

# HAT5300-12T



**Brand:** Synology  
**Product Code:** HAT5300-12T  
**Availability:** 10  
**Weight:** 720.00g  
**Dimensions:** 147.00mm x 101.85mm x 26.10mm  
**Call for Price:**

## Short Description

Synology HAT5300-12T 12 TB Hard Drive - 3.5" Internal - SATA (SATA/600)

## Description

### Enterprise storage drives for Synology systems

Synology HAT5300 series HDDs offer class-leading performance thanks to tight integration with DSM and Synology hardware. With over 500,000 hours of in-house validation testing and backed by Synology's 5-year limited warranty, the HAT5300 series bring unmatched reliability to Synology deployments.



**Performance**

Up to 281 MB/s sustained data transfer



## **Optimization**

Up to 23% faster sequential read in Synology NAS



## **Reliability**

Purpose-built for Synology servers running 24/7



## **Updates**

One-click drive firmware updates through DSM

## **Consistent performance scaling**

Through testing and optimizations, HAT5300 series HDDs has been tuned to deliver up to 23% higher sustained sequential read performance in demanding multi-user environments.

## **Built for peak performance**

## **Rigorous validation**

Over 500,000 hours of stress testing with Synology devices ensure that HAT5300 series drives can withstand even the most demanding enterprise environments and deliver highly reliable performance.

Synology Enterprise Series SATA drives undergo over 1,000 stress test cycles and more than 500,000 hours of cumulative testing to ensure maximum reliability. Cumulative testing stress tests

## **One-click firmware upgrades**

Automatic firmware update notifications and one-click installation through DSM minimize maintenance workload and reduce the chance of oversights.



## **Durability for 24/7 environments**

With an MTBF rating of up to 2.5 million hours, the HAT5300 series HDD supports a workload of 550 TB per year and persistent write cache technology to minimize data corruption in the event of sudden power loss.

## **Built for Demanding Workloads and HighCapacity Arrays**

Synology HAT5300 series HDDs are engineered for demanding, high-volume workloads, delivering up to 23% greater multi-client sequential read performance compared to third-party drives.<sup>1</sup> Built for unwavering reliability, these CMR-based drives have undergone over 500,000 hours of rigorous validation and are backed by a 5-year Synology limited

warranty.

## Highlights

- **Enterprise Reliability and Durability** For demanding 24/7 environments, rated for up to 2.5 million hours MTBF<sup>3</sup> and up to 550 TB per year workloads.
- **Persistent Write Cache Technology** Minimizes the chance of data corruption in the event of sudden power loss.
- **Better Performance** Firmware and DiskStation Manager (DSM) optimizations improve multi-client seq. read performance by up to 23%<sup>1</sup>.
- **One-Stop Update** Get one-click firmware updates through DSM, reducing the need for additional maintenance sessions.
- **For Synology, by Synology** Stringent validation and up to 500,000 hours of tests ensures maximum reliability in Synology systems.

## Scale-up Confidently

Synology HAT5300 series drives are engineered to provide fast and dependable performance. Firmware and software collaborate to ensure maximum performance, delivering over 23% higher sequential read performance than similar capacity drives.<sup>1</sup> HAT5300 series provides outstanding performance for large-scale video surveillance, multimedia post-production, and enterprise file server environments.

## **Maximum Endurance and Reliability**

Designed with our expertise in storage systems, HAT5300 series drives are backed by an up to 2.5 million hour MTBF rating, workload support of 550 TB per year, and persistent write cache technology. Over 500,000 hours of compatibility and stress testing ensure that HAT5300 Series drives can continuously operate even under extreme workloads with our NAS and IP SAN lineup. Combined with data protection solutions running on Synology systems, you can confidently depend on your data 24/7 using HAT5300 series drives.

## **Streamlined Maintenance for Reduced Downtime**

The HAT5300 series drives feature one-click firmware update capability within DSM. This user-friendly update process reduces maintenance time from over 50 minutes to just a few minutes per system, eliminating the need for Linux command line operations.<sup>4</sup> Additionally, using Synology hard disk drives along with Synology systems simplifies IT infrastructure as the entire system receives support from Synology.

## Hardware Specifications

General	
Capacity	12 TB
Form Factor	3.5"
Interface	SATA 6 Gb/s
Performance	
Rotational Speed	7,200 rpm
Maximum Sustained Data Transfer Speed (Typ.)	254 MB/s
Power Consumption	
Active Idle (Typ.)	4.25 W
Random Read / Write (4KB Q1) (Typ.)	7.83 W
Notes	Power consumption may differ according to configurations and platforms.
Temperature	
Operating	5°C to 60°C 41°F to 140°F
Non-operating	40°C to 70°C 40°F to 158°F

## Product Gallery

