



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 8TB.



### 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 8TB** 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 6Gb/s** interface optimizes 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	8TB	6TB	4TB	3TB	2TB
Standard Model Numbers	ST8000DM004	ST6000DM003	ST4000DM004	ST3000DM008	ST2000DM008
Seagate Secure <sup>®</sup> Model Numbers	—	—	—	ST3000DM002	—
Bytes per Sector	4096	4096	4096	4096	4096
Heads/Disks	8/4	6/3	4/2	6/3	2/1
<b>Performance</b>					
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	190MB/s	190MB/s	210MB/s	220MB/s
Cache, Multisegmented (MB)	256	256	256	64	256
<b>Reliability/Data Integrity</b>					
Load/Unload Cycles	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
Power-On Hours per Year (24x7)	2400	2400	2400	2400	2400
Workload Rate Limit (TB/Year)	55	55	55	55	55
Limited Warranty (years)	2	2	2	2	2
<b>Power Management</b>					
Startup Power (A)	2.0	2.0	2.0	2.5	2.0
Operating Mode, Typical (W)	5.3	5.3	3.7	8	4.3
Idle Average (W)	3.4W	3.4W	2.5W	5.40W	3.0W
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.25/0.25	0.25/0.25	0.75/0.75	0.3/0.3
Voltage Tolerance, Inc. Noise (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Inc. Noise (12V)	±10%	±10%	±10%	±10%	±10%
<b>Environmental/Temperature</b>					
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
Nonoperating (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
<b>Physical</b>					
Height (mm/in, max)	26.11mm/1.028in	26.11mm/1.028in	20.20mm/0.795in	26.11mm/1.028in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
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)	630g/1.389lb	610g/1.345lb	490g/1.08lb	626g/1.38lb	415g/0.915lb
Carton Unit Quantity	20	20	25	20	25
Cartons per Pallet/Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8	40 / 8



Specifications	2TB	1TB	500GB
Standard Model Numbers	ST2000DM006	ST1000DM010	ST500DM009
Seagate Secure <sup>®</sup> Model Numbers	ST2000DM002	—	—
Bytes per Sector	4096	4096	4096
Heads/Disks	6/3 or 4/2	2/1	2/1
<b>Performance</b>			
Interface	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
Max. Sustained Transfer Rate OD (MB/s)	210MB/s	210MB/s	210MB/s
Cache, Multisegmented (MB)	64	64	32
<b>Reliability/Data Integrity</b>			
Load/Unload Cycles	300,000	—	—
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours per Year (24x7)	2400	2400	2400
Workload Rate Limit (TB/Year)	55	55	55
Limited Warranty (years)	2	2	2
<b>Power Management</b>			
Startup Power (A)	2.5	2.0	2.0
Operating Mode, Typical (W)	8	5.3	5.3
Idle Average (W)	5.40W	4.60W	4.60W
Standby Mode/Sleep Mode, Typical (W)	0.75/0.75	0.94/0.94	0.94/0.94
Voltage Tolerance, Inc. Noise (5V)	±5%	±5%	±5%
Voltage Tolerance, Inc. Noise (12V)	±10%	±10%	±10%
<b>Environmental/Temperature</b>			
Operating (ambient, min)	0°C	0°C	0°C
Operating (drive case, max)	60°C	60°C	60°C
Nonoperating (ambient)	-40°C – 70°C	-40°C – 70°C	-40°C – 70°C
Halogen Free	Yes	Yes	Yes
RoHS Compliance	Yes	Yes	Yes
<b>Physical</b>			
Height (mm/in, max)	26.11mm/1.028in	19.99mm/0.787in	19.99mm/0.787in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.010in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb)	626g/1.38lb	400g/0.88lb	400g/0.88lb
Carton Unit Quantity	20	25	25
Cartons per Pallet/Cartons per Layer	40 / 8	40 / 8	40 / 8

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