# asustor

# Built with only two speeds, FAST and EXTREME

Upgrading network equipment to 10gbE required. Premium dual core 10gbE NAS balancing capacity and performance



# AS4002T

- ASUS motherboard quality
- Marvell 1.6GHz CPU
- 2GB of DDR4 RAM at 2400Mhz, fast and efficient
- Dual gigabit Ethernet with the addition of a 10gbE port
- All new diamond cut exterior
- Magnetic dust-proof cover
- Supports two hot-swappable HDDs
- Screwless, Toolfree installation
- Hot-swappable
- 3 year warranty, best in class





# • A New Look! Enhanced dust prevention, cooling and stability

The AS40 series diamond-cut exterior has a magnetic cover for easy access to hard drives within. Its front panel hexagonal design creates a lightweight, yet strong frame for added durability and protection. The AS40 series also comes with a better cooling design, allowing for better airflow, allowing for higher longevity and lower failure rates.





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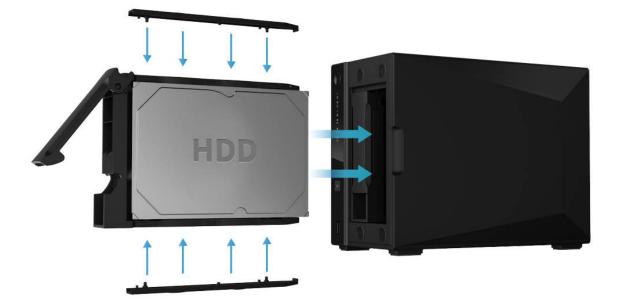
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# Toolfree Installation

ASUSTOR'S AS40 series introduces its new tool-free caddies as a way to simplify installation of hard drives. Each NAS comes included with brackets to install the drive easily. On the AS4000 series, hot-swapping of hard drives is supported, allowing you to change hard drives easily without powering down the NAS.



### • PC-less Software Installation

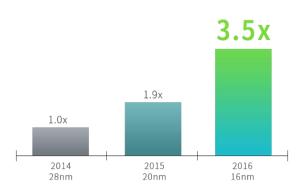
Mobile installation with AiMaster takes only 3 steps! Finding your NAS, system initialization and installation, power management, ADM firmware updates, system information and more are all available from the convenience of your mobile device at any time.



# Dual Core 64bit CPU and DDR4 RAM

The Marvell 64bit CPU found inside the AS40 series contains two cores clocked at 1.6Ghz powered by the ARM Cortex A72 microarchitecture. Compared with the Cortex-A15 core, the Cortex-A72 is three and a half times faster while providing seventy-five percent reduced power. The AS40 series also supports DDR4 RAM soldered onto the motherboard, providing even faster bandwidth and lower power consumption than DDR3.





## • Brand New Interface Design Elements and Flexible Use of Desktop Space

ADM 3.0 provides a flexibly designed desktop layout that can provide an optimal configuration based on the display resolution. Furthermore, convenient App organization provided by the grouping function allows users to experience management that is very much like a tablet device.



# Unlimited potential

# 10gbps speeds

ASUSTOR'S AS40 series of NAS are the first line of consumer NAS made by ASUSTOR to feature 10gbps of bandwidth over Ethernet. Our 10gbps Ethernet port uses RJ45 which are different from SFP+ as it is more accessible to consumers, and flexible with different Ethernet speeds and standards.



# Up to 3gbps of aggregated performance

The AS40 series of NAS can provide up to 3gbps of aggregated performance. Even without 10gbps switch or router, connecting all Ethernet ports (two gigabit, one 10gb) of the AS40 series simultaneously and enabling Link Aggregation feature can combines 3 gigabit network connections into one.

Performance figures are achieved in the ASUSTOR lab using state of the art client computers under optimized network settings, and could vary in different environments. Ordinary desktop or notebook computers may be unable to reproduce these figures.



