# asustor

# An enterprise class storage solution AS7012RD/AS7012RDX



- Complete iSCSI/IP-SAN and NFS support. VMware, Citrix and Hyper-V ready.
- Windows ACL support combined with Windows AD infrastructure enhances management efficiency for business applications
- Support for RAID 0, 1, 5, 6, 10 and hard drive hot swapping
- 10GbE Ethernet card and memory expansion slots allow for further expansion as the need arises
- New disk tray locks ensure that hard disks will not be accidentally ejected during operation
- SMB 2/3 support increases Windows networking performance by 30%-50%





















Performance King



Boundless Functionality



Intuitive UI



Incredible Value



3year warranty

# Supreme Stability and Security

Highly stable storage equipment is critical in enterprise environments. The AS7012RD/AS7012RDX is equipped with a powerful Intel processor and 4GB of memory, providing stable and reliable operation. This combines with ADM's RAID storage technology and AES 256-bit encryption to provide efficient multi-user access and data security.



# Enhanced Data Security While Maintaining Top-Flight Performance

AS10/31/32/61/62/63/64/70 series devices utilize CPUs with built-in hardware encryption engines. This allows the system to maintain high speed data transfers even after enabling data encryption, while not greatly increasing the load on the CPU. This allows you to employ enterprise-class data encryption while maintaining first-rate system performance.

non-encrypted/encrypted data transfer comparison table (AS7010T):

	Single Gio	gabit LAN	Single 10GbE LAN		
	Read (MB/s)	Write (MB/s)	Read (MB/s)	Write (MB/s)	
Non-encrypted	112.86	112.50	514.46	749.31	
Encrypted	112.63	112.32	510.54	536.54	

# **Data Protection Starts with Storage**

ASUSTOR understands that your data is priceless, therefore ASUSTOR NAS provides different RAID Volume options, giving your data various levels of protection from the moment it is first stored on the NAS. We recommend you plan your storage protection based on your NAS model and number of hard disks. Data protection has never been so simple.



	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	Х	Х	1	1	2	2
Increased System performance	X	X	V	X	٧	V	V
Maximum use of Storage space	V	V	V	Х	Х	Х	Х

# Efficient Management of Your Network Environment

ASUSTOR NAS integrates many network management tools including the DHCP server function which can automate IP assignments on your network. Furthermore, Syslog Server can be used to centrally aggregate system logs that are spread out over various network devices for storage and management. These functions allow IT administrators to efficiently manage equipment on enterprise networks, enhancing productivity.



## AD + ACL



ADM features built-in Windows AD support. Once an ASUSTOR NAS has been successfully added to a Windows AD domain, AD users will then be able to use their own AD accounts to log in to and access the NAS. Windows AD support combined with ACL allows IT professionals to use the familiar Windows user experience to quickly configure shared folder access rights for users and groups on an ASUSTOR NAS. Furthermore these settings can be applied to Samba, File Explorer, AFP, NFS, or WebDAV allowing businesses to maintain flexibility and security with regards to data access.

## **Batch Creation of ADM Accounts**

Via ADM's batch creation function, you can quickly create multiple regular sequential user accounts (e.g., student numbers). With regards to irregular non-sequential account creation, you can enter account data into a text file (\*.txt, \*.csv) and then import it into ADM to create accounts.

# Supporting LDAP Clients Centralized control now more convenient than ever

LDAP, also known as Lightweight Directory Access Protocol is mainly used for unified management of accounts and passwords. Using LDAP technology can more efficiently manage user authentications or computer resource permissions across the enterprise. ASUSTOR NAS originally only supported Microsoft's Windows Active Directory service. ADM 3.1 adds an LDAP client. Users can easily add an ASUSTOR NAS to their existing LDAP server providing easier ways to manage helps improve productivity.

# Multi-Layered Protection from the Outside in

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

#### **Secured Data Transmission**

- VPN connection
- $\cdot$  SSL certificate connection
- · Automatic logout

#### Access Control

- · File/Folder/App Isolated
- · 2-Step Verification

#### **Internal Data**

- · MyArchive Offline Backup
- · AES-256 folder encryption
- · Anti-virus software



## **Evolved Network Defender**

- Provides Auto Black List to block brute-force attack attempts
- Trusted List can prevent trusted IP addresses from being automatically blocked in the event of too many inadvertent login failures
- Black and White List can be defined by specific IPs, IP ranges, and geolocation

# **Comprehensive Backup Solutions**

ASUSTOR NAS 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.

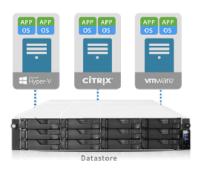


# "Find Me" Function and Service Light for Server Rooms

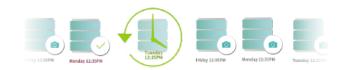
In enterprise environments, storage devices are commonly placed together in a server room. ASUSTOR also offers the mobile NAS management app, AiMaster which provides the exclusive Find Me function. When Find Me is activated, the system status light on the front of the NAS will flash and the system buzzer will sound, helping users to quickly find the NAS.



# Integrates a Variety of Enterprise Applications



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.



