

asustor

The Lockerstor 12R Pro and 16R Pro Gen2 Bring Rising and Ryzen Speeds!

LOCKERSTOR 16R PRO Gen2 **AS7216RDX**



- Powered by the AMD Ryzen 7 Pro 7745 processor with 8 cores and 16 threads
- 16 GB ECC DDR5-4800 memory, expandable up to 192 GB
- 16x 2½" & 3½" drives supported
- Expansion slots: PCIe 5.0 x8 and PCIe 5.0 x4
- Dual 10GbE + Dual Gigabit Ethernet
- Supports PCIe Gen5 SSDs
- Dual redundant 80 PLUS Platinum power supplies
- WOL supported (1GbE)



AMD Ryzen
7 Pro 7745



16 x 3.5"/2.5"
SATA HDD/SSD



16 GB ECC
DDR5-4800



Dual 10 Gigabit
Ethernet



Dual Gigabit
Ethernet



1x M.2 NVMe PCIe
5.0 x 4 SSD Slot



PCIe 5.0 x 8 and
PCIe 5.0 x 4



4 x USB 3.2 Gen 1
Type-A

More than Just 10-Gigabit Ethernet!

The Lockerstor 12R Pro Gen2 and 16R Pro Gen2 offer dual 10GbE and dual Gigabit Ethernet RJ45 network ports, supporting link aggregation and SMB multichannel, while also delivering ultra-low latency and high-speed data transfer rates. If 10-Gigabit is not enough, the included PCI Express slot allows for 25GbE / 40GbE / 50GbE NICs for even faster networking.

Powerful Core for Enterprise-Level High-Speed Computing

The Lockerstor 12R Pro Gen2 and 16R Pro Gen2 are equipped with the AMD Ryzen™ 7 Pro 7745 embedded processor, featuring 8 cores and 16 threads with clock speeds of up to 5.3 GHz. The Lockerstor R Pro Gen2 series with its powerful Ryzen CPU chews through virtualization and containerized workloads as it delivers smooth and stable high-performance computing, making it ideal for diverse enterprise environments.

10GbE x2 SMB Multichannel (RAID 5)

2309 MB/s

Read

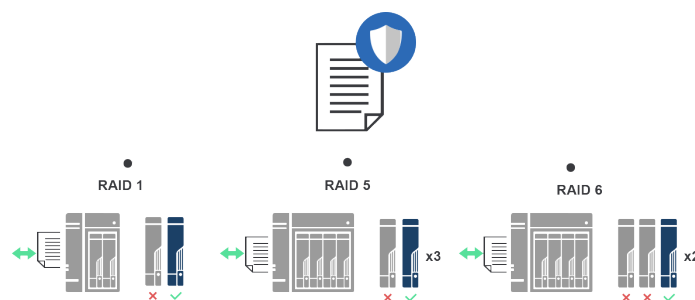
1886 MB/s

Write



Data Protection Starts with Storage

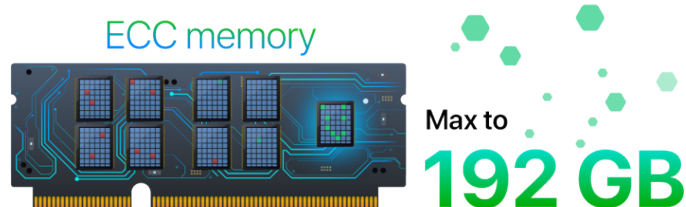
ASUSTOR understands that your data is priceless, therefore ASUSTOR NAS provides numerous options for protecting your data from a variety of threats. Your data is important and receives numerous levels of protection from the moment it is first stored on the NAS. Take advantage of a variety of data protection features found inside an ASUSTOR NAS, including, but not limited to RAID, easy automatic backups and snapshots. ASUSTOR recommends planning a holistic 3-2-1 backup solution to protect data easily, efficiently and effectively.