# Ultra-quiet operation

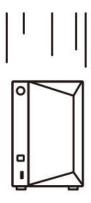
The AS40 series devices produce only 19 decibels of noise during system standby, equivalent to the almost inaudible sound of a pin drop. During system operation, only 32 decibels of noise is produced, equivalent to the hushed tones of a quiet library, allowing the AS40 series devices to seamlessly and comfortably integrate into any living environment.



# • 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 tests to test durability in extreme conditions. Heatsinks were added to sensitive components to dissipate heat, helping to maintain the longevity of the device.







### Save power to save money

ASUSTOR NAS products are designed and developed around ecologically friendly concepts. When in use, our devices consume far less power than the average computer or server. Furthermore, our advanced power control features allow you to more efficiently manage your NAS device and hard drives. This lowers your electric bill and prolongs the lifespan of your hard drives all at the same time. While in disk hibernation, the AS4002T consumes only 12.7 W of power. Under normal operating conditions it still only consumes 19.5 W of power.



# Cross-Platform Multi-User Access

The ASUSTOR NAS provides seamless cross-platform and multi-user access, allowing you to easily connect to your NAS from Windows, Mac OS X or Unix-like operating systems no matter if you are using a PC, notebook, tablet or smartphone.







512 Shared Folders 512 Concurrent Connections

Accounts

Groups

# Comprehensive Backup Solutions

The AS40 provides over 12 different backup options and is connected to a variety of public cloud storage services including Amazon S3, Dropbox, Google Drive, OneDrive, Box.net, HiDrive, Ralus, WonderBox, xCloud and CrashPlan. You can also use FTP Explorer, USB external hard drive enclosures, external hard drives and local backup to ensure proper backup for your data. No matter if you are using Windows, Mac or Linux, ASUSTOR provides the proper tools for your backup needs.

MyArchive cold backup technology turns NAS hard disks into removable storage archives. Directly insert a MyArchive hard disk into the NAS to easily access, backup and share terabytes of content.



# • Exclusive MyArchive Cold Backup Technology Unlimited Capacity Expansion

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# Effortless Connections to Your NAS

ADM 3.0 provides easy connections by supporting a new Internet Passthrough function that helps users to simplify previously complex router configurations. Even if users with mobile devices are under local network or multi-router environments, all they need to do is upgrade their apps to the latest version supporting ADM 3.0 and they will be able to easily connect to their NAS to access their data from anywhere and at any time. For computer users, they only need to install the new ASUSTOR EZ Connect (AEC) utility to utilize the Internet Passthrough function and conveniently connect to their NAS at home. Furthermore, they will also be use AEC to map their NAS to their computer as a network drive for convenient access.



# • Multi-Layered Protection from the Outside in

ASUSTOR NAS ensures data security by creating an in-depth data protection plan that protect

ASUSTOR NAS ensures data security by creating an in-depth data protection plan that protects your data from the outside in. Utilization of a multi-layered deployment scheme allows for the achievement of active network, system and data protection.

Network Attack Protection

- Firewall
- ADM Defender

Secure Data Transmission

- VPN connectio
- SSL certificate connection
- Automatic logout

Intermal Data

- MyArchive offline backup
- AES-256 folder encryption
- Anti-virus software

#### Access Control

- File/folder/ app Isolation
- 2-Step Verification



# • 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, website construction or even digital home entertainment, App Central has got you covered. With over 200 unique Apps, App Central provides you with the boundless variety of applications that you require to satisfy your digital lifestyle needs. Explore the unlimited potential of ASUSTOR NAS devices while creating a personalized NAS device for yourself.



# Mobile Apps

ASUSTOR's exclusive Cloud Connect technology allows you to connect to your NAS from anywhere with your Mobile device in order to access and share your files. 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 more added security.



