# asustor

# **Full Xeon Speed Ahead!**



# **LOCKERSTOR IO PRO**

**AS7110T** 





- · Intel Xeon 9<sup>th</sup> Generation Quad-Core Processor
- · 8GB of server-grade DDR4-2666 ECC memory
- · Dual M.2 NVMe SSD ports for fast caching
- · Complete iSCSI/IP-SAN and NFS support. VMware, Citrix and Hyper-V ready Supports virtualization and Docker apps
- Brings the smoothest work experience with 10-Gigabit Ethernet,
   triple 2.5-Gigabit ports and USB 3.2 Gen2 ports
- · Supports Wake on LAN (2.5-Gigabit ports )



Performance King



Boundless Functionality



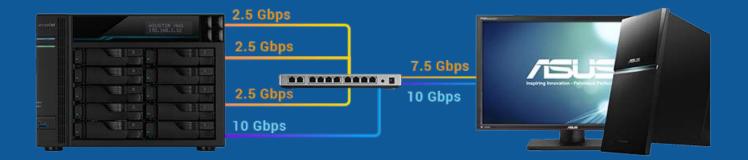
Intuitive UI



Incredible Value



5-year Warranty



## 10-Gigabit and Triple 2.5-Gigabit ports. Extreme speeds

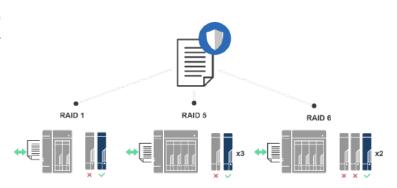
The all new Lockerstor 10 Pro NAS features a powerful Aquantia 10-Gigabit Ethernet port as well as triple Aquantia 2.5-Gigabit Ethernet ports. With a managed switch that supports multiple speeds, take advantage of up to 10 Gbps of speed on the 10-Gigabit port or up to 7.5 Gbps on all 2.5-Gigabit ports.

2.5 Gigal	bit x3	Single 10GbE LAN			
Read (MB/s)	Write (MB/s)	Read (MB/s)	Write (MB/s)		
848	847	1,181	1,178		

<sup>\*</sup>One Cat 6a and three Cat 5e cables included.

# **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	Х	X	Х	1	1	2	1
Increased System performance	X	X	V	X	V	V	V
Maximum use of Storage space	V	V	V	<b>⊙</b> x 1/ <sub>2</sub>	<b>2</b> -1	<b>2</b> -2	<b>2</b> x 1/ <sub>2</sub>

## **Enterprise Versatility**

ASUSTOR NAS offers rich variety of services for business users. For the price of one NAS you can create a multifunctional server that is worth much more.



## 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
- · SSL certificate connection
- · Automatic logout

#### **Access Control**

- · File/Folder/App Isolated
- · 2-Step Verification
- · Wake-on-LAN (WOL)

### **Internal Data**

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



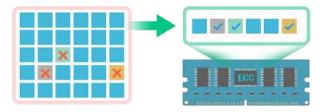
## **Protected From Ransomware**

The Lockerstor 10 Pro comes with the most up-to-date version of ADM to help protect against ransomware attacks. Snapshot Center and Btrfs provide the ability to efficiently create snapshots to protect and easily restore lost data. Other security features found on the Lockerstor 10 Pro are the ability to create one or more replacement administrator accounts, a firewall by ADM Defender that features blacklists and whitelists, the ability to change default ports, disable SSH and Terminal to prevent remote attacks. MyArchive cold storage hard drive security can also be increased by implementing AES 256bit encryption.



## Server-grade ECC memory

ECC memory is memory usually used in servers for detection and correction of the most common kinds of data corruption. This can help prevent data loss due to electromagnetic interference or crashes, making the Lockerstor 10 Pro our most stable NAS ever.



# Virtual Applications with Virtualbox

Deploy all kinds of operating systems to your NAS. ADM 3.5 brings a newer Linux Kernel, providing better system security and stability.



## Portainer – Easy Docker Deployments

Even more possibilities for ADM with Portainer for Docker images. With thousands of images, Portainer can download and deploy more types of programs than ever before. Portainer is incredibly user friendly and employs a graphical interface to make docker images easier to deploy than ever.





# 360° Backup solution and enterprise virtualization application

- MyArchive cold storage backups
- Snapshot Center, Cloud Backup Center, DataSync Center
- Complete iSCSI/IP-SAN and NFS support
- VMware, Citrix and Hyper-V ready
- Supports virtualization and Docker apps



## **Snapshot Center**

Snapshot Center is a new feature for ASUSTOR NAS devices to utilize Btrfs and iSCSI volumes to take snapshots of the information inside a NAS. Snapshot Center supports up to 256 snapshots of a volume and can be done every five minutes, creating a backup that can be restored easily if data is damaged or lost.



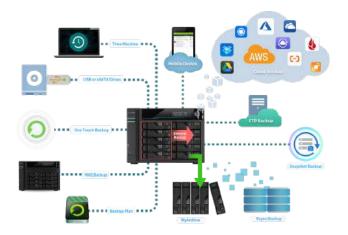
# File Editing and Project Collaboration

NextCloud and OnlyOffice make collaborating on projects easier than ever by creating a cloud office suite for offices to work on documents, spreadsheets, presentations and more.



