asustor

Efficient rackmount storage for Small and Medium Businesses

LOCKERSTOR 4RS/4RD/12RD
AS6504RS/AS6504RD/AS6512RD

- Complete iSCSI/IP-SAN and NFS support
- VMware, Citrix and Hyper-V ready
- Supports Virtualization and Docker apps
- Windows ACL combined with Windows AD infrastructure enhances management efficiency for business applications
- Intel Atom C3538 2.1 GHz Quad-Core CPU
- 8 GB DDR4-2133 - 128 GB maximum
- Two Gigabit Ethernet ports
- Two 2.5-Gigabit Ethernet ports that can be combined for up to 5 Gbps of performance
- PCIe slot for 10-Gigabit Ethernet card
- Supports Wake on LAN and Wake on WAN

Performance King

Boundless Functionality

Intuitive UI

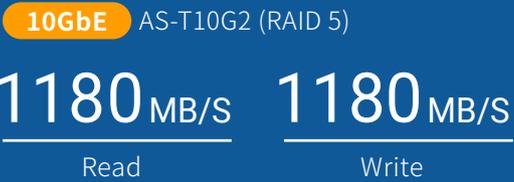Incredible Value

3-year Warranty

All New Hardware

- Intel Atom C3538 2.1 GHz Quad-Core CPU
- 8 GB DDR4-2133 - 128 GB maximum
- Two Gigabit Ethernet ports
- Two 2.5-Gigabit ports that can be combined in Link Aggregation for up to 5 Gbps of performance
- PCIe slot for 10-Gigabit Ethernet card
- USB 3.2 Gen1 Type-A

| Intel Atom C3538 CPU | 8 GB DDR4-2133 (MAX: 128 GB) | 10 GbE card expansion | 2x 1 GbE Ethernet Port 2x 2.5 GbE Ethernet Ports | 2x 250W PSU (AS6504RD) 2x 350W PSU (AS6512RD) | USB3.2 Gen 1 (5Gb/s) TypeA x4 |

Extreme Transfer Performance

The Lockerstor 4RD/4RS/12RD contain four Ethernet ports. Two are Gigabit and two are 2.5 -Gigabit Ethernet. Combine the two 2.5- Gigabit Ethernet ports to increase performance and redundancy. Link aggregation increases performance to up to 5 Gbps while also ensuring zero downtime in the event of one port going offline. All Lockerstor rackmount NAS devices come equipped with PCIe slots for network card expansion.

2.5G x2 Link Aggregation (RAID 5)

591 MB/S
Read

565 MB/S
Write

10GbE AS-T10G2 (RAID 5)

1180 MB/S
Read

1180 MB/S
Write

Data Protection Starts with Storage

ASUSTOR understands that your data is priceless, therefore an ASUSTOR NAS provides different RAID volume options, giving your data various levels of protection from the moment it is first stored on a NAS. We recommend you plan your storage protection based on your NAS model and number of hard drives. Data protection has never been so simple.
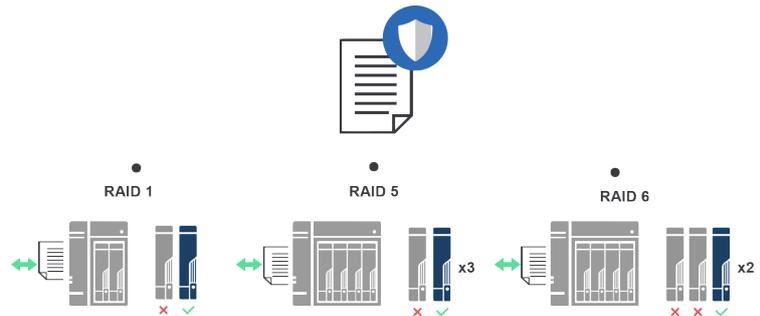
RAID 1   RAID 5   RAID 6

	Single	JBOD	RAID 0	RAID 1	RAID 5	RAID 6	RAID 10
Minimum Number of drives	1	2	2	2	3	4	4
Fault tolerance (Number of drives)	X	X	X	1	1	2	1
Increased transfer rates	X	X	V	X	V	V	V
Maximum Use of Storage Space	V	V	V	x ½	-1	-2	x ½

Enterprise Versatility

ASUSTOR NAS offers rich variety of services for business users. Create a server that does so much more than just storage for the price of just one NAS.

