NAS HDD

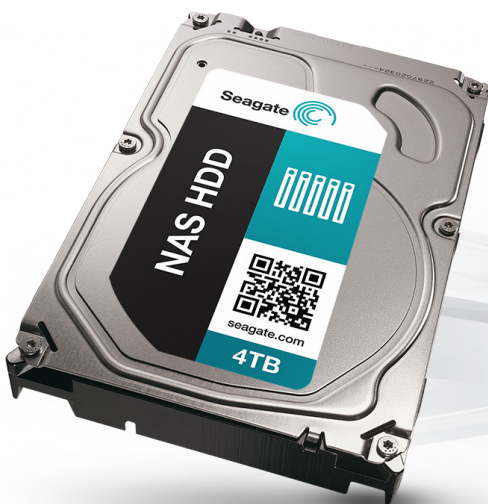**Data Sheet**

Best-Performing, Highest-Capacity Storage for 1- to 8-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 8-bay solution with 20 users or less.

- 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, 24×7 performance.

- Quiet drive operation enhances customer experience in living room or office environments.

- Optional 3-year +Rescue Data Recovery Service plan protects against data loss from viruses, software issues, or mechanical and electrical breakdowns in a NAS or RAID environment.

Best-Fit Applications

- Home/SOHO NAS desktop towers

- Desktop RAID

- Backup and disaster recovery

- Print and file servers

- Multimedia server/storage

- Archival

- Virtualization

- Small-business file sharing

- Backup servers

NAS HDD

Seagate®

Specifications	Bonus Pack Models		Single Drive Models		
	16TB[1]	4TB[1]	4TB[1]	3TB[1]	2TB[1]
Model Number	—	—	ST4000VN000	ST3000VN000	ST2000VN000
+Rescue Model Number	ST16000VN000 (4 × 4TB)	ST4000VN002 (2 × 2TB)	ST4000VN003	—	ST2000VN001
Interface Options	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Halogen Free	Yes	Yes	Yes	Yes	Yes
NASWorks					
Number of Drive Bays Supported	1 to 8	1 to 8	1 to 8	1 to 8	1 to 8
Dual-Plane Balance	Yes	Yes	Yes	Yes	Yes
Vibration Tolerance for Small NAS	Yes	Yes	Yes	Yes	Yes
NASWorks Error Recovery Control	Yes	Yes	Yes	Yes	Yes
+Rescue Data Recovery Service					
3-Year Option With +Rescue Model	Yes	Yes	Yes	—	Yes
Performance (Per Drive)					
Cache, Multisegmented (MB)	64	64	64	64	64
SATA Transfer Rates Supported (Gb/s)	6.0	6.0	6.0	6.0	6.0
Power-On or Standby to Ready (typical, sec)	<17	<17	<17	<17	<17
Max Sustained Data Transfer Rate OD (MB/s)	180	180	180	180	159
Voltage (Per Drive)					
Voltage Tolerance, Including Noise (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12V)	±10%	±10%	±10%	±10%	±10%
Power Management (Per Drive)					
Startup Current (12V, A max)	2.0	2.0	2.0	2.0	2.0
Operating Average (W)	4.8	4.8	4.8	4.8	4.3
Idle Average (W)	3.95	3.95	3.95	3.95	3.0
Standby/Sleep Mode (typical, W)	0.5	0.5	0.5	0.5	0.3
Environmental (Per Drive)					
Temperature (°C)					
Operating (ambient min)	0	0	0	0	0
Operating (drive case max)	70	70	70	70	70
Nonoperating (ambient)	−40 to 70	−40 to 70	−40 to 70	−40 to 70	−40 to 70
Temperature Gradient, Operating/Nonoperating (°C per hour max)	20/30	20/30	20/30	20/30	20/30
Shock					
Operating: 2ms (max, Gs)	80	80	80	80	80
Nonoperating: 2ms (max, Gs)	300	300	300	300	300
Acoustics					
Idle (typical, bels)[2]	2.3	2.3	2.3	2.3	1.9
Operational (typical, bels)	2.5	2.5	2.5	2.5	2.1
Reliability (Per Drive)					
Load/Unload[3]	600,000	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours	8760	8760	8760	8760	8760
Mean Time Between Failures (MTBF, hours)	1M	1M	1M	1M	1M
Warranty, Limited (years)	3	3	3	3	3
Physical (Per Drive)					
Height (mm/in, max)	26.11/1.028	26.11/1.028	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	101.6/4.0	101.6/4.0
Depth (mm/in, max)	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787
Weight (g/lb, max)	610/1.345	610/1.345	610/1.345	610/1.345	535/1.18
Carton Unit Quantity	TBD	TBD	20	20	20
Cartons per Pallet	TBD	TBD	40	40	40
Cartons per Layer	TBD	TBD	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

+Rescue
DATA RECOVERY SERVICES
Seagate

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