## **Comprehensive Backup Solutions**

ASUSTOR's comprehensive backup solution provides more than twelve backup options, including, but not limited to Amazon S3, Dropbox, Google Drive, and Onedrive. ASUSTOR Backup Plan for Windows as well as Time Machine for macOS provide easy backups for desktop and laptops while MyArchive removable hard drives provide long term storage. Btrfs is now supported and with Snapshot Center, can take snapshots of your information in the event of unintentional modification. Restore previous versions easily with Snapshot Center.



## Virtual Storage



The Lockerstor 10 Pro provides enterprise-class hardware and software and is compatible with VMware, Citrix, Hyper-V virtual storage environments. iSCSI/IP-SAN and NFS support allow it to seamless integrate with existing IT environments, providing an optimal and cost-effective storage solution.

## Exclusive MyArchive storage technology

MyArchive provides unlimited storage for your cold data for allowing for flexible storage management. MyArchive allows users to take less frequently accessed data or highly confidential data and store it independently on a hard disk. When not in use, MyArchive disks can be ejected from the NAS and separately stored, increasing the life of hard disks, saving power and most importantly providing added security for critical data. Every ASUTOR NAS is able to create and read MyArchive hard disks. Users can take their created MyArchive hard disks to any other another ASUSTOR NAS for direct access. This provides a significant boost in transfer speeds when compared with file transfers over a network.



# **Enterprise Surveillance System**

The powerful ASUSTOR NAS provides optimal reliability for Enterprise 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 100 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**

## AS7110T

Processor	Intel Xeon 9 <sup>th</sup> Generation Quad-Core Processor		
Memory	8GB ECC DDR4 SO-DIMM		
M.2 Drive Slots	2x M.2 PCIE(NVMe) or SATA3 supported M.2 2280, 2260 and 2242		
Internal Disk	10x SATA3 6Gb/s; 3.5"/2.5" HDD/SSD		
Network	1x 10GBASE-T, 3x 2.5GBASE-T		
External Device Interface	1x USB 3.2 Gen 1, 2x USB3.2 Gen 2,		
Dimensions (HxWxD)	215.5(H) x 293(W) x 230(D) mm		
Weight	7.1 (kg) / 15.62 (lb)		
Power	Internal Power Supply: 350W		
Operation/Disk Hibernation/ Sleep Mode(S3)	78.7W / 40.1W / 5.8W		
Volume Type	Single, JBOD, RAID 0/1/5/6/10, RAID 1/5/6/10 + Hot Spare		



- Power Button
- Power LED
- System Status LED
- 2.5-Gigabit Network LEDs 10-Gigabit Network LEDs USB LED
- One Touch Backup Button
- USB3.2 Gen 1 port
- Control Buttons Hard Drive LEDs
- Reset Button 10-Gigabit RJ45 Ports
- 2.5-Gigabit RJ45 Ports
- USB 3.2 Gen 2 Ports K-Lock
- Ω AC Input
- Q. System Fans

## Software & Features

### Operating System

- ADM 3.5 Onwards
- Supports Online Firmware Undates
- Built-in App Central for Various Apps

- 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/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 Ouota
- 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

#### **External Devices**

- Supports USB External Storage Devices
- USB Wi-Fi Dongle Support
- Bluetooth Dongle/Speaker Support
- USB Printer Support
- USB DAC/IR Receiver/Keyboard/Mouse Support
- USB CD ROM Drives/DVD ROM Drives/BD-ROM Drives

#### **Energy Control**

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

- · TCP/IP (IPv4 & IPv6)
- · Link Aggregation: Supports 802.3ad and Six Other Modes for Load Balancing and/or Network Failover
- · Jumbo Frame (MTU)
- · VLAN
- · EZ Connect
- · Wireless Network
- · DDNS/EZ-Router
- Supports Wake-on-LAN (WOL) \*Only supported on 2.5 GbE port

#### **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:
- AS31/32/40/50/51/61/62/63/64/70/ Nimbustor/Lockerstor/Lockerstor Pro series RAID Scrubbing: detects the integrity and consistency of RAID 5 and RAID 6 drive data

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

#### EZ Svnc 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

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

## 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
- Deletion Settings 1.File size 2.File date

VPN server, SNMP server, RADIUS server, Syslog server, Mail server, DHCP server, Web server, FTP server, Print server, Rsync server

- 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/ Nimbustor/Lockerstor/ Lockerstor Pro series

- · Btrfs Snapshots
- 256 snapshots
- · iSCSI LÜNs
- Supported Models: AS31/32/40/50/51/61/62/63/64/70/ Nimbustor/Lockerstor/ Lockerstor Pro series Snapshot Center will not display Volume snapshots information in other models.

**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 iSCSI/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

## Featured Apps

- Antivirus
- Download Center
- FTP Explorer DataSync for CloudDrive
- Cloud Backup Center
- **RADIUS Server**
- · VirtualBox
- Mail Server
- LooksGood
- · Photo Gallery SoundsGood
- · ASUSTOR Live
- · Linux Center · Surveillance Center
- · UPnP Media Server · VPN Server
- · DataSync Center · VPN Client

# Mobile Apps

· AiMaster · AiFoto

· AiMusic

- AiVideo
- AiData · AiDownload
- · AiSecure · AiRemote

