



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



IronWolf[™] Pro is designed for everything business NAS. Get used to tough, ready and scalable 24×7 performance that can handle multidrive 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.¹

Seagate[®] Rescue Data Recovery.² 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 2-year included 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 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 24x7 performance. Access your data on your NAS any time, remotely or on site.

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

¹ Performance may vary depending on user's hardware configuration and operating system.

² Registration required to activate. Rescue recovery services not available in all countries. Contact your Seagate sales representative for further details.





| Specifications | 10 TB ^{1,2} | 81 | B ^{1,2} | 6 TB ^{1,2} | 4 TB ^{1,2} | 2 TB1 |
|--|----------------------|----------------|-------------------------|---------------------|---------------------------|---------------------------|
| Standard Model Number | ST10000NE0004 | ST8000NE0021 | ST8000NE0004 | ST6000NE0021 | ST4000NE0025 ³ | ST2000NE0025 ³ |
| Interface | SATA 6 Gb/s | 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 | Up to 16 Bays |
| Multi-User Technology (TB/yr) | 300 | 300 | 300 | 300 | 300 | 300 |
| Rotational Vibration (RV) Sensors | Yes | Yes | Yes | Yes | Yes | Yes |
| Hot-Plug Support ⁴ | Yes | Yes | Yes | Yes | Yes | Yes |
| Cache (MB) | 256 MB | 256 MB | 256 MB | 256 MB | 128 MB | 128 MB |
| Reliability/Data Integrity | | | | | | |
| Mean Time Between Failures (MTBF) (hours) | 1.2M | 1.2M | 1.2M | 1.2M | 1.2M | 1.2M |
| Reliability Rating @ Full 24×7 Operation (AFR) | 0.73% | 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 | 1 per 10E15 |
| Power-On Hours (per year) | 8,760 | 8,760 | 8,760 | 8,760 | 8,760 | 8,760 |
| Sector Size (Bytes per Logical Sector) | 512E | 512E | 512E | 512E | 512E | 512 |
| Rescue Services ⁵ | Yes | Yes | Yes | Yes | Yes | Yes |
| Limited Warranty (years) | 5 | 5 | 5 | 5 | 5 | 5 |
| Performance | | | | | | |
| Spindle Speed (RPM) | 7,200 | 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 | 6.0, 3.0, 1.5 |
| Max Sustained Rate OD (MB/s) | 214 | 214 | 214 | 214 | 214 | 195 |
| Average Latency (ms) | 4.16 | 4.16 | 4.16 | 4.16 | 4.16 | 4.16 |
| Interface Ports | Single | Single | Single | Single | Single | Single |
| Rotational Vibration @ 10-1,500 Hz (rad/s ²) | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| Power Consumption | | | | | | |
| Startup Current, Typical (12V, A) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Idle Power, Average (W) | 4.4 | 7.6 | 4.4 | 7.6 | 6.0 | 4.5 |
| Average Operating Power (W) | 6.8 | 9.0 | 6.8 | 9.0 | 6.7 | 7.5 |
| Standby Mode, Typical (W) | 0.8 | 0.6 | 0.8 | 0.6 | 0.6 | 0.8 |
| Sleep Mode, Typical (W) | 0.8 | 0.6 | 0.8 | 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 | +12 V and +5 V |
| Environmental | | | | | | |
| Temperature (°C) | | | | | | |
| Operating (ambient, min) | 5 | 5 | 5 | 5 | 5 | 5 |
| Operating (drive case, max) | 60 | 60 | 60 | 60 | 60 | 60 |
| Non-operating (ambient, min) | -40 | -40 | -40 | -40 | -40 | -40 |
| Non-operating (ambient, max) | 70 | 70 | 70 | 70 | 70 | 70 |
| Vibration, Non-operating: 10 Hz to 500 Hz (Grms) | 2.27 | 5 | 2.27 | 5 | 5 | 5 |
| Shock, Operating, 2 ms (Read/Write) (Gs) | 70/40 | 70/40 | 70/40 | 70/40 | 70/40 | 70/40 |
| Shock, Non-operating, 1 ms and 2 ms (Gs) | 250 | 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 | 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 | 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 | 146.99/5.787 |
| Weight (g/lb, typical) | 650/1.433 | 780/1.72 | 650/1.433 | 780/1.72 | 680/1.50 | 550/1.21 |

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

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

³ Coming soon. For immediate needs, please see Enterprise NAS HDD.

⁴ Supports Hot-Plug operation per Serial ATA Revision 2.6 specification.

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

seagate.com

AMERICAS ASIA/PACIFIC EUROPE, MIDDLE EAST AND AFRICA

Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, +1 408 658 1000 Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, +65 6485 3888 Seagate Technology SAS 16-18 rue du Dôme, 92100 Boulogne-Billancourt, France, +33 1 4186 10 00

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