

# Desktop HDD

## Data Sheet

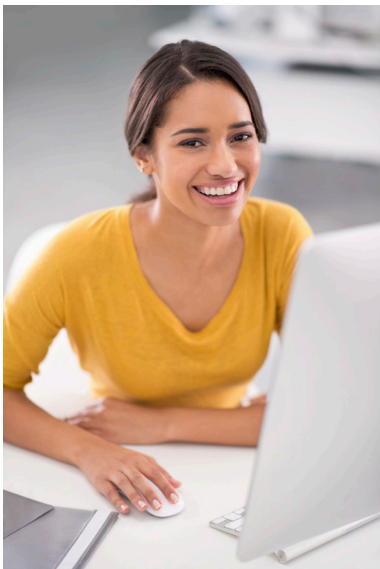
### The Power of One

- Seagate brings over 30 years of trusted performance and reliability to the new Seagate® Desktop HDDs—now available in capacities up to 6TB.
- Increase your capacity and drive down costs with up to 1TB-per-disk hard drive technology.
- SATA 6Gb/s interface optimizes burst performance
- Seagate AcuTrac™ servo technology delivers dependable performance.
- Free DiscWizard™ software enables high capacities on legacy PC BIOS systems.
- Seagate Secure™ models provide hardware-based data security and deliver an Instant Secure Erase feature for safe, fast and easy drive retirement.<sup>1</sup>
- Seagate Secure models meet the NIST 800-88 media sanitization specification and also support the Trusted Computer Group (TCG) Opal standard.<sup>1</sup>

### Best-Fit Applications

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

<sup>1</sup> Seagate Secure models are not available in all countries. May require TCG-compliant host or controller support.





# Desktop HDD



Specifications	6TB <sup>1</sup>	5TB <sup>1</sup>	4TB <sup>1</sup>	3TB <sup>1</sup>	2TB <sup>1</sup>	1TB <sup>1</sup>	500GB <sup>1</sup>	320GB <sup>1</sup>	250GB <sup>1</sup>
Standard Model Numbers	ST6000DM001	ST5000DM002	ST4000DM000	ST3000DM001	ST2000DM001	ST1000DM003	ST500DM002 <sup>2</sup>	ST320DM000 <sup>2</sup>	ST250DM000 <sup>2</sup>
Seagate Secure™ Model Numbers	—	—	—	ST3000DM002	ST2000DM002	ST1000DM004	—	—	—
Model Name	Desktop HDD	Desktop HDD	Desktop HDD	formerly Barracuda®	formerly Barracuda	formerly Barracuda	formerly Barracuda	formerly Barracuda	formerly Barracuda
Interface Options (with NCQ)	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
<b>Performance</b>									
Cache, Multisegmented (MB)	128	128	64	64	64	64	16	16	16
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	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	180	180	146	156	156	156	125	125	125
Max Sustained Data Rate, OD Read (MB/s)	220	220	180	210	210	210	144	144	144
<b>Configuration/Organization</b>									
Heads/Disks	6/12	6/12	8/4	6/3	4/2	2/1	2/1	2/1	1/1
Bytes per Sector	512E	512E	512E	512E	512E	512E	512E or 512	512E or 512	512E or 512
<b>Voltage</b>									
Voltage Tolerance, Inc. Noise (5V)	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Inc. Noise (12V)	±10%	±10%	±10%	±10%	±10%	±10%	±10%	±10%	±10%
<b>Reliability/Data Integrity</b>									
Contact Start/Stop Cycles	—	—	—	—	—	50,000	50,000	50,000	50,000
Load/Unload Cycles	300,000	300,000	300,000	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	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Workload Rate Limit (TB/year)	55	55	55	55	55	55	55	55	55
Power-On Hours	2400	2400	2400	2400	2400	2400	2400	2400	2400
Limited Warranty (years) <sup>3</sup>	2	2	2	2	2	2	2	2	2
<b>Power Management</b>									
Startup Power (A)	2.0	2.0	2.0	2.5	2.5	2.0	2.0	2.0	2.0
Operating Mode, Typical (W)	9.0	9.0	5.6	8.0	8.0	5.3	5.3	6.19	6.19
Idle Average (W) <sup>4</sup>	7.2	7.2	4.0	5.4	5.4	4.6	4.6	4.60	4.60
Standby Mode (W)	0.6	0.6	0.50	0.75	0.75	0.94	0.94	0.79	0.79
Sleep Mode (W)	0.6	0.6	0.50	0.75	0.75	0.94	0.94	0.79	0.79
<b>Environmental</b>									
<b>Temperature</b>									
Operating (ambient min °C)	0	0	0	0	0	0	0	0	0
Operating (drive case max °C)	60	60	60	60	60	60	60	60	60
Nonoperating (ambient °C)	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Halogen Free	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RoHS Compliance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Physical</b>									
Height (mm/in)	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	20.2/0.784	20.2/0.784	20.2/0.784	20.2/0.784
Width (mm/in)	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0
Depth (mm/in)	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787
Weight (g/lb)	780/1.720	780/1.720	610/1.345	626/1.38	626/1.38	400/0.88	415/0.92	415/0.92	415/0.92
Carton Unit Quantity	20	20	20	20	20	25	25	25	25
Cartons per Pallet	40	40	40	40	40	40	40	40	40
Cartons per Layer	8	8	8	8	8	8	8	8	8
<b>Special Features</b>									
Seagate AcuTrac™ Technology	Yes	Yes	Yes	Yes	Yes	No	No	No	No

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

2 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.

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

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



seagate.com

AMERICAS  
ASIA/PACIFIC  
EUROPE, MIDDLE EAST AND AFRICA

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