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

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.

- **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.

- **Seagate® Rescue Data Recovery.** 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 3-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.

- **Range of capacities up to 18TB.** 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 24×7 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.

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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.

4 Three-year coverage for product models shipped January 1, 2020, or later.
### Specifications

<table>
<thead>
<tr>
<th>Capacity</th>
<th>18TB</th>
<th>16TB</th>
<th>14TB</th>
<th>12TB</th>
<th>10TB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Model Number</td>
<td>ST18000NE000</td>
<td>ST16000NE000</td>
<td>ST14000NE0008</td>
<td>ST12000NE0008</td>
<td>ST10000NE0008</td>
</tr>
</tbody>
</table>

### Features

<table>
<thead>
<tr>
<th>Drive Bays Supported</th>
<th>Up to 24-bay</th>
<th>Up to 24-bay</th>
<th>Up to 24-bay</th>
<th>Up to 24-bay</th>
<th>Up to 24-bay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recording Technology</td>
<td>CMR</td>
<td>CMR</td>
<td>CMR</td>
<td>CMR</td>
<td>CMR</td>
</tr>
<tr>
<td>Workload Rate Limit (WRL)</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Rotational Vibration (RV) Sensors</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hot-Plug Support</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cache (MB)</td>
<td>256</td>
<td>256</td>
<td>256</td>
<td>256</td>
<td>256</td>
</tr>
</tbody>
</table>

### Reliability/Data Integrity

<table>
<thead>
<tr>
<th>Mean Time Between Failures (MTBF, hours)</th>
<th>1,200,000</th>
<th>1,200,000</th>
<th>1,200,000</th>
<th>1,200,000</th>
<th>1,200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonrecoverable Read Errors per Bits Read, Max</td>
<td>1 per 10E15</td>
<td>1 per 10E15</td>
<td>1 per 10E15</td>
<td>1 per 10E15</td>
<td>1 per 10E15</td>
</tr>
<tr>
<td>Power-On Hours (per year)</td>
<td>8760</td>
<td>8760</td>
<td>8760</td>
<td>8760</td>
<td>8760</td>
</tr>
<tr>
<td>Sector Size (Bytes per Logical Sector)</td>
<td>512E</td>
<td>512E</td>
<td>512E</td>
<td>512E</td>
<td>512E</td>
</tr>
</tbody>
</table>

### Performance

<table>
<thead>
<tr>
<th>Spindle Speed (RPM)</th>
<th>7200</th>
<th>7200</th>
<th>7200</th>
<th>7200</th>
<th>7200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface Access Speed (Gb/s)</td>
<td>6.0, 3.0, 1.5</td>
<td>6.0, 3.0, 1.5</td>
<td>6.0, 3.0, 1.5</td>
<td>6.0, 3.0, 1.5</td>
<td>6.0, 3.0, 1.5</td>
</tr>
<tr>
<td>Max. Sustained Transfer Rate OD (MB/s)</td>
<td>260MB/s</td>
<td>255MB/s</td>
<td>255MB/s</td>
<td>240MB/s</td>
<td>240MB/s</td>
</tr>
</tbody>
</table>

### Power Consumption

| Startup Current, Typical (12V, A) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Idle Power, Average (W) | 5.2 | 5.0 | 5.0 | 5.0 | 5.0 |
| Average Operating Power (W) | 8.0W | 7.6W | 7.6W | 7.8W | 7.8W |

### Environmental/Temperature

| Operating (ambient, min °C) | 5 | 5 | 5 | 5 | 5 |
| Operating (drive reported temperature °C) | 65 | 60 | 60 | 60 | 60 |
| Nonoperating (ambient, min °C) | -40 | -40 | -40 | -40 | -40 |
| Nonoperating (ambient, max °C) | 70 | 70 | 70 | 70 | 70 |

### Environmental/Acoustics

| Vibration, Nonoperating: 10Hz to 500Hz (Grms) | 2.27 | 2.27 | 2.27 | 2.27 | 2.27 |
| Acoustics, Idle (typical, measured in Idle 1 state) | 2.8bels | 2.8bels | 2.8bels | 2.8bels | 2.8bels |
| Acoustics, Seek (typical) | 3.2bels | 3.2bels | 3.2bels | 3.2bels | 3.2bels |

### Environmental/Shock

| Shock, Operating 2ms (Read/Write) (Gs) | 50/50Gs | 50/50Gs | 50/50Gs | 50/50Gs | 70/40Gs |
| Shock, Nonoperating, 1ms and 2ms (Gs) | 200 | 200 | 200 | 200 | 250 |

