



3.5 HDD DATA SHEET

Amazing Versatility.  
Unmatched Dependability.



Seagate brings over 20 years of trusted performance and reliability to the Seagate® BarraCuda® 3.5-inch HDD — now available in capacities up to 4 TB.



### Best-fit Applications

- Desktop or all-in-one PCs
- Home servers
- Entry-level direct-attached storage devices (DAS)

## Key Advantages

**Versatile** HDDs for all your PC needs bring you industry-leading excellence in personal computing.

**For over 20 years** the BarraCuda family has delivered super-reliable storage for the hard drive industry.

**Capacities up to 4 TB** for desktops, BarraCuda leads the market with the widest range of storage options available.

**Advanced Power** modes help save energy without sacrificing performance.<sup>1</sup>

**SATA 6 Gb/s** interface optimises burst performance.<sup>1</sup>

**Seagate Secure®** models provide Self-Encrypting Drive (SED) hardware-based data security and deliver an Instant Secure Erase feature for safe, fast and easy drive retirement. They meet NIST 800-88 media sanitization specifications and also support the Trusted Computer Group (TCG) Opal standard.<sup>2,3</sup>

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

<sup>2</sup> Seagate Secure models are not available in all countries. May require TCG-compliant host or controller support.

<sup>3</sup> Refer to specifications table for further information and feature options.



| Specifications                                 | 4 TB               | 3 TB               | 3 TB               | 2 TB               | 1 TB               |
|------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Standard Model Numbers                         | ST4000DM004        | ST3000DM007        | ST3000DM008        | ST2000DM006        | ST1000DM010        |
| Seagate Secure® Model Numbers                  | —                  | —                  | ST3000DM002        | ST2000DM002        | —                  |
| Bytes per Sector                               | 4,096              | 4,096              | 4,096              | 4,096              | 4,096              |
| Heads/Discs                                    | 4/2                | 3/2                | 6/3                | 6/3 or 4/2         | 2/1                |
| Performance                                    |                    |                    |                    |                    |                    |
| Interface                                      | SATA 6Gb/s         | SATA 6Gb/s         | SATA 6Gb/s         | SATA 6Gb/s         | SATA 6Gb/s         |
| SATA Transfer Rates Supported (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 Transfer Rate OD (MB/s)         | 190MB/s            | 185MB/s            | 210MB/s            | 210MB/s            | 210MB/s            |
| Cache, Multi-segmented (MB)                    | 256                | 256                | 64                 | 64                 | 64                 |
| Reliability/Data Integrity                     |                    |                    |                    |                    |                    |
| Load/Unload Cycles                             | 300,000            | 300,000            | 300,000            | 300,000            | —                  |
| Non-recoverable Read Errors per Bits Read, Max | 1 per 10E14        | 1 per 10E14        | 1 per 10E14        | 1 per 10E14        | 1 per 10E14        |
| Power-On Hours per Year (24×7)                 | 2,400              | 2,400              | 2,400              | 2,400              | 2,400              |
| Workload Rate Limit (TB/Year)                  | 55                 | 55                 | 55                 | 55                 | 55                 |
| Limited Warranty (years)                       | 2                  | 2                  | 2                  | 2                  | 2                  |
| Power Management                               |                    |                    |                    |                    |                    |
| Startup Power (A)                              | 2                  | 2                  | 2.5                | 2.5                | 2                  |
| Operating Mode, Typical (W)                    | 3.7                | 3.7                | 8                  | 8                  | 5.3                |
| Idling Average (W)                             | 2.5 W              | 2.5 W              | 5.4 W              | 5.4 W              | 4.6 W              |
| Standby Mode/Sleep Mode, Typical (W)           | 0.25/0.25          | 0.25/0.25          | 0.75/0.75          | 0.75/0.75          | 0.94/0.94          |
| Voltage Tolerance, Inc. Noise (5 V)            | ±5%                | ±5%                | ±5%                | ±5%                | ±5%                |
| Voltage Tolerance, Inc. Noise (12 V)           | ±10%               | ±10%               | ±10%               | ±10%               | ±10%               |
| Environmental/Temperature                      |                    |                    |                    |                    |                    |
| Operating (ambient, min)                       | 0°C                | 0°C                | 0°C                | 0°C                | 0°C                |
| Operating (drive case, max)                    | 60°C               | 60°C               | 60°C               | 60°C               | 60°C               |
| Non-operating (ambient)                        | -40°C – 70°C       | -40°C – 70°C       | -40°C – 70°C       | -40°C – 70°C       | -40°C – 70°C       |
| Halogen-free                                   | Yes                | Yes                | Yes                | Yes                | Yes                |
| RoHS compliance                                | Yes                | Yes                | Yes                | Yes                | Yes                |
| Physical                                       |                    |                    |                    |                    |                    |
| Height (mm/in, max)                            | 20.2 mm/0.795 in   | 20.2 mm/0.795 in   | 26.11 mm/1.028 in  | 26.11 mm/1.028 in  | 19.99 mm/0.787 in  |
| Width (mm/in, max)                             | 101.85 mm/4.01 in  | 101.85 mm/4.01 in  | 101.85 mm/4.01 in  | 101.85 mm/4.01 in  | 101.85 mm/4.01 in  |
| Depth (mm/in, max)                             | 146.99 mm/5.787 in | 146.99 mm/5.787 in | 146.99 mm/5.787 in | 146.99 mm/5.787 in | 146.99 mm/5.787 in |
| Weight (lb/g)                                  | 490 g/1.08 lb      | 490 g/1.08 lb      | 626 g/1.38 lb      | 626 g/1.38 lb      | 400 g/0.88 lb      |
| Carton Unit Quantity                           | 25                 | 25                 | 20                 | 20                 | 25                 |
| Cartons per Pallet / Cartons per Layer         | 40/8               | 40/8               | 40/8               | 40/8               | 40/8               |



