV Shows, Movies, Apps and More
- ASUSTOR Customized Features
- AiRemote Mobile App

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

- For information on additional Apps, please visit:
<http://www.asustor.com/apps>

Currently, Boxee is only available on the 6 series while XBMC is only available on the 2TE & 3 series..

