



M.2 NVMe SSD

SNV3000 Series

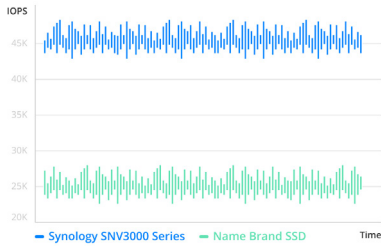


Durable SSD Built for Demanding Caching Workloads

Synology SNV3000 series is designed to handle tough caching workloads in a 24/7 multi-user environment. Its durable I/O performance boosts system responsiveness and speeds up handling of frequent access data. Purpose-built for Synology systems, the NVMe solid-state drive line provides a streamlined storage experience while minimizing service disruptions. The SNV3000 series comes with advanced lifetime analytics and is backed by Synology 5-year limited warranty.⁴

Highlights

- **High Performance**
Over 205,000/40,000 sustained 4K random read/write IOPS for demanding I/O¹
- **Enterprise-Grade Endurance**
Suitable for intensive caching workloads at up to 500 TBW²
- **Robust Data Protection**
End-to-end data protection ensures data integrity
- **Lifetime Analytics**
Actionable insight helps make optimal use of SNV3000 series SSD performance and longevity
- **Built for Synology Systems**
Proven interoperability with Synology systems through rigorous validation



Consistently Fast

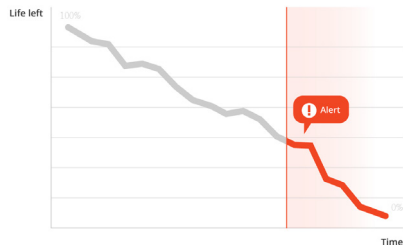
Synology SNV3000 series deliver superior performance output when compared with name brand SSD.

Consistently Fast Caching for 24/7 Environment

Built for system cache, Synology SNV3000 series pushes up random I/O performance and reduces latency in demanding 24/7 environments. It provides a durable caching experience with over **205,000/40,000 4K random read/write IOPS¹** and a **500 TBW** endurance rating², suitable for multi-user environments, multimedia post-production, and database applications. The SNV3000 series comes with two form factors, **SNV3400** for **2280** and **SNV3500** for **22110**. It allows you to build a highly efficient storage system with exceptional performance, without sacrificing any 3.5" drive bays.

Data Integrity Safeguards

SSD cache boosts your system's read/write performance by storing transient data in solid-state drives to increase retrieval efficiency and cut down recurring requests to the primary storage. Data integrity is important, as cached data are continuously relocated. Synology SNV3000 series integrates **end-to-end data protection** to safeguard data integrity over the entire transfer path. The SNV3500 comes with **power loss protection circuit design³**, further preventing data corruption during an abnormal shutdown: **Dedicated capacitors** provide power to flush data-in-flight into NAND flash in a power loss event and firmware is designed to enable a correct restart on the next power-up.



SSD Lifetime Analytics

SNV3000 series' full integration with Synology DSM allows for SSD remaining lifetime analytics based on each unit's actual workload.

Lifetime Analytics Based on Your Workload

Full integration with **Synology's DiskStation Manager (DSM)** operating system allows Synology systems to provide lifetime analytics based on actual workloads for each unit in SNV3000 series. Timely notifications allow you to plan further ahead for uninterrupted system performance and longevity. Easy monitoring allows you to make optimal use of each SSD.

Purpose-Built for Synology Systems

Firmware versions and component changes can over time cause SSD compatibility issues. Synology SNV3000 series is thoroughly tested for compatibility with our systems following each engineering change, while firmware and component changes are strictly managed. Intensive I/O stress, power cycling and temperature trials ensure that all products meet our strictest standards for quality and reliability.

Technical Specifications

Hardware specifications

Model number	SNV3400-400G	SNV3500-400G
Capacity	400 GB	
Form factor	M.2 2280	M.2 22110
Interface	NVMe PCIe 3.0 x4	
Performance		
Sequential read (128 KB, QD32) ¹	3,100 MB/s	
Sequential write (128 KB, QD32) ¹	550 MB/s	
Random read (4 KB, QD256) ¹	205,000 IOPS	
Random write (4 KB, QD256) ¹	40,000 IOPS	
Endurance and Reliability		
Terabytes Written (TBW) ²	500 TB	
Drive Writes Per Day (DWPD)	0.68	
Mean Time Between Failures (MTBF)	1.8 million hours	
Uncorrectable Bit Error Rates (UBER)	< 1 sector per 10 ¹⁷ bits read	
Power loss protection	-	Yes ³
Warranty	5 years ⁴	
Power Consumption		
Supply voltage	3.3 V (± 10%)	
Active read (Typ.)	3.2 W	3.7 W
Active write (Typ.)	3.2 W	3.4 W
Idle	2.0 W	
Temperature		
Operation temperature	0°C to 70°C (32°F to 158°F)	
Storage temperature	-40°C to 85°C (-40°F to 185°F)	
Others		
Dimension (H x W x D)	3.5 mm x 22 mm x 80 mm	4.5 mm x 22 mm x 110 mm
Certification	CE, FCC, VCCI, RCM, BSMI, KC, RoHS	

*Model specifications are subject to change without advance notice. Please refer to www.synology.com for the latest information.

1. Performance measured using FIO on Linux with Queue Depth 32/256 (128 KB = 131,072 bytes; 4 KB = 4,096 bytes).
2. The endurance rating is calculated based on JESD219A enterprise workload.
3. Power loss protection circuit design is available on SNV3500 to further prevent data corruption in case of power failure.
4. 5-year limited warranty provides coverage until the end of the warranty period or until the endurance usage of the drive has been reached, whichever comes first.

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SNV3000 Series-2020-ENU-REV001