



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 24x7 performance that can handle multi-drive environments across a wide range of capacities.



Best-Fit Applications

- 1- to 24-bay network attached storage (NAS)
- Backup, archiving, and disaster recovery
- On-premise private cloud
- Virtual storage



Key Advantages

Optimized for NAS with AgileArray™. AgileArray enables dual-plane balancing and RAID optimization in multi-bay environments, with the most advanced power management possible.

Actively protect your NAS with IronWolf Health Management focusing on prevention, intervention, and recovery.¹

High performance means no lag time or downtime for users during workload traffic for the NAS. Seagate leads the competition with the highest-performing NAS drive portfolio.²

Seagate® Rescue Data Recovery.³ 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) sensors. First in its class of drives to include RV sensors to maintain high performance in multi-drive NAS enclosures.³

Range of capacities up to 12TB. More capacity options means more choices that will fit within the budget. Seagate provides a scalable solution for any NAS use-case scenario.

Do more in multi-user environments. IronWolf provides a workload rate of 300TB/year. Multiple users can confidently upload and download data to the NAS server, knowing IronWolf can handle the workload, whether you are a creative professional or a small business.

Designed for always on, always accessible 24x7 performance. Access 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) over desktop drives with reduced maintenance costs.

¹ Contact your Seagate sales representative for further information.

² Performance may vary depending on user's hardware configuration and operating system.

³ Registration required to activate. Rescue recovery services not available in all countries. Contact your Seagate sales representative for further details.



| Specifications | 12TB | 10TB | 8TB |
|---|------------------|------------------|------------------|
| Standard Model Number ¹ | ST12000NE0007 | ST10000NE0004 | ST8000NE0004 |
| Interface | SATA 6Gb/s | SATA 6Gb/s | SATA 6Gb/s |
| Features | | | |
| Drive Bays Supported | Up to 24 Bays | Up to 24 Bays | Up to 24 Bays |
| Multi-User Technology (TB/yr) | 300 | 300 | 300 |
| Rotational Vibration (RV) Sensors | Yes | Yes | Yes |
| Hot-Plug Support ² | Yes | Yes | Yes |
| Cache (MB) | 256 | 256 | 256 |
| Reliability/Data Integrity | | | |
| Mean Time Between Failures (MTBF, hours) | 1,200,000 | 1,200,000 | 1,200,000 |
| Reliability Rating @ Full 24x7 Operation (AFR) | 0.73% | 0.73% | 0.73% |
| Nonrecoverable Read Errors per Bits Read, Max | 1 per 10E15 | 1 per 10E15 | 1 per 10E15 |
| Power-On Hours per Year (24x7) | 8760 | 8760 | 8760 |
| Sector Size (Bytes per Logical Sector) | 512E | 512E | 512E |
| Rescue Services ³ | Yes | Yes | Yes |
| Limited Warranty (years) | 5 | 5 | 5 |
| Performance | | | |
| Spindle Speed (RPM) | 7200 | 7200 | 7200 |
| Interface Access Speed (Gb/s) | 6.0, 3.0, 1.5 | 6.0, 3.0, 1.5 | 6.0, 3.0, 1.5 |
| Max. Sustained Transfer Rate OD (MB/s) | 250MB/s | 214MB/s | 214MB/s |
| Average Latency (ms) | 4.16 | 4.16 | 4.16 |
| Interface Ports | Single | Single | Single |
| Rotational Vibration @ 10-1500 Hz (rad/s ²) | 12.5 | 12.5 | 12.5 |
| Power Consumption | | | |
| Startup Current, Typical (12V, A) | 2.0 | 2.0 | 2.0 |
| Idle Power, Average (W) | 5.0 | 5.0 | 4.4 |
| Average Operating Power (W) | 7.8W | 7.8W | 7.4W |
| Standby Mode (W) | 0.8 | 0.8 | 0.8 |
| Sleep Mode (W) | 0.8 | 0.8 | 0.8 |
| Power Supply Requirements | +12 V and +5 V | +12 V and +5 V | +12 V and +5 V |
| Environmental/Temperature | | | |
| Operating (ambient, min °C) | 5 | 5 | 5 |
| Operating (drive case, max °C) | 60 | 60 | 60 |
| Nonoperating (ambient, min °C) | -40 | -40 | -40 |
| Nonoperating (ambient, max °C) | 70 | 70 | 70 |
| Environmental/Acoustics | | | |
| Vibration, Nonoperating: 10Hz to 500Hz (Grms) | 2.27 | 2.27 | 2.27 |
| Environmental/Shock | | | |
| Shock, Operating 2ms (Read/Write) (Gs) | 70/40Gs | 70/40Gs | 70/40Gs |
| Shock, Nonoperating, 1ms and 2ms (Gs) | 250 | 250 | 250 |
| Physical | | | |
| Height (mm/in) | 26.11mm/1.028in | 26.11mm/1.028in | 26.11mm/1.028in |
| Width (mm/in, max) | 101.85mm/4.01in | 101.85mm/4.01in | 101.85mm/4.01in |
| Depth (mm/in, max) | 146.99mm/5.787in | 146.99mm/5.787in | 146.99mm/5.787in |
| Weight (g/lb) | 705g/1.55lb | 705g/1.55lb | 650g/1.433lb |
| Carton Unit Quantity | 20 | 20 | 20 |
| Cartons per Pallet/Cartons per Layer | 40/8 | 40/8 | 40/8 |

