

# asustor

## Store more in a flash!

# FLASHSTOR 12 Pro

## FS6712X



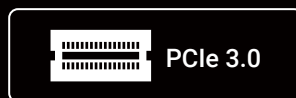
- Quad-Core 10 nm Intel Celeron N5105 CPU
- Ultimate twelve M.2 PCIe 3.0 SSD slots NAS
- Superfast 10-Gigabit Ethernet port
- Best for 4K video editing, enthusiast, studio demand
- Uses efficient DDR4-2933
- USB 3.2 Gen 2x1 ports – 10Gbps speed
- Enjoy, download, upload and stream content with 4K transcoding
- High-res S/PDIF output
- Supports Wake on LAN



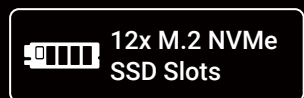
Intel  
Quad-Core CPU



4 GB  
DDR4-2933



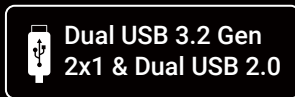
PCIe 3.0



12x M.2 NVMe  
SSD Slots



10GbE



Dual USB 3.2 Gen  
2x1 & Dual USB 2.0



S/PDIF



HDMI™



Performance  
King



Boundless  
Functionality



Intuitive  
UI



Incredible  
Value



Warranty  
Service

## 10GbE x1

The Flashstor 12 Pro has one 10GbE port which is 10 times of the performance of Gigabit Ethernet devices.



## ASUSTOR first twelve M.2 slots and 1x10GbE

The Flashstor 12 Pro comes with twelve M.2 slots and 10-Gigabit Ethernet, bringing extreme sequential and random speeds for content creation.

Windows sequential read and write (RAID 5)

**1181** MB/s  
Read

**1027** MB/s  
Write

## Powered by the latest Intel Celeron N5105 quad-core processors

Intel's newest N5105 Quad-Core CPU comes with Intel 10 nm technology and up to 31% increased performance over Gemini Lake SoCs. The N5105 is clocked at 2.0 GHz with a boost of up to 2.9 GHz, enabling efficient content creation.

### Intel N5105



### Intel J4125



## Sleek and Cool

The precise technological design of the Flashstor series combines efficient cooling without sacrificing aesthetics, making it fit neatly in almost any space.

## 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	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

## Dr. ASUSTOR

ASUSTOR provides a holistic solution for protecting your data against a variety of threats using Dr. ASUSTOR. Dr. ASUSTOR helps protect your data from a variety of threats, including, but not limited to ransomware attacks.

### Dr. ASUSTOR



## Easy dismantle and installation design

With special chassis design, user only needs to remove few screws to dismantle the chassis for easier M.2 SSD and RAM installation.



## 360° Backup and Virtualization Solution

- Rsync
- 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



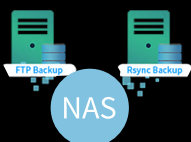
Transfer mobile data to NAS



NAS local backup



Public cloud and NAS data backup



NAS to NAS



NAS backup to external device

## Security upgrade

ADM 4.2 eliminates suspicious behaviour and is able to remove or isolate problematic files or viruses in real time. It also incorporates multiple new security measures. Every time you log into ADM and AiMaster, your NAS will also detect and provide real-time information for immediate optimization.

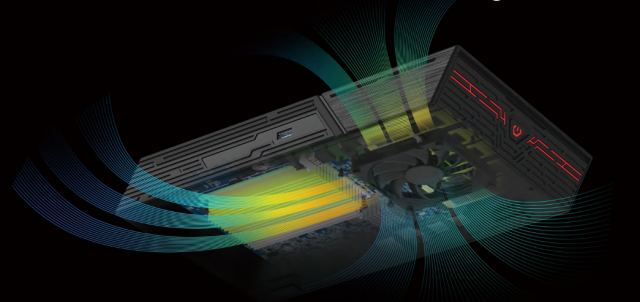
## Hi-Res lossless playback

The Flashstor series supports S/PDIF which is best for you who love music. Satisfying hi-res lossless demand. Enjoy the perfect NAS space combination with Roon or Hi-Res Player.



## Silent efficient cooling

With special silent cooling designs, only 18.7 dB on standby. While cooling, it can let the audiophile concentrate on the music without being disturbed.



## USB 3.2 Gen2x1 – High speed backup

The Flashstor series supports USB 3.2 Gen 2x1. Enjoy up to double the performance compared with USB 3.2 Gen 1x1 at up to 10 Gbps.



## 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 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

### 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



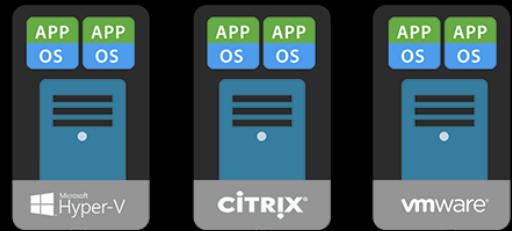
## Automatically Synchronize Files Between a Computer and your NAS

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.



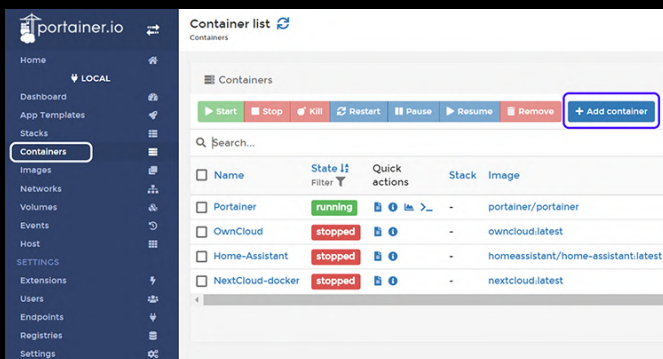
## Virtual Storage

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.



