5 Best NAS Devices for Home Media Servers in 2026

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Network-connected storage devices offer greater flexibility, but that's just one of the many benefits of purchasing a NAS device. The author has tested top models to show readers which NAS device will work best for their home or small business. Let's explore this further in the following article from **TipsMake.com !**

Access files without being blocked from anywhere.

In the age of high-resolution photos and almost constant video recording, storage space on PCs and mobile devices fills up faster than ever before. While you can certainly use an external hard drive to ease the burden on your memory and back up files from your PC (and via extensions on your phone), if you disconnect the hard drive and leave it at the office, you won't be able to access the files stored on it at home. There are ways to allow other users to share and access files on the hard drive, but you may encounter difficulties in implementation or face security risks.

Instead, consider a good network attached storage (NAS) device. As its name suggests, a NAS is a high-capacity storage device that connects to your home or office network, allowing you and other designated users to access files from mobile devices and PCs without plugging in hard drives. Here's what you need to know to choose the right NAS device.

What can you do with a NAS device?

When you decide you need to store files on a network drive, you need to figure out what you want to do with them to determine the type of NAS device you need.

For example, a NAS device can help you do simple tasks like sharing access to Office files such as spreadsheets and Word documents with colleagues. If you're using a NAS to back up your laptop overnight, that's also fairly straightforward. But if you're streaming HD video over your home network to two tablets, a laptop, and a smart TV simultaneously, you'll want a NAS with higher specifications in terms of memory, processor, and networking capabilities. You'll also need a more powerful NAS if you want to store large media libraries, such as a collection of 100,000 stock photos.

Like any computer peripheral, the features offered by different NAS devices will vary to meet a wide range of specific needs. Therefore, you will need to understand the terms and features before deciding to purchase a

device.

Basic principles when buying a NAS drive

Because NAS devices, at their simplest level, are just containers for hard drives, the most important numerical specification for any NAS device is its potential storage capacity, determined by the number of hard drive bays it includes. Most consumer-grade NAS devices have one or two bays, while models designed for office use typically have four or more bays.

You shouldn't choose NAS drives with only a single bay unless they are specifically for backing up data, which is also stored on network computers. (Some single-bay NAS drives will allow you to attach a second NAS device or external hard drive.) Certainly, you don't want the only copy of your data on a network drive. Additionally, users tend to be unable to access the drives in these single-bay devices if the NAS comes with a pre-installed drive.

For most home users who don't store a lot of video files, a dual-bay NAS device will suffice. You'll spend more money buying a high-capacity storage device, but it's better than buying two hard drives for the NAS to double the capacity, as that would take up two physical drives.

Buy Populated or Diskless NAS?

Some NAS devices come with drives, sometimes already formatted for use in a specific RAID configuration (called populated), while others are "diskless." Each NAS vendor has its own preference in this regard. However, in practice, NAS device manufacturers, who are also hard drive manufacturers (e.g., Seagate, Western Digital), favor populated NAS drives because they can sell the drives alongside the NAS device.

Independent NAS manufacturers, such as Synology and QNAP, tend to sell diskless NAS devices, although these companies (or more accurately, their distributors) may also offer populated NAS, which are pre-configured with drives for buyer convenience.

If a particular NAS is offered in both populated and diskless versions, you should compare the cost differences and ensure that the drives offered in the populated model offer good value.

What types of drives are used inside a NAS device?

Manufacturers selling diskless NAS drives recommend certain hard drive models that have been tested for use with their NAS drives. These models may or may not be the same as the hard drives the manufacturer produces. Check these compatibility lists before you decide to purchase a device. If you own multiple hard drives that you plan to use in your installation, you'll want to find information to confirm compatibility. If your hard drive isn't on the list, it doesn't mean it won't work, but if you're buying new drives, it's best to follow the NAS manufacturer's recommendations.

Some hard drives from HGST, Seagate, Toshiba, and WD are specifically designed for NAS use. Most of these "NAS-certified" hard drives have been tested to run 24/7/365, which is somewhat excessive for typical, consumer-grade hard drives.

