



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 4 TB.¹



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.²

SATA 6 Gb/s interface optimises burst performance.²

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.^{3, 4}

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

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

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

⁴ Refer to specifications table for further information and feature options.



Specifications	4 TB ¹	3 TB ¹	2 TB ¹	1 TB ¹	500 GB ¹
Standard Model Numbers	ST4000DM005 ²	ST3000DM008	ST2000DM006	ST1000DM010 ²	ST500DM009 ³
Seagate Secure Model Numbers	—	ST3000DM009	ST2000DM007	—	—
Interface Options (with NCQ)	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Features and Performance					
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, Multi-segmented (MB)	64	64	64	64	32
Configuration/Organisation					
Heads/Discs	6/3	6/3	6/3 or 4/2	2/1	2/1
Bytes per Sector	4,096	4,096	4,096	4,096	4,096
Reliability/Data Integrity					
Contact Start/Stop Cycles	—	—	—	50,000	50,000
Load/Unload Cycles	300,000	300,000	300,000	—	—
Non-recoverable Read Errors per Bits Read, Max	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴
Power-On Hours (per year)	2,400	2,400	2,400	2,400	2,400
Workload Rate Limit (TB/year)	55	55	55	55	55
Warranty, Limited (years) ⁴	2	2	2	2	2
Power Management					
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) ⁵	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 (5 V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12 V)	±10%	±10%	±10%	±10%	±10%
Environmental					
Temperature (°C)					
Operating (ambient, min)	0	0	0	0	0
Operating (drive case, max)	60	60	60	60	60
Non-operating (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
Physical					
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

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

² Coming Fall 2016. For immediate needs, please see Seagate Desktop HDD.

³ 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.

⁴ Extended warranty products available. Consult your distributor for details.

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

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