- FTP Explore
- Syslog Server
- Files Server
- VPN Server
- Download Server
- Print Server
- Web Server
- Mail Server
- Rsync Backup Server

AD + ACL

Windows

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. 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

Enterprise Backup

The Lockerstor 4RD and 12RD have complete backup and safety mechanisms by including dual backup power supplies for safety while including four Ethernet ports for additional performance and redundancy. Two Gigabit and two 2.5-Gigabit Ethernet ports adorn the rear of the NAS, ensuring that everyone can access their files quickly and efficiently. The Lockerstor 4RD and 12RD make no sacrifices by ensuring zero downtime if a port or power supply is offline.

ASUSTOR Find and Service Lights for Server Rooms

In enterprise environments, storage devices are commonly placed together in a server room. In order to allow administrators to quickly find the NAS from among many servers the Lockerstor 4RD/4RS/12RD provide a dedicated button on front panel. When this button is pressed, the LED service light on the rear panel of the NAS will light up. 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.

360° Backup and Virtualization Solution

- 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 in ASUSTOR NAS devices utilizes 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 now supports Btrfs and snapshots.

Btrfs for MyArchive supports snapshots and version history to help protect against accidental deletions or modifications. MyArchive drives run independently of internal NAS volumes, ensuring that snapshots are supported even when internal NAS volumes do not support snapshots.

08/20 PM 01:58   08/20 PM 05:37   08/21 PM 01:58   08/22 PM 01:58   08/23 PM 01:58

Max: 256 Snapshots

Cloud Backup Center

Combine multiple business cloud services
Backblaze B2, Microsoft Azure Blob Storage, Alibaba Cloud, Baidu Cloud, IBM Cloud.

Microsoft Azure Blob Storage   Alibaba Cloud   Backblaze B2

Baidu Cloud   IBM Cloud

Virtual Applications with Virtualbox

Deploy all kinds of operating systems to your NAS
ADM 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.

Virtual Applications with Linux Center

ASUSTOR NAS users can now run the native Linux® system on their NAS, enjoying the rich variety of Linux® apps. Linux Center features easy installation without extra configurations. It effectively turns the NAS into a computer with unlimited possibilities.

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.

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

Virtual Storage

The Lockerstor 4RD/4RS/12RD provide an enterprise-class hardware and software solution. The Lockerstor 4RD/4RS/12RD are compatible with VMware, Citrix, Hyper-V virtual storage environments as well as supporting iSCSI/IP-SAN and NFS protocols, which seamlessly integrate with existing IT environments, making the Lockerstor 4RD/4RS/12RD optimal and cost-effective storage solutions.
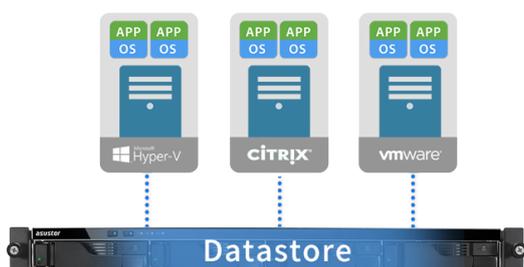
Exclusive MyArchive Storage Technology

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 ASUSTOR 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. MyArchive now supports Btrfs and snapshots.
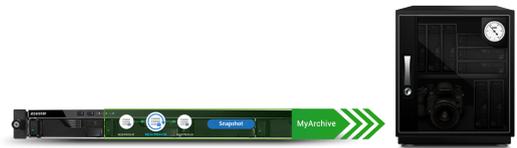
Enterprise Surveillance System