If you're looking at options from Seagate, their NAS drives are called "IronWolf" and "IronWolf Pro" series. IronWolf drives are a suitable choice after equipping a home NAS. They typically range in capacity from 1TB to 14TB. IronWolf Pro drives are usually for enterprise or commercial use. HGST drives are the Deskstar NAS series, and Toshiba drives are in the "N" series. Western Digital offers NAS-specific drives called "WD Red," with capacities from 1TB to 10TB, and the "WD Red Pro" series is for enterprise use.

Safe (storage) space: Better to have too much than too little.

As mentioned earlier, NAS units have more than one drive, built to provide redundancy options. Therefore, in models with 2 and 4 drives, the secondary drives may simply "mirror" the contents of another drive. For example, a NAS device with two bays containing two 4TB drives will only offer 4TB of usable storage if you leave it in mirror mode. The other drive is invisible, as it is used to create a second copy of all files from the first drive in the background.

Typically, users have the option to reconfigure the drives to take advantage of the second drive's capacity, if desired. One way you can do this is through the "striping" method, where data is spread across both drives. Striping is somewhat risky. In some cases, it helps increase read and write speeds, as you are accessing two drives simultaneously. But if one of the drives fails, all your data could be lost, so you should avoid this method.

Many NAS units also support JBOD ("Just a Bunch of Disks") mode, which allows you to treat each drive as a separate drive letter and save data to separate drives within the NAS box. This is slightly more secure than basic striping, but any data you save to a particular drive is still vulnerable to loss if that drive fails.

It's also possible to combine both striping and mirroring methods across three or more drives to enhance data security and speed. In this combination, the NAS will replicate data across the hard drive array, so that if one of the drives fails, the NAS will recreate the array (and thus protect your data) if you switch to a replacement drive. This is primarily of interest to business users who need to maximize both redundancy and data transfer speeds.

The subtleties of streaming media files.

If you think a NAS drive will allow you to stream any type of media file you have to any device or TV, remember that some devices will only play certain file types, and you'll need both software and hardware working in parallel to make this work.

For example, you have a DVD rip (a copy from the official release) of the movie Titanic in AVI format. This copy won't open on an iPhone without some 'tricks'. (It needs to be in MP4 format for the iPhone to read it). Software can fix that problem, such as the incredibly useful VLC Media Player utility, and some NAS units work with Chromecast , Apple TV, Roku, Android phones/tablets , and many other types of hardware. However, ensuring that a specific file or file type will play on a given device can be a bit complicated, so carefully check the NAS specifications to determine its capabilities.

Specialized support for 4K video streaming is a lifesaver in these situations. Some NAS devices with 4K acceleration capabilities will quickly convert this high-resolution video to formats more suitable for the bitrate of the device, such as a smartphone, that requires it. This is a particularly important need at the moment, but keep in mind that some NAS manufacturers will charge extra for these features.

Connect and control

Most NAS drives have one or two USB ports that you can use to connect printers or external storage drives, allowing you to add them to your network through the NAS itself. Once plugged in, like everything else on the NAS, they can be shared with all connected users. A NAS drive will typically have a USB 2.0 port used for

printer sharing and a USB 3.0 port that can be used for external storage drives. (USB 2.0 is much slower than USB 3.0 , but a USB 2.0 port is still sufficient for printers.)

Some NAS units also have a **"copy"** button on the front panel designed to copy the contents of an external drive, such as a flash drive, to the NAS with just one button press. You simply connect the drive and touch the button, and everything on the external hard drive will be securely copied to the NAS to a pre-designated location.

By definition, NAS drives come with an Ethernet port, possibly two for redundancy or channel-bonding (essentially using two Ethernet connections to boost speed) with very high-end enterprise models. Recent high-end models may also offer an option for 10 gigabit Ethernet, to increase data transfer speeds, although hard drive throughput makes this a point of contention for most consumers and SOHO use cases. (Some models have PCI slots that may allow you to install an advanced network card).

Some models will also come with an HDMI port , allowing you to use the NAS as a media server that connects directly to an HDMI-equipped HDTV.

