

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

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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 8TB** 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>1</sup>

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

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



Specifications	8 TB	6 TB	4 TB	3 TB	2TB
Standard Model Number	ST8000DM004	ST6000DM003	ST4000DM004	ST3000DM007	ST2000DM005
Bytes per Sector	4,096	4,096	4,096	4,096	4096
<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 Data Rate, OD Read (MB/s)	190MB/s	185MB/s	190MB/s	185MB/s	190MB/s
Cache, Multi-segmented (MB)	256	256	256	256	256
Rotational Speed (RPM)	5,400	5,400	5,400	5,400	5,400
Recording Technology	SMR	SMR	SMR	SMR	SMR
<b>Reliability/Data Integrity</b>					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
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)	2,400	2,400	2,400	2,400	2,400
Workload Rate Limit (TB/Year)	55	55	55	55	55
Warranty, Limited (years)	2	2	2	2	2
<b>Power Management</b>					
Startup Power (A)	2	2	2	2	2
Operating Mode, Typical (W)	5.3	5.3	3.7	3.7	3.7
Idling Average (W)	3.4 W	3.4 W	2.5 W	2.5 W	2.5 W
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.25/0.25	0.25/0.25	0.25/0.25	0.25/0.25
Voltage Tolerance, Inc. Noise (5 V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Inc. Noise (12 V)	±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
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
<b>Physical</b>					
Height (mm/in, max)	26.11 mm/1.028 in	26.11 mm/1.028 in	20.2 mm/0.795 in	20.2 mm/0.795 in	20.2 mm/0.795 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 (g/lb, typical)	630 g/1.389 lb	610 g/1.345 lb	490 g/1.08 lb	490 g/1.08 lb	490 g/1.08 lb
Carton Unit Quantity	20	20	25	25	25
Cartons per Pallet / Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8	40 / 8



Specifications	2 TB	1 TB	500 GB
Standard Model Number	ST2000DM008	ST1000DM010	ST500DM009
Bytes per Sector	4,096	4,096	4,096
<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 Data Rate, OD Read (MB/s)	220MB/s	210MB/s	210MB/s
Cache, Multi-segmented (MB)	256	64	32
Rotational Speed (RPM)	7,200	7,200	7,200
Recording Technology	SMR	CMR	CMR
<b>Reliability/Data Integrity</b>			
Load/Unload Cycles	600,000	50,000	50,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours (per year)	2,400	2,400	2,400
Workload Rate Limit (TB/Year)	55	55	55
Warranty, Limited (years)	2	2	2
<b>Power Management</b>			
Startup Power (A)	2	2	2
Operating Mode, Typical (W)	5.1	5.3	5.3
Idling Average (W)	3.9 W	4.6 W	4.6 W
Standby Mode/Sleep Mode, Typical (W)	0.3/0.3	0.94/0.94	0.94/0.94
Voltage Tolerance, Inc. Noise (5 V)	±5%	±5%	±5%
Voltage Tolerance, Inc. Noise (12 V)	±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
Non-operating (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)	20.2 mm/0.795 in	19.99 mm/0.787 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
Depth (mm/in, max)	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in
Weight (g/lb, typical)	490 g/1.08 lb	400 g/0.88 lb	400 g/0.88 lb
Carton Unit Quantity	25	25	25
Cartons per Pallet / Cartons per Layer	40/8	40 / 8	40/8

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