	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 1/2	⚙️ -1	⚙️ -2	⚙️ x 1/2

DDR5-4800 ECC Server-Grade Memory

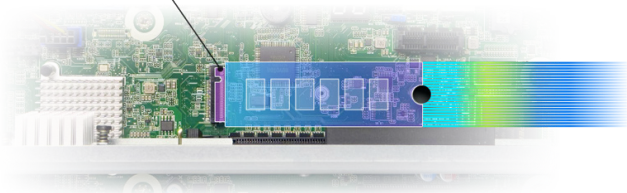
The Lockerstor 12R Pro Gen2 and 16R Pro Gen2 are equipped with DDR5-4800 ECC memory, which is expandable up to 192GB. ECC memory supports automatic error correction and helps prevent system crashes as well as data corruption, ensuring stable and accurate long-term operation.



PCI Express 5.0

Includes one PCIe Gen5 x4 M.2 2280 NVMe slot, allowing users to install SSDs for high performance caching or storage, significantly improving access speed for small files and enhancing data processing in multi-user environments.

PCIe Gen5 x4



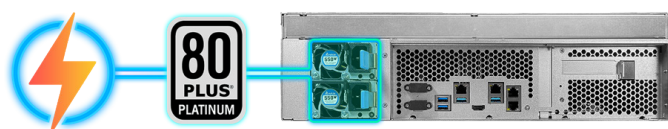
Feels Like Unlimited Space

Your Lockerstor connect to an Xpanstor 12R device using a SAS controller card to add 12 additional drive bays. This provides a stable, high-speed enterprise-grade storage expansion solution without replacing existing hardware and allows your NAS to grow with you.



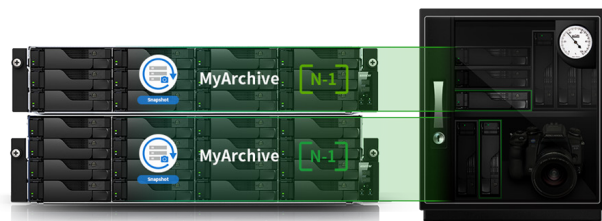
Efficiently Large and In Charge

Built with dual-redundant 80 PLUS Platinum certified power supplies, providing stable power delivery with up to 92% power conversion efficiency. This ensures optimal energy use even under high workloads, helping businesses save on electricity costs while supporting eco-friendly operations.



Exclusive MyArchive Cold Backup Technology

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.



360° Backup and Virtualization Solution

- Rsync, MyArchive
- 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



Computer data to NAS



Transfer mobile data to NAS



NAS local backup



Public cloud and NAS data backup



NAS to NAS

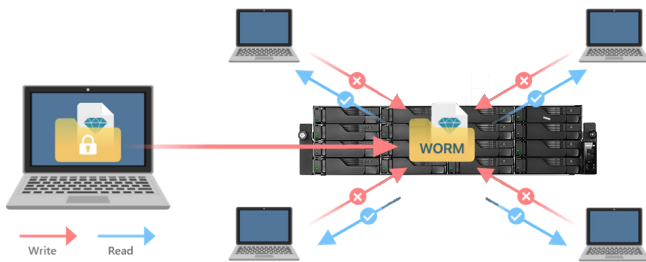


NAS backup to external device

Immutable data storage space, WORM is here!

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WORM (Write Once, Read Many) is a data storage technology that only allows data to be written to a storage device once and prevents it from being deleted or modified. Data stored on WORM-compliant storage is immutable. This means that once data has been written to a WORM-compliant storage device, it cannot be modified. This plays a key role when it comes to addressing data security and compliance requirements as well as protecting against ransomware and other attacks.

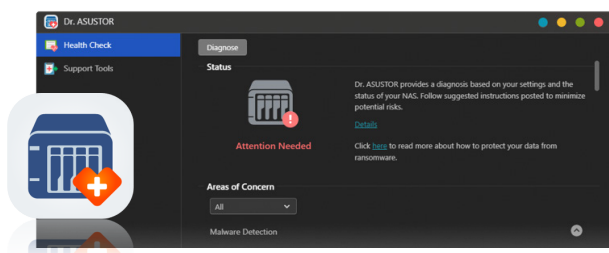


Proactively Prevent Suspicious Connections

Record suspicious IPs with the ADM. When the risk detection greylist is enabled, ADM will automatically block potentially harmful IP addresses found in the AbuselPDB database and add them to the risk detection greylist. Denying suspicious IP connections can help further reduce the risks of a NAS being attacked and further improve data security.