# • First-Class Product Warranty

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



# Hardware Specification

#### AS4002T

			1
Processor	Marvell ARMADA-7020 1.6GHz (Dual-Core) Processor		G - COP
Memory	2GB DDR4		
Internal Disk	2 x SATA3 6Gb/s; 3.5"/2.5" HDD/SSD		
Network	Gigabit Ethernet x 2; 10Gigabit Ethernet x1		
External Device Interface	USB 3.1 Gen-1 x2		F
Dimensions (HxWxD)	170(H) x 114(W) x 230(D) mm		
Weight	1.6 kg / 3.53 lbs	B. System Status LED Indicator       B. 10 Gigs         C. Network LED Indicator       C. 1 Gigal         D. USB LED Indicator       D. Reset I         E. Hard Disk LED Indicator       E. DC Inpi         F. K-lock       F. K-lock	A. USB 3.0 Port
Power	External Power Adapter : 65 W		B. 10 Gigabit RJ45 C. 1 Gigabit RJ45 P
Operation	19.5 W		D. Reset Button E. DC Input
Disk Hibernation	12.7 W		F. K-lock G. System Fan
Sleep Mode (S3)	No Sleep Mode		
Volume Type	Single disk, JBOD, RAID 0 / 1		

# Software & Features

#### **Operating System**

- ADM 3.2 Onwards
- Supports Online Firmware Updates

#### Supported OS

- Windows XP, Vista, 7, 8, 10, 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, Ceská, Polski, Svenska, Dansk, Norsk, uomi, Português, Türkçe, Español, Magyar

#### **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

#### **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 Wait Time
- Configurable Time Period for Sleep Mode Activation
- Automatic Sleep

#### **Backup Solutions**

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

#### 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
  1.File size
  2.File extension

#### 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 ADM
- Supports local users and groups
- Exclusive permission reset function allows users to quickly restore default permissions

#### Security

- AES 256-Bit Encryption
- Firewall: Prevent Unauthorized Access
- Alert Notifications: E-mail, SMS
- Encrypted Connections: HTTPS, FTP over SSL/TLS, SSH, SFTP, Rsync over SSH
- Built-in Hardware
   Encryption Engine:
   AS70/64/63//62/61
   /31/32/10 Series

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

- Maximum Targets: 64
- Maximum LUNs: 64
- Maximum Snapshot Versions of a Single LUN: 256
- Target Masking
- LUN Mapping
- ISO File Mounting
- Supports MPIO
- Persistent (SCSI-3)
- Reservations

#### Network Defender

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

#### **External Devices**

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

#### Network

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

#### Supported Browsers

- Internet Explore 11 Onwards
- FireFox
- Chrome
- Safari
- Microsoft Edge

# Featured Apps

#### 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 iOS & Android with Push Notification
- Smart Download Function

#### 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
- Email Alias Creation and Mapping
- Monitoring of Mail Queue
- Mail Service Activity Log
  Exclusive Email Backup Mechanism
- Auto-Forwarding and Auto-Response Protocols

#### DataSync for Microsoft OneDrive

- Each ADM account is able to individually log into a OneDrive account
- Supports file filter and bandwidth limitation
- Supported backup methods:
   Sync
  - Directly upload files to OneDrive from NAS
  - Directly download files from OneDrive to NAS

#### DropBox

- Each ADM Account is Able to Individually Log in to One Dropbox Account
- Supported backup methods:
   Sync
- Dropbox to NAS
- NAS to Dropbox

#### 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>

#### Syslog server

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

#### 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

#### **VPN Server**

- Supports PPTP & OpenVPN & IPsec/ L2TP settings
- View Current Connections & Ability to Disconnect Suspicious Connections
- Comprehensive
   Connection Log

#### 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

#### **Google Drive**

- Each ADM Account is Able to Individually Log in to One Google Account
- Supported Backup Methods:
- Sync
- Directly Upload Files to Google Drive from NAS
- Directly Download Files from Google Drive to NAS

#### iTunes Server

- 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

#### UPnP Media Server

- 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, JPG, PNG, PSD, TIF, RAW Image<sup>4</sup> (3FR, ARW, CR2, CRW, DCR, DNG, ERF, KDC, MEF, MOS, MRW, NEF, NRW, ORF, PEF, RAF, RAW, RW2, SR2, X3F)