### Physical

| Height (mm/in) | 26.11mm/1.028in | 26.11mm/1.028in | 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 | 101.85mm/4.01in | 101.85mm/4.01in |
| Depth (mm/in, max) | 146.99mm/5.787in | 146.99mm/5.787in | 146.99mm/5.787in | 146.99mm/5.787in | 146.99mm/5.787in |
| Weight (g/lb, typical) | 670g/1.477lb | 670g/1.477lb | 670g/1.477lb | 670g/1.477lb | 690g/1.521lb |
| Carton Unit Quantity | 20 | 20 | 20 | 20 | 20 |
| Cartons per Pallet/Cartons per Layer | 40/8 | 40/8 | 40/8 | 40/8 | 40/8 |

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1 Seagate recommends validate your configuration with your HBA/RAID controller manufacturer to ensure full capacity capabilities.
2 Supports Hot-Plug operation per Serial ATA Revision 3.3 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.
4 Seagate does not recommend operating at sustained drive temperatures above 60°C. Operating at higher temperatures may affect drive health.
### Specifications

<table>
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<tr>
<th>Feature</th>
<th>8TB</th>
<th>6TB</th>
<th>4TB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity</strong></td>
<td>8TB</td>
<td>6TB</td>
<td>4TB</td>
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<tr>
<td><strong>Standard Model Number</strong></td>
<td>ST8000NE001</td>
<td>ST6000NE000</td>
<td>ST4000NE001</td>
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<tr>
<td><strong>Interface</strong></td>
<td>SATA 6Gb/s</td>
<td>SATA 6Gb/s</td>
<td>SATA 6Gb/s</td>
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<tr>
<td><strong>Features</strong></td>
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<td>Yes</td>
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<tr>
<td>Cache (MB)</td>
<td>256</td>
<td>256</td>
<td>128</td>
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<tr>
<td><strong>Reliability/Data Integrity</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Mean Time Between Failures (MTBF, hours)</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
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<tr>
<td>Reliability Rating @ Full 24×7 Operation (AFR)</td>
<td>0.73%</td>
<td>0.73%</td>
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<tr>
<td>Nonrecoverable Read Errors per Bits Read, Max</td>
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<td>512E</td>
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<tr>
<td>Rescue Services</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Limited Warranty (years)</td>
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<tr>
<td><strong>Performance</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Spindle Speed (RPM)</td>
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<td>6.0, 3.0, 1.5</td>
</tr>
<tr>
<td>Max. Sustained Transfer Rate OD (MB/s)</td>
<td>240MB/s</td>
<td>220MB/s</td>
<td>220MB/s</td>
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<tr>
<td>Average Latency (ms)</td>
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<tr>
<td>Rotational Vibration @ 10-1500 Hz (rad/s')</td>
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<td>12.5</td>
<td>12.5</td>
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<tr>
<td><strong>Power Consumption</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Startup Current, Typical (12V, A)</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
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<tr>
<td>Idle Power, Average (W)</td>
<td>7.06</td>
<td>7.06</td>
<td>5.5</td>
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<tr>
<td>Average Operating Power (W)</td>
<td>9.2W</td>
<td>8.1W</td>
<td>9.0W</td>
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<td>Standby Mode, Typical (W)</td>
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<td>1.0</td>
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<tr>
<td>Sleep Mode, Typical (W)</td>
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<td>1.0</td>
<td>1.0</td>
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<tr>
<td>Power Supply Requirements</td>
<td>+12 V and +5 V</td>
<td>+12 V and +5 V</td>
<td>+12 V and +5 V</td>
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<tr>
<td><strong>Environmental/Temperature</strong></td>
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</tr>
<tr>
<td>Operating (ambient, min °C)</td>
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<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Operating (drive reported temperature °C)</td>
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<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Nonoperating (ambient, min °C)</td>
<td>-40</td>
<td>-40</td>
<td>-40</td>
</tr>
<tr>
<td>Nonoperating (ambient, max °C)</td>
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<td>70</td>
<td>70</td>
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<tr>
<td><strong>Environmental/Acoustics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vibration, Nonoperating: 10Hz to 500Hz (Gms)</td>
<td>2.27</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Acoustics, Idle (typical, measured in Idle 1 state)</td>
<td>1.8bels</td>
<td>2.7bels</td>
<td>2.7bels</td>
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<td>2.7bels</td>
<td>2.8bels</td>
</tr>
<tr>
<td><strong>Environmental/Shock</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shock, Operating 2ms (Read/Write) (Gs)</td>
<td>70/40Gs</td>
<td>70/40Gs</td>
<td>70/40Gs</td>
</tr>
<tr>
<td>Shock, Nonoperating, 1ms and 2ms (Gs)</td>
<td>250</td>
<td>250</td>
<td>300</td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Height (mm/in)</td>
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<td>146.99mm/5.787in</td>
</tr>
<tr>
<td>Weight (g/lb, typical)</td>
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<td>705g/1.55lb</td>
<td>643g/1.42lb</td>
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<tr>
<td>Carton Unit Quantity</td>
<td>20</td>
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<td>20</td>
</tr>
<tr>
<td>Cartons per Pallet/Cartons per Layer</td>
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