Remote access

In addition to the sharing features mentioned above, most NAS drives allow you to send web links to people, enabling them to remotely access certain files or folders on your NAS. Therefore, a NAS can act as your own personal Dropbox or Google Drive , but with greater storage capacity and no monthly fees. Many NAS manufacturers emphasize this point.

With this functionality, you can also access the NAS itself from any internet connection, not just the local network. Therefore, you can download the files you need or stream movies/music from your home NAS to your laptop in a hotel room, either domestically or internationally. Most, but not all, NAS drives offer this type of feature, so be sure to do thorough research before purchasing if it's a must-have.

Below are some of the top NAS devices we've recently tested, ranging from simple home models to multi-drive units capable of serving dozens of users in an office environment. Whether you want to stream media files to different locations in your home, keep documents in a single, accessible archive, or simply back up digital data from PCs, tablets, and mobile phones, there's sure to be an option to suit your needs.

For more storage options, check out the list of top external hard drives, SSDs , and cloud storage services that **TipsMake.com** has mentioned.

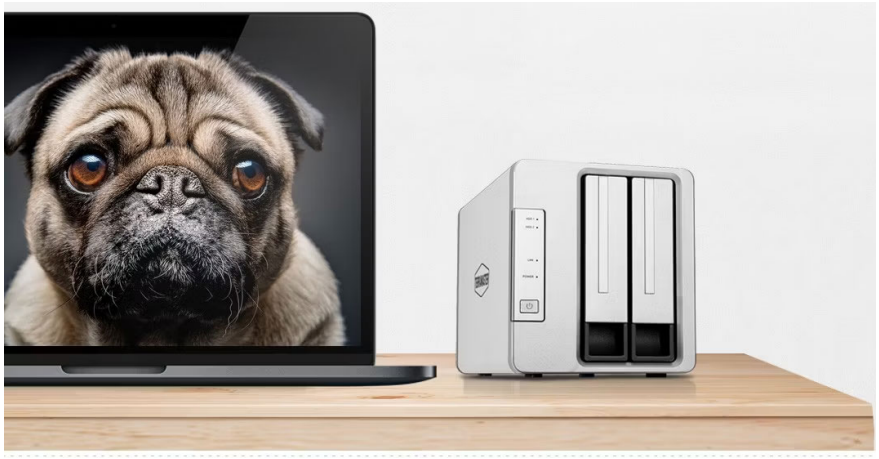
The best NAS devices currently available.

1. QNAP TS-464-8G

An ideal NAS for media servers, the QNAP TS-464-8G boasts a powerful processor capable of handling multiple streams, even when transcoding is involved. Equipped with an Intel Celeron N5095 processor and 8GB of RAM, the QNAP TS-464-8G easily handles 4K transcoding without any issues. This means no more stuttering. You can enjoy your favorite movies and shows without interruption, regardless of your device.

The TS-464-8G offers four drive bays with capacities up to 66TB and boasts superior file transfer speeds thanks to its 2.5GbE ports and dual M.2 slots for high-speed caching. In terms of connectivity, the TS-464-8G surpasses its competitors, featuring four USB ports , an HDMI output for direct TV connection, and a PCIe 3.0 slot for expansion. You'd be hard-pressed to find a NAS with this feature set, performance, and upgrade potential at this price point.

