



3.5 HDD DATA SHEET The Power of Agility for Creative Pro and SME NAS Enclosures



IronWolf<sup>™</sup> Pro is designed for everything business NAS. Get used to tough, ready and scalable 24×7 performance that can handle multi-drive environments with a wide range of capacities.



## **Best-Fit Applications**

- 1- to 16-bay business network attached storage (NAS)
- Backup, archiving and disaster recovery
- On-premise private cloud
- Virtual storage



## Key Advantages

**Optimised for NAS with AgileArray™.** AgileArray is built for dual-plane balancing and RAID optimisation in multi-bay environments with the most advanced power management possible.

High performance means reduced lag times or downtime for users during high traffic time for the NAS. Seagate leads the competition with the highest performance in NAS-class drives.<sup>1</sup>

Seagate<sup>®</sup> Rescue Data Recovery.<sup>2</sup> IronWolf Pro comes with extra peace of mind for any mechanical, accidental or natural disaster. With a 90% success rate of in-house recovery, Seagate has your back with a Rescue Data Recovery plan.

Rotational Vibration (RV) mitigation. IronWolf Pro comes standard with RV sensors to maintain high performance in multi-bay NAS enclosures.

Range of capacities up to 10 TB. More capacity options mean more choices that will fit within the budget. Seagate provides a scalable solution for any NAS use-case scenario.

Get ahead with more cache. IronWolf Pro provides high-cache options allowing your NAS to serve data faster.

**Do more with multi-user technology.** Enables user workload rate of 300 TB/year. Multiple users can confidently upload and download data to the NAS server, knowing it can handle the workload, whether you're a creative professional or small business.

Designed for always on, always accessible 24×7 performance. Access your data on your NAS any time, remotely or on site.

**1.2 M hours MTBF, 5-year limited warranty** represents an improved total cost of ownership (TCO) with reduced maintenance costs.

<sup>1</sup> Performance may vary depending on user's hardware configuration and operating system.

<sup>2</sup> Rescue recovery services not available in all countries. Please contact your Seagate sales representative for further details.





Specifications	10 TB <sup>1,2</sup>	8 TB <sup>1,2</sup>	6 TB <sup>1,2</sup>	4 TB <sup>1,2</sup>	2 TB1
Standard Model Number	ST10000NE0004	ST8000NE0021	ST6000NE0021	ST4000NE00253	ST2000NE0025
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Features					
Drive Bays Supported	Up to 16 Bays	Up to 16 Bays	Up to 16 Bays	Up to 16 Bays	Up to 16 Bays
Multi-User Technology (TB/yr)	300	300	300	300	300
Rotational Vibration (RV) Sensors	Yes	Yes	Yes	Yes	Yes
Hot-Plug Support <sup>4</sup>	Yes	Yes	Yes	Yes	Yes
Cache (MB)	256 MB	256 MB	256 MB	128 MB	128 MB
Reliability/Data Integrity					
Mean Time Between Failures (MTBF) (hours)	1.2 M	1.2 M	1.2 M	1.2 M	1.2 M
Reliability Rating @ Full 24×7 Operation (AFR)	0.73%	0.73%	0.73%	0.73%	0.73%
Non-recoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours (per year)	8,760	8,760	8,760	8,760	8,760
Sector Size (Bytes per Logical Sector)	512E	512E	512E	512E	512E
Rescue Services <sup>5</sup>	Yes	Yes	Yes	Yes	Yes
Limited Warranty (years)	5	5	5	5	5
Performance					
Spindle Speed (RPM)	7,200	7,200	7,200	7,200	7,200
Interface Access Speed (Gb/s)	6.0, 3.0, 1.5	6.0, 3.0, 1.5	6.0, 3.0, 1.5	6.0, 3.0, 1.5	6.0, 3.0, 1.5
Max Sustained Rate OD (MB/s)	214	214	214	214	195
Average Latency (ms)	4.16	4.16	4.16	4.16	4.16
Interface Ports	Single	Single	Single	Single	Single
Rotational Vibration @ 10-1,500 Hz (rad/s <sup>2</sup> )	12.5	12.5	12.5	12.5	12.5
Power Consumption					
Startup Current, Typical (12 V, A)	2.0	2.0	2.0	2.0	2.0
Idle Power, Average (W)	4.4	7.6	7.6	6.0	4.5
Average Operating Power (W)	6.8	9.0	9.0	6.7	7.5
Standby Mode, Typical (W)	0.8	0.6	0.6	0.6	0.8
Sleep Mode, Typical (W)	0.8	0.6	0.6	0.6	0.8
Power Supply Requirements	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V	+12 V and +5 V
Environmental					
Temperature (°C)					
Operating (ambient, min)	5	5	5	5	5
Operating (drive case, max)	60	60	60	60	60
Non-operating (ambient, min)	-40	-40	-40	-40	-40
Non-operating (ambient, max)	70	70	70	70	70
Vibration, Non-operating: 10 Hz to 500 Hz (Grms)	2.27	5	5	5	5
Shock, Operating, 2 ms (Read/Write) (Gs)	70/40	70/40	70/40	70/40	70/40
Shock, Non-operating, 1 ms and 2 ms (Gs)	250	250	250	300	300
Physical					
Height (mm/in)	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028
Width (mm/in, max)	101.85/4.01	101.85/4.01	101.85/4.01	101.85/4.01	101.85/4.01
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, typical)	650/1.433	780/1.72	780/1.72	680/1.50	550/1.21

<sup>1</sup> One gigabyte, or GB equals one billion bytes; and one terabyte or TB, equals one trillion bytes when referring to drive capacity.

<sup>2</sup> Seagate recommends validating your configuration with your HBA/RAID controller manufacturer to ensure full capacity capabilities.

<sup>3</sup> Coming soon. For immediate needs, please see Enterprise NAS HDD.

<sup>4</sup> Supports Hot-Plug operation per Serial ATA Revision 2.6 specification.

<sup>5</sup> Rescue recovery services not available in all countries. Please contact your Seagate sales representative for further details. Register an IronWolf Pro drive to activate your 2-year Rescue plan at seagate.com/register.

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