## 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.



## 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.



## Created for the Digital Home

Your ASUSTOR NAS allows you to enjoy thrilling digital entertainment at any time. Pair the HDMI port on your ASUSTOR NAS with various multimedia apps NAS to an Ultra HDTV for maximum enjoyment or similarly use the UPnP multimedia server inside your NAS to stream your favorite media to compatible computers, phones, tablets or set top boxes.



## PhotoGallery 3 + AiFoto 3

The all new Photo Gallery 3 and AiFoto 3 have been revamped and brings a variety of new features to make photo organization easier than ever. New features for Photo Gallery 3 include, but not are limited to custom folder selection, timelines, smart albums, and new photo modes. Easily blow up photos to up to twice their size, play songs on slideshows, performance enhancements and customized share links make for an even better photo viewing and sharing experience.



## Comprehensive Surveillance System

The powerful 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 Flashstor 6 supports up to 44 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.

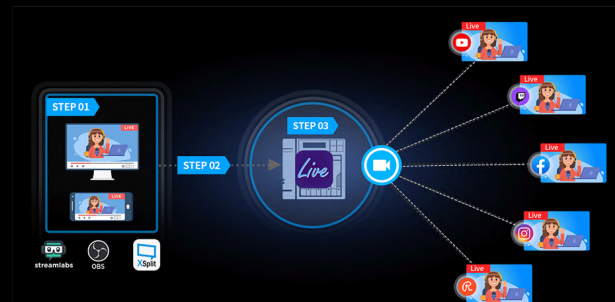
## 5 Steps - 60 Seconds

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



## ASUSTOR Live

Your own streaming center. Stream your from a phone or tablet as well as a computer to multiple streaming platforms, including, but not limited to Twitch, YouTube, Facebook, Instagram, Restream or RTMP compatible platforms. Unlike services like restream.io, ASUSTOR Live doesn't require fees to operate to stream to multiple platforms and channels which saves you money and streaming resources. Recordings can be safely saved to your NAS for future use.



## Mobile Apps

ASUSTOR's EZ Connect allows you to connect to your NAS from anywhere with your smartphone to access and share your files. ASUSTOR suite of mobile apps provide pass code locks to help protect your privacy and data. You can also make use of HTTPS connections for even more added security.

# Hardware Specification

## FS6712X (Flashstor 12 Pro)

Processor	Intel Celeron N5105 Quad-Core, 2.0 GHz up to 2.9 GHz
Memory	4GB DDR4-2933 SO-DIMM (Expandable. max. 16GB, 8GB x2)
M.2 Slots	12x M.2 PCIe (NVMe) Support M.2 2280
USB	2x USB 3.2 Gen 2 (1x Front ; 1x Rear) 2x USB 2.0
LAN	1x 10-Gigabit (Wake On LAN)
Dimensions(HxWxD)	48.3x308.26x193 mm
Weight	1.37 kg/3 lb
Operation	26 W
Volume Type	Single, JBOD, RAID 0/1/5/6/10, RAID 1/5 + Hot Spare
Display Out	1x HDMI 2.0b
Infrared Receiver	Yes
Audio Output	1x S/PDIF



1. Power LED Indicator
2. System Status LED
3. Network LED Indicator
4. Hard Drive LED Indicator
5. USB 3.2 Gen 2 port
1. K-Lock
2. S/PDIF Port
3. USB 2.0 Port
4. 10GbE Ports
5. HDMI Port
6. USB 3.2 Gen 2 port
7. Power Supply Unit
8. Reset Button
9. DC port

## Software & Features

### Operating System

- ADM 4.2 Onwards
- Supports Online Firmware Updates
- Built-in App Central for Various Apps

### Supported OS

- Windows XP, 7, 8, 10, 11, Server 2003, Server 2008, 2012, 2016, 2019, 2022
- macOS 10.6 Onwards
- UNIX, Linux, BSD

### Access Control

- Supports 2-Step Verification
- Supports Batch Creation and Importation of ADM Accounts
- 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 · Task Monitor
- Thumbnail Previews · Browse Files on Local PC
- Data Access via External Optical Drive
- Supports video playback
- Share Links quick upload

### System Administration

- Log Types: System Log, Connection Log, File Access Log
- Real-time Online User Monitor
- Real-time System Monitor
- User Quota
- Virtual Drives (ISO Mounting, Maximum 16)
- UPS Support

### Storage Management

- Supports Multiple Volumes with Spare Disks
- Volume Type: Single disk, JBOD, RAID 0, RAID 1, RAID 5, RAID 6, RAID 10
- Support for RAID Level Migration
- Support for 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/Keyboard/Mouse Support
- USB CD ROM Drive/DVD ROM Drive/BD-ROM

### 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
- SMB Multichannel
- EZ Connect
- Wireless Network
- DDNS/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: AS52/53/63/64/Flashstor/Driverstor/Driverstor Pro/Lockerstor (G1-G2)/Lockerstor Pro series

### Dr. ASUSTOR

- Security advice and health records

### Backup Solutions (Two-Way Backup)

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

### Server

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

### M.2 Storage

- Supported Models: Lockerstor 2 (G1-G2)/4 (G1-G2)/6 (G2-G2)/8/10/10 Pro/12R Pro/16R Pro/Flashstor 6/12 Pro

### 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 Models: AS31/32/40/50/51/52/53/61/62/63/64/70/Lockerstor (G1-G2)/Lockerstor Pro/Flashstor 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, ภาษาไทย

### iSCSI/IP-SAN

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

## Featured Apps

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

## Mobile Apps

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



### ASUSTOR Inc.

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