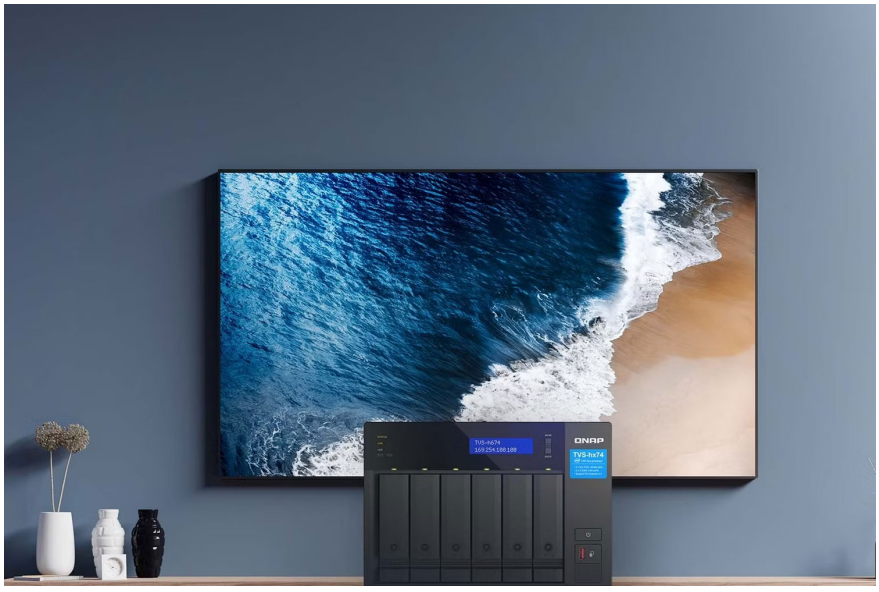
2. TerraMaster F2-223



The budget NAS device category offers many options, but two stand out: the TerraMaster F2-223 and the Synology DiskStation DS224+. These affordable dual-bay NAS devices are capable of streaming and transcoding 4K media, but the TerraMaster takes the lead by offering better specifications, including a superior Intel CPU, more RAM, M.2 SSD slots, and HDMI outputs.

It also offers faster file transfer speeds and a highly responsive experience, even for multiple users, with 2.5GbE network support and SSD caching. The only area where the TerraMaster F2-223 might be slightly lacking is its software. While TerraMaster has recently made strides in improving its operating system, if you prioritize an intuitive interface and a broad application ecosystem, opting for the Synology DiskStation DS224+ might be a worthwhile investment.

3. QNAP TVS-h674-i3-16G-US



The QNAP TVS-h674-i3-16G-US boasts a quad-core CPU with 16GB of RAM and SSD caching capabilities, a powerful combination capable of handling over 10 simultaneous 4K streams, even when transcoding is involved. You can also expand your storage as desired with 6 flexible interchangeable bays, meeting even the most demanding media needs.

More than just a basic media server, the TVS-h674-i3-16G-US can handle everything from virtual machine hosting to running popular apps like Home Assistant for seamless control of your smart devices. It comes equipped with 2.5GbE networking, three 10Gbps USB ports, and an HDMI port for direct connectivity, but you can expand your horizons even further with a PCIe Gen 4 slot, adding capabilities like 10GbE ports.

4. Synology DiskStation DS620slim

If data protection is your top concern but you still want smooth 4K media streaming, the Synology DiskStation DS620slim might be the perfect match for you. While it doesn't boast the most powerful hardware, it has great power when it comes to streaming and transcoding 4K video. That means smooth media playback on laptops, smartphones, or even low-spec HDTVs.

But the DS620slim's true strength lies in its versatility. Its 6 drive bays allow for various RAID configurations, including RAID 5/6/10, giving you the freedom to prioritize performance for lightning-fast access or ramp up data protection for maximum peace of mind. It's also incredibly compact and surprisingly affordable compared to similar 6-bay NAS devices.

5. Asustor Lockerstor 4 Gen2 AS6704T

The Asustor Lockerstor 4 Gen2 AS6704T is very similar to the top pick on the list, the QNAP TS-464-8G, but boasts several key upgrades that solidify its position as the best 4-bay NAS currently available. Both excel in media streaming capabilities, supporting 4K transcoding for seamless playback on any device. You'll also find 2.5GbE networking, 10Gbps USB ports, HDMI outputs, and PCIe expandability on both devices.

Where the Lockerstor 4 Gen2 AS6704T truly shines is its upgradeability. While starting with 4GB of RAM compared to the TS-464-8G's 8GB, it offers the ability to expand RAM up to 16GB if your needs grow. Additionally, it boasts four M.2 SSD slots, double that of its competitors, providing flexibility for caching or expanding storage capacity. It's a powerful overall 4-bay NAS that can keep up with your evolving media needs.

We hope you find the right option!