¹ Seagate recommends validating your configuration with your HBA/RAID controller manufacturer to ensure full capacity capabilities.

² Supports Hot-Plug operation per Serial ATA Revision 2.6 specification.

³ 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.



| Specifications | 6TB | 4TB | 2TB |
|---|------------------|------------------|------------------|
| Standard Model Number ¹ | ST6000NE0023 | ST4000NE0025 | ST2000NE0025 |
| Interface | SATA 6Gb/s | SATA 6Gb/s | SATA 6Gb/s |
| Features | | | |
| Drive Bays Supported | Up to 24-bay | Up to 24-bay | Up to 24-bay |
| Multi-User Technology (TB/yr) | 300 | 300 | 300 |
| Rotational Vibration (RV) Sensors | Yes | Yes | Yes |
| Hot-Plug Support ² | Yes | Yes | Yes |
| Cache (MB) | 256 | 128 | 128 |
| Reliability/Data Integrity | | | |
| Mean Time Between Failures (MTBF, hours) | 1,200,000 | 1,200,000 | 1,200,000 |
| Reliability Rating @ Full 24x7 Operation (AFR) | 0.73% | 0.73% | 0.73% |
| Nonrecoverable Read Errors per Bits Read, Max | 1 per 10E15 | 1 per 10E15 | 1 per 10E15 |
| Power-On Hours per Year (24x7) | 8760 | 8760 | 8760 |
| Sector Size (Bytes per Logical Sector) | 512E | 512E | 512E |
| Rescue Services ³ | Yes | Yes | Yes |
| Limited Warranty (years) | 5 | 5 | 5 |
| Performance | | | |
| Spindle Speed (RPM) | 7200 | 7200 | 7200 |
| Interface Access Speed (Gb/s) | 6.0, 3.0, 1.5 | 6.0, 3.0, 1.5 | 6.0, 3.0, 1.5 |
| Max. Sustained Transfer Rate OD (MB/s) | 214MB/s | 214MB/s | 195MB/s |
| Average Latency (ms) | 4.16 | 4.16 | 4.16 |
| Interface Ports | Single | Single | Single |
| Rotational Vibration @ 10-1500 Hz (rad/s ²) | 12.5 | 12.5 | 12.5 |
| Power Consumption | | | |
| Startup Current, Typical (12V, A) | 2.0 | 2.0 | 2.0 |
| Idle Power, Average (W) | 7.5 | 5.45 | 4.61 |
| Average Operating Power (W) | 8.1W | 8.5W | 6.5W |
| Standby Mode (W) | 0.6 | 0.6 | 0.8 |
| Sleep Mode (W) | 0.6 | 0.6 | 0.8 |
| Power Supply Requirements | +12 V and +5 V | +12 V and +5 V | +12 V and +5 V |
| Environmental/Temperature | | | |
| Operating (ambient, min °C) | 5 | 5 | 5 |
| Operating (drive case, max °C) | 60 | 60 | 60 |
| Nonoperating (ambient, min °C) | -40 | -40 | -40 |
| Nonoperating (ambient, max °C) | 70 | 70 | 70 |
| Environmental/Acoustics | | | |
| Vibration, Nonoperating: 10Hz to 500Hz (Grms) | 3 | 3 | 3 |
| Environmental/Shock | | | |
| Shock, Operating 2ms (Read/Write) (Gs) | 70/40Gs | 70/40Gs | 70/40Gs |
| Shock, Nonoperating, 1ms and 2ms (Gs) | 250 | 300 | 300 |
| Physical | | | |
| Height (mm/in) | 26.11mm/1.028in | 26.11mm/1.028in | 26.11mm/1.028in |
| Width (mm/in, max) | 101.85mm/4.01in | 101.85mm/4.01in | 101.85mm/4.01in |
| Depth (mm/in, max) | 146.99mm/5.787in | 146.99mm/5.787in | 146.99mm/5.787in |
| Weight (g/lb) | 705g/1.55lb | 680g/1.50lb | 550g/1.21lb |
| Carton Unit Quantity | 20 | 20 | 20 |
| Cartons per Pallet/Cartons per Layer | 40/8 | 40/8 | 40/8 |

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