# **Enterprise Surveillance System**

The powerful ASUSTOR NAS provides optimal reliability for home and SMB users looking to set up a surveillance system. 4 free camera channels are offered, making it an extremely cost-effective surveillance solution for users with smaller demands. For users with larger demands, the number of camera channels can be expanded up to 64 via purchasable camera licenses. After installing Surveillance Center and its corresponding mobile app AiSecure, users will also be able to stream live surveillance feeds to their smartphones while on the go, keeping an eye on their most valued assets from anywhere.

# 5 Steps 60 Sec

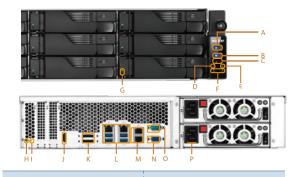
- Start quick installation wizard
- Automatic camera search
- Add cameras with just one click
- Configure video format
- Configure recording schedule



# **Hardware Specification**

#### AS7012RD/AS7012RDX

Processor	AS7012RD: Intel® Core i3 3.5GHz Dual-Core AS7012RDX: Intel® Xeon E3 3.4GHz Quad-Core				
Memory	AS7012RD: 4GB UDIMM DDR3(Expandable. Max 32GB) AS7012RDX: 4GB ECC UDIMM DDR3(Expandable. Max 32GB)				
Internal Disk	12x SATA3 6Gb/s; 3.5"/2.5" HDD/SSD				
Network	Gigabit Ethernet x 4				
External Device Interface	USB 3.0 x 4, eSATA x 2, 2 x expansion 10-GbE/SAS card				
Dimensions (HxWxD)	88(H) x 439(W) x 535(D) mm				
Weight	13.74 kg / 30.29 lb				
Power	Redundant Power Supply, adapter: 600W x2				
Operation/Disk Hibernation /Sleep Mode(S3)	AS7012RD: 122W / 54.8 W / 4.09 W AS7012RDX: 123W / 55.6W / 4.13W				
Volume Type	Single disk, JBOD, RAID 0 / 1 / 5 / 6 / 10				
HD Display	HDMI 1.4a x 1				



- A. Power LED Indicator
- B. Inspection LED Indicator
  C. System Status LED Indicator
- D. Alert LED Indicator E. SAS LED Indicator
- Network LED Indicators
- G. Hard Disk LED Indicator
- H. Service LED Reset Button
- **HDMI** Port
- eSATA Port
- RJ45 & USB 3.0 Port
- M. RJ45 Port N. VGA Port
- O. Console Port P. Power Supply

## Software & Features

- ADM 3.2 Onwards
- Supports Online Firmware Updates
- Built-in App Central for Various Apps

#### Supported OS

- Windows XP, Vista, 7, 8, 10, Server 2003, Server 2008, Server 2012, Server 2016
- Mac OS X 10.6 Onwards
- UNIX, Linux, BSD

#### Access Control

- Maximum Number of Users: 16384
- Maximum Number of Groups: 512
- Maximum Number of Shared Folders: 512
- Maximum Number of Concurrent Connections: 2048
- Supports Windows Active Directory

#### Supports Windows Active Directory / LDAP 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

#### System Administration

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

#### 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

#### Disk Management

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

- Supports USB/eSATA 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

#### **Energy Control**

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

#### **Supported Browsers**

· Internet Explore 11 Onwards, FireFox, Chrome, Safari, Microsoft Edge

- · TCP/IP (IPv4 & IPv6)
- · Jumbo Frame (MTU)
- · VLAN
- · EZ Connect
- · Wireless Network
- · DDNS 和 EZ-Router
- · Supports Wake-on-LAN (WOL)

#### **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

- · 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:
- RAID Scrubbing: detects the integrity and consistency of RAID 5 and RAID 6 drive data

#### **Backup Solutions**

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

### 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

#### Network Recycle Bin

- Share Folder-based
- Maintains Original Directory Structure and File Permission
- One-click Restore
- · Supports Scheduled Emptying
- · Filtering Rules

#### Supported Languages

· Deutsch, English, Français, Italiano, Nederlands, Русский, 日本語, 한글, 简体中文, 繁体中文, Česká, Polski, Svenska, Dansk, Norsk, Suomi, Português, Türkçe, Español, Magyar

#### File System

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

- · 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

- · SSD-like performance with traditional hard drives
- supports read-only access and read-write cache mode
- Supported Models:
- AS31/32/50/51/61/62/63/64/70 series

## iSCSI/IP-SAN

- · Maximum Targets: 256
- · Maximum LUNs: 512 · Maximum Snapshot Versions of a Single LUN: 256
- · Target Masking
- · LUN Mapping
- · ISO File Mounting
- · Supports MPIO · Persistent (SCSI-3) Reservations

· VPN sever, SNMP sever, RADIUS sever, Syslog sever, Mail sever, DHCP sever, Web sever, FTP sever, Print sever, Rsync sever

# **Featured Apps**

- · Antivirus
- · ASUSTOR Portal (HDMI Local Output)
- Download Center · FTP Explorer
- · DataSync for CloudDrive · iTunes Server · VirtualBox · RADIUS Server

· Mail Server

- LooksGood
  - Photo Gallery
  - · SoundsGood · Takeasv
  - · Linux Center · Surveillance Center
  - · UPnP Media Server
  - · VPN Server · VPN Client

# **Mobile Apps**

- AiMasterAiFoto
- AiData

· AiRemote

- · AiMusic
- $\cdot \ \text{AiDownload}$ AiSecure
- · AiVideo