| Specifications                                 | 500 GB             |
|------------------------------------------------|--------------------|
| Standard Model Numbers                         | ST500DM009         |
| Seagate Secure® Model Numbers                  | —                  |
| Bytes per Sector                               | 4,096              |
| Heads/Discs                                    | 2/1                |
| Performance                                    |                    |
| Interface                                      | SATA 6Gb/s         |
| SATA Transfer Rates Supported (Gb/s)           | 6.0/3.0/1.5        |
| Max. Sustained Transfer Rate OD (MB/s)         | 210MB/s            |
| Cache, Multi-segmented (MB)                    | 32                 |
| Reliability/Data Integrity                     |                    |
| Load/Unload Cycles                             | —                  |
| Non-recoverable Read Errors per Bits Read, Max | 1 per 10E14        |
| Power-On Hours per Year (24×7)                 | 2,400              |
| Workload Rate Limit (TB/Year)                  | 55                 |
| Limited Warranty (years)                       | 2                  |
| Power Management                               |                    |
| Startup Power (A)                              | 2                  |
| Operating Mode, Typical (W)                    | 5.3                |
| Idling Average (W)                             | 4.6 W              |
| Standby Mode/Sleep Mode, Typical (W)           | 0.94/0.94          |
| Voltage Tolerance, Inc. Noise (5 V)            | ±5%                |
| Voltage Tolerance, Inc. Noise (12 V)           | ±10%               |
| Environmental/Temperature                      |                    |
| Operating (ambient, min)                       | 0°C                |
| Operating (drive case, max)                    | 60°C               |
| Non-operating (ambient)                        | -40°C – 70°C       |
| Halogen-free                                   | Yes                |
| RoHS compliance                                | Yes                |
| Physical                                       |                    |
| Height (mm/in, max)                            | 19.99 mm/0.787 in  |
| Width (mm/in, max)                             | 101.85 mm/4.01 in  |
| Depth (mm/in, max)                             | 146.99 mm/5.787 in |
| Weight (lb/g)                                  | 400 g/0.88 lb      |
| Carton Unit Quantity                           | 25                 |
| Cartons per Pallet / Cartons per Layer         | 40/8               |

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

© 2017 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. BarraCuda and Seagate Secure are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes; and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors. The export or re-export of Seagate hardware or software is regulated by the U.S. Department of Commerce, Bureau of Industry and Security (for more information, visit [www.bis.doc.gov](http://www.bis.doc.gov)), and may be controlled for export, import and use in other countries. Seagate reserves the right to change, without notice, product offerings or specifications. DS1900.10-1710GB October 2017