This powerful ASUSTOR NAS provides optimal reliability for enterprises looking to set up a surveillance system.
four free camera channels are offered, making it an extremely cost-effective surveillance solution.
Up to 60 more licenses can be purchased to run up to 64 camera licenses.
Monitor live feeds with Surveillance Center and AiSecure for phones at any time and any place easily and securely ensuring the safety of your home and office with your brand new ASUSTOR NAS.
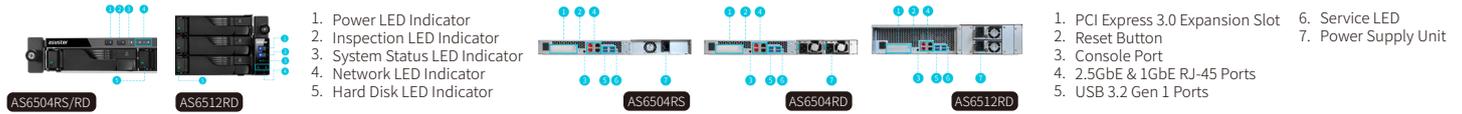
5 Steps 60 Sec

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

4 ch Free

Supports up to

64 camera channels

Hardware Specification

LOCKERSTOR 4RS(AS6504RS)/LOCKERSTOR 4RD(AS6504RD)		LOCKERSTOR 12RD(AS6512RD)	
Processor	Intel Quad-Core Atom C3538 @ 2.1GHz	Processor	Intel Quad-Core Atom C3538 @ 2.1GHz
Memory	8 GB DDR4 SO-DIMM. Maximum 128 GB	Memory	8 GB DDR4 SO-DIMM. Maximum 128 GB
Drive Bays	4x 2½"/3½" SATA III	Drive Bays	12x 2½"/3½" SATA III
LAN	2x 2.5-Gigabit Ethernet, 2x Gigabit Ethernet	LAN	2x 2.5-Gigabit Ethernet, 2x Gigabit Ethernet
Expansion	1x PCIe slot. Supports 10-Gigabit Ethernet cards	Expansion	1x PCIe slot. Supports 10-Gigabit Ethernet cards
Dimensions(HxWxD)	44x439x515 mm	Dimensions(HxWxD)	88x439x535 mm
Power	LOCKERSTOR 4RS(AS6504RS): 250W x1 LOCKERSTOR 4RD(AS6504RD): 250W x2	Power	2x 350 W – 80+ Gold
Volume Type	Single, JBOD, RAID 0/1/5/6/10, Hot Spare supported	Volume Type	Single, JBOD, RAID 0/1/5/6/10, Hot Spare supported

AS6504RS/RD AS6512RD

1. Power LED Indicator
2. Inspection LED Indicator
3. System Status LED Indicator
4. Network LED Indicator
5. Hard Disk LED Indicator

AS6504RS AS6504RD AS6512RD

1. PCI Express 3.0 Expansion Slot
2. Reset Button
3. Console Port
4. 2.5GbE & 1GbE RJ-45 Ports
5. USB 3.2 Gen 1 Ports
6. Service LED
7. Power Supply Unit

Software & Features

Operating System
· ADM 3.5 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
· macOS 10.10 and up
· UNIX, Linux, BSD

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/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 (ISO Mounting, 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 wait time
· Automatic Sleep

Network
· 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) and Wake on WAN (WOW)

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 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:
· AS63/64/Drivestor/Drivestor Pro/ Nimbustor/Lockerstor/Lockerstor Pro series 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   · One Touch Backup
· EZ Sync

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

SSD Cache
· SSD-like performance with traditional hard drives
· Supports read-only access and read-write cache mode
· Supported Models: AS63/64/Nimbustor/Lockerstor/Lockerstor Pro series

Snapshots
· Btrfs Snapshots
· 256 snapshots
· iSCSI LUNs
· Supported Models: AS63/64/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: 512
· Maximum Snapshot Versions of a Single LUN: 256
· Target Masking
· LUN Mapping
· ISO File Mounting
· Supports MPIO
· Persistent (SCSI-3) Reservations

Featured Apps
· Antivirus   · LooksGood
· Download Center   · Photo Gallery 3
· FTP Explorer   · SoundsGood
· DataSync for CloudDrive · ASUSTOR Live
· Cloud Backup Center   · Linux Center
· VirtualBox   · Surveillance Center
· RADIUS Server   · UPnP Media Server
· Mail Server   · VPN Server
· DataSync Center   · VPN Client

Mobile Apps
· AiMaster   · AiVideos   · AiSecure
· AiFoto 3   · AiData   · AiRemote
· AiMusic   · AiDownload