



# BARRACUDA

COMPUTE



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 HDDs—now available in capacities up to 4TB.<sup>1</sup>



### Best-Fit Applications

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

## Key Advantages

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

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

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

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**Advanced Power** modes help save energy without sacrificing performance.<sup>2</sup>

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**SATA 6Gb/s** interface optimizes burst performance.<sup>2</sup>

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**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 specification and also support the Trusted Computer Group (TCG) Opal standard.<sup>3, 4</sup>

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<sup>1</sup> 1TB and 4TB capacities coming Fall 2016. For immediate needs, please see Seagate Desktop HDD.

<sup>2</sup> Performance may vary depending on user's hardware configuration and operating system.

<sup>3</sup> Seagate Secure models are not available in all countries. May require TCG-compliant host or controller support.

<sup>4</sup> Refer to specifications table for further information and feature options.



Specifications	4TB <sup>1</sup>	3TB <sup>1</sup>	2TB <sup>1</sup>	1TB <sup>1</sup>	500GB <sup>1</sup>
Standard Model Numbers	ST4000DM005 <sup>2</sup>	ST3000DM008	ST2000DM006	ST1000DM010 <sup>2</sup>	ST500DM009 <sup>3</sup>
Seagate Secure Model Numbers	—	ST3000DM009	ST2000DM007	—	—
Interface Options (with NCQ)	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
<b>Features and Performance</b>					
Seagate AcuTrac™ Technology	Yes	Yes	Yes	No	No
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
Average Data Rate, Read/Write	146	156	156	156	156
Max Sustained Data Rate, OD Read (MB/s)	180	210	210	210	210
Cache, Multisegmented (MB)	64	64	64	64	32
<b>Configuration/Organization</b>					
Heads/Disks	6/3	6/3	6/3 or 4/2	2/1	2/1
Bytes per Sector	4096	4096	4096	4096	4096
<b>Reliability/Data Integrity</b>					
Contact Start/Stop Cycles	—	—	—	50,000	50,000
Load/Unload Cycles	300,000	300,000	300,000	—	—
Nonrecoverable 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)	2400	2400	2400	2400	2400
Workload Rate Limit (TB/year)	55	55	55	55	55
Warranty, Limited (years) <sup>4</sup>	2	2	2	2	2
<b>Power Management</b>					
Startup Power (A)	2.0	2.5	2.5	2.0	2.0
Operating Mode, Typical (W)	5.6	8.0	8.0	5.3	5.3
Idle Average (W) <sup>5</sup>	4.0	5.4	5.4	4.6	4.6
Standby Mode/Sleep Mode, Typical (W)	0.50/0.50	0.75/0.75	0.75/0.75	0.94/0.94	0.94/0.94
Voltage Tolerance, Including Noise (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12V)	±10%	±10%	±10%	±10%	±10%
<b>Environmental</b>					
Temperature (°C)					
Operating (ambient, min)	0	0	0	0	0
Operating (drive case, max)	60	60	60	60	60
Nonoperating (ambient)	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Halogen Free	Yes	Yes	Yes	Yes	Yes
RoHS Compliance	Yes	Yes	Yes	Yes	Yes
<b>Physical</b>					
Height (mm/in, max)	26.11/1.028	26.11/1.028	26.11/1.028	20.17/0.794	20.17/0.794
Width (mm/in, max)	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0
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)	610/1.345	626/1.38	626/1.38	400/0.88	400/0.88
Carton Unit Quantity	20	20	20	25	25
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

<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> Coming Fall 2016. For immediate needs, please see Seagate Desktop HDD.

<sup>3</sup> Seagate ships this drive in both 4K- and 512-byte sectors. SmartAlign technology is included on 4K sector drives. Both drives are functionally and physically equivalent.

<sup>4</sup> Extended warranty products available. Consult your distributor for details.

<sup>5</sup> Idle information may be based on Idle 1 or Idle 2 specifications. Consult the product manual for more information.

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Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, 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