#### SNMP Server

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

#### 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 according to the Movies, TV Shows, Home Movies categories 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 t o configure order of favorites and playlist history
- System administrator can configur e video library and editing permissions according to user
- Can configure access permissions to share with friends and family
- Multimedia conversion function
- Self-defined smart folder for video conversions
- Supports digital TV recordings via digital TV dongles
- Easy streaming with Chromecast and DLNA
- Support to watch videos in Apple TV via AiVideos tvOS version

#### SoundsGood

- Import Personal/Public Music Collection
- Personal/Public Music Collection Permission Control
- Playlist Editor
- ID3 Tag Editor
- Local Speaker Support: HDMI, USB, Audio Jack
- Local Network Audio Output Support: AirPlay Devices
- Supported Audio Formats for Browser: MP3, WAV, OGG, FIAC, AIF, AIFF, AAC, M4A, WMA, APE
- Supported Audio
   Formats for Transcoding
   Through Browser:AIF,
   AIFF, AAC, M4A, WMA,
   APE, OGG, FLAC
- Supported Audio
   Formats for Local
   Speaker: MP3, WAV, OGG,
   FIAC, AIF, AIFF, AAC, M4A,
   WMA, APE
- ASUS DAC Support

#### **VPN** Client

- Supported VPN settings: PPTP, OpenVPN & IPsec/L2TP
- 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

#### **Photo Gallery**

- "Album" and "Browse" Viewing Modes
- Manage Photo Album Access Rights: Public Access, Restricted to Certain Accounts, Album Password
- Multi-level Folder Structure Support
- Supports Tagging of Photos
- Intuitive Sorting and Comprehensive Search Function
- Adjustable Photo Wall Browsing Scales
- Automatic Image Rotation
- One-click Sharing to Social Media (Facebook, Google+, Twitter, Plurk, email)
- Intuitive Drag and Drop Management
- Slideshow Viewing Mode
- Provides Comment Function for Users to Interact with Each Other
- Supports a Wide Range of Image Formats: JPG/JPEG, GIF, PNG, BMP, TIFF, RAW
- Supports Video Playback

#### Takeasy

- Download from YouTube, Vimeo, YouKu, Tudou and More
- Selectable the Video Type and Quality
- Automatic Downloads with YouTube Subscriptions
- Preview Downloads in Progress
- Online Playback

#### Surveillance Center

- Up to 64 channels in 720p on single live view display
- On-screen camera controls including camera PTZ, manual recordings, take snapshots, configure camera settings and open Maps
- Up to 4 channels of synchronous and non-synchronous playback with audio
- Intelligent video analytics including motion detection and foreign object detection
- Supported Browsers: Windows Internet Explorer, Microsoft Edge, Firefox, Chrome, Mac Safari, Mac Firefox ESR
- Event notification supports: SMS, E-mail, and mobile push notification
- Automated event action rules
- Role-based access control
- RTSP streaming server (video and audio)
- AiSecure mobile app for iOS and Android with Push notification
- ONVIF™ 2.4, Profile S certified
- CMS Lite supports connect up to 128 IP Cameras from 32 NAS
- Two different camera license packages are offered: single channel and 4 channels
- Maximum IP Cam (4 Free Licenses; Additional Licenses to be Purchased)

Series	Maximum IP cam	Local display
AS7	64	Yes
AS63/64	36	Yes
AS61/62	36	Yes
AS50/51	30	Yes
AS31/32	25	Yes
AS40	16	N/A
AS-6	16	Yes
AS-2TE/AS-3	8	Yes
AS-2T	8	N/A
AS10	8	N/A

- Minimum PC Client Requirements
  - CPU: i5/i7 or above
  - RAM: DDR3 4G or above
  - Operating system
     Windows 7 and onward,
     Mac OS X
  - Windows browsers: Firefox 32-bit / IE11 32-bit onwards / Chrome
  - Mac browsers: Safari 7.0 / Firefox ESR
  - Display resolution: 1280x800 pixels or higher for best user experience
  - Network interface: Gigabit x1
  - Independent graphics card is highly recommend

#### EZ Sync Manager

- Automatically synchronizes files between a PC and NAS
- Can restore previous versions of files
- Supports file sharing
- AiData now supports accessing EZ Sync files

#### 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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