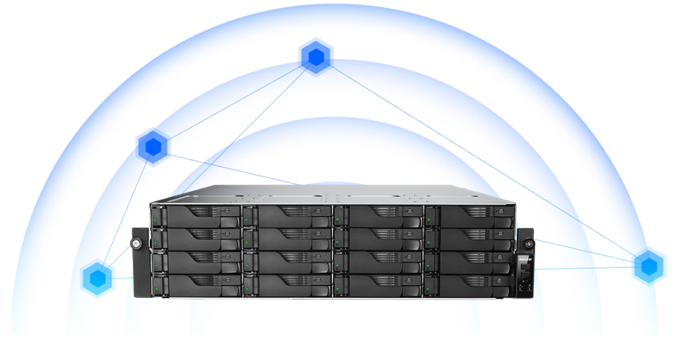
Dr. ASUSTOR

Dr. ASUSTOR monitors your ASUSTOR NAS for abnormalities and keeps check on a variety of settings and data health points in your NAS to ensure your NAS is running well and makes recommendations to help better protect your data.



Protected from the Inside and Out

ASUSTOR NAS ensures data security by creating an in-depth data protection plan that protects your data from the inside out. Utilization of a multi-layered deployment scheme allows for extra system and data protection.



Network Attack Protection

- Firewall
- ADM Defender
- Risk detection greylist

Access Control

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

Secured Data Transmission

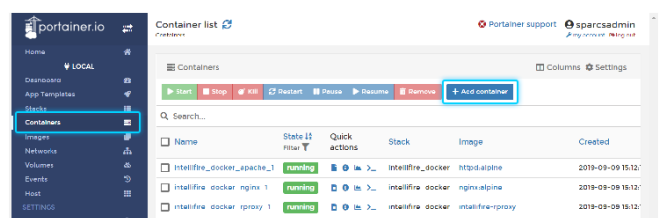
- VPN connection
- SSL certificate connection
- Automatic logout

Internal Data

- AES-256 folder encryption
- Antivirus software
- MyArchive
- WORM (Write Once, Read Many)

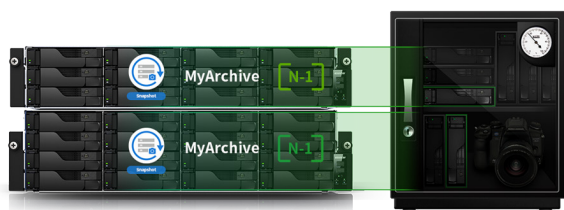
Portainer – Easy Docker Deployments

Even more possibilities for ADM can be done 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.



ASUSTOR MyArchive

ADM now supports automatic mounting and dismounting of MyArchive drives when backing up important data from an ASUSTOR NAS to a MyArchive drive. ADM will automatically mount a connected MyArchive when a backup begins, and automatically eject a MyArchive drive after the backup is complete. In addition to making performing 3-2-1 backups easier than ever, MyArchive drives are more comprehensively protected from various threats due to a different set of risks that complement the risks to data on a NAS.



Automatic Sync

ASUSTOR EZ Sync brings the magic of cloud sync services right to your home. With an ASUSTOR NAS and EZ Sync, data can be synchronized anywhere with an internet connection without a monthly bill or a data limit. If data is unintentionally modified, restoration is easy with EZ Sync's automatic file history management feature.



Integrate with a Variety of Enterprise Applications

Virtual Storage

The ASUSTOR NAS 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 seamlessly integrate with existing IT environments, providing an optimal and cost-effective storage solution.



Snapshot Center

Snapshot Center allows 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.

MyArchive also now supports Btrfs and snapshots. Btrfs for MyArchive supports snapshots and version history to help protect against accidental deletions or modifications.



