

NAS HDD

Data Sheet

Best-Performing, Highest-Capacity Storage for 1- to 5-Bay NAS Systems

- Seagate® NAS HDDs are built and tested to provide industry-leading performance for small NAS systems.
- NASWorks™ technology supports customized error recovery controls, power management and vibration tolerance for optimal performance and reliability in a 1- to 5-bay solution.
- NAS error recovery controls optimize drive health by helping to ensure drives are not dropped from the NAS and sent into a RAID rebuild.
- Improved vibration tolerance and emission in multi-drive systems with dual-plane balance
- Advanced power management supports multiple power profiles for low-power, 24x7 performance.
- Industry-leading performance with NASWorks balances sequential and random performance, ideal for both small business and personal profiles.
- Quiet drive operation enhances customer experience in living room or office environments.
- 4TB drives offer the highest capacity in purpose-built NAS storage.

Best-Fit Applications

- Home servers or desktop NAS solutions
- Small-business file sharing
- Backup servers



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Specifications	4TB ¹	3TB ¹	2TB ¹
Model Number	ST4000VN000	ST3000VN000	ST2000VN000
Interface Options	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Halogen Free	Yes	Yes	Yes
NASWorks			
Number of Drive Bays Supported	1 to 5	1 to 5	1 to 5
Dual-Plane Balance	Yes	Yes	Yes
Vibration Tolerance for Small NAS	Yes	Yes	Yes
NASWorks Error Recovery Control	Yes	Yes	Yes
Performance			
Cache, Multisegmented (MB)	64	64	64
SATA Transfer Rates Supported (Gb/s)	6.0	6.0	6.0
Power-On or Standby to Ready (typical, sec)	<17	<17	<17
Max Sustained Data Transfer Rate OD (MB/s)	180	180	159
Voltage			
Voltage Tolerance, Including Noise (5V)	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12V)	±10%	±10%	±10%
Power Management			
Startup Current (12V, A max)	2.0	2.0	2.0
Operating Average (W)	4.8	4.8	4.3
Idle Average (W)	3.95	3.95	3.0
Standby/Sleep Mode (typical, W)	0.5	0.5	0.3
Environmental			
Temperature (°C)			
Operating (ambient min)	0	0	0
Operating (drive case max)	70	70	70
Nonoperating (ambient)	-40 to 70	-40 to 70	-40 to 70
Temperature Gradient, Operating/Nonoperating (°C per hour max)	20/30	20/30	20/30
Shock			
Operating: 2ms (max, Gs)	80	80	80
Nonoperating: 2ms (max, Gs)	300	300	300
Acoustics			
Idle (typical, bels) ²	2.3	2.3	1.9
Operational (typical, bels)	2.5	2.5	2.1
Reliability			
Load/Unload ³	600,000	600,000	600,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1M	1M	1M
Physical			
Height (mm/in, max)	26.11/1.028	26.11/1.028	26.11/1.028
Width (mm/in, max)	101.6/4.0	101.6/4.0	101.6/4.0
Depth (mm/in, max)	146.99/5.787	146.99/5.787	146.99/5.787
Weight (g/lb, max)	610/1.345	610/1.345	535/1.18
Carton Unit Quantity	20	20	20
Cartons per Pallet	40	40	40
Cartons per Layer	8	8	8

¹ One terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² Idle measured in Idle1 state

³ Load/Unload tested to 600,000 cycles

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