Comprehensive Surveillance System

ASUSTOR NAS provides optimal reliability for home and small businesses looking to set up a surveillance system. Four free camera channels are provided, making it an extremely cost-effective surveillance solution for users with smaller demands. The AS72 supports up to 128 cameras with licenses sold separately. View surveillance feeds on Surveillance Center and its corresponding mobile app AiSecure. AiSecure also supports streams while on the go with an Internet connection.

5 Steps 60 Sec

- Quick installation wizard
- Automatic camera search
- Add cameras with just one click
- Configure video formats
- Configure recording schedules



Hardware Specification

AS7216RDX (3U)

Processor	AMD Ryzen 7 PRO 7745 Octa-Core , 5.3GHz Turbo	Power	550W x2 (80 Plus Platinum)
Memory	16GB ECC UDIMM DDR5-4800 (Expandable. max. 192GB, 48GB x4)	Operation	187 W
Drive Bays	16x 2½"/3½" SATA III	Disk Hibernation	128 W
M.2 Slots	1x M.2 slots for NVMe SSDs , Supports M.2 2280 SSDs Supports PCIe 5.0	Sleep Mode (S3)	-
USB	4x USB 3.2 Gen 1 (Type A)	Volume Type	Single, JBOD, RAID 0/1/5/6/10 , RAID 1/5/6/10 + Spare Drive
LAN	2x 10-Gigabit , 2x Gigabit	Display Out	HDMI™ (For Servicing)
Expansion	2x for optional expansion 10,25,40,50GbE card and SAS card	Service LED	Yes
Dimensions(HxWxD)	116x439x576 mm	Disk Tray Lock	Yes
Weight	15.3 kg/33.7 lb	LCD Panel	-



- A. Power LED Indicator
- B. Inspection LED Indicator
- C. System Status LED Indicator
- D. Alert LED Indicator
- E. SAS LED Indicator
- F. Network LED Indicators
- G. Hard Disk LED Indicator

Software & Features

Operating System

- ADM 5.0 Onwards
- Supports Online Firmware Updates

Supported OS

- Windows 7, 8, 10, 11, Server 2003, Server 2008 R2, 2012, 2016, 2019, 2022
- macOS 10.13 Onwards
- UNIX, Linux, BSD

Access Control

- Supports 2-Step Verification
- Supports Batch Creation and Importation of ADM Accounts
- 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 quick upload
- Task Monitor
- 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 (ISO Mounting, Maximum 16)
- UPS Support

Storage Management

- Supports Multiple Volumes with Spare Disks
- Volume Type: Single disk, JBOD, RAID 0/1/5/6/10
- 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
- Seagate IronWolf Health Management

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 Drive/DVD ROM Drive/BD-ROM

Network

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

Security

- AES 256-Bit Folder Encryption
- Firewall: Prevent Unauthorized Access
- Alert Notifications:
- Encrypted Connections: HTTPS, FTP over SSL/TLS, SSH, SFTP, Rsync over SSH
- Built-in Hardware Encryption Engine: AS63, 64, Nimbustor(G1-G2), Lockerstor (G1-G3), Lockerstor Pro (G1-G2), Flashstor (G1-G2) series

Dr. ASUSTOR

- Security advice and health records

Backup Solutions (Two-Way Backup)

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

Supported Browsers

- 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)

Sever

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

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

Snapshot Center

- Btrfs snapshots
- 256 snapshots
- iSCSI LUNs

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, ગુજરાતી

iSCSI

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

Featured Apps

- ClamAV Antivirus
- Download Center
- FTP Explorer
- DataSync Center
- Cloud Backup Center
- RADIUS Server
- Mail Server
- DataSync Center
- LooksGood
- Photo Gallery 3
- SoundsGood
- Surveillance Center
- UPnP Media Server
- VPN Client
- VPN Server

Mobile Apps

- AiMaster
- AiVideos
- AiSecure
- AiFoto 3
- AiData
- AiRemote
- AiMusic
- AiDownload (Android)

Note:

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.



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