



3.5 HDD DATA SHEET

Amazing Versatility. Unmatched Dependability.

Seagate brings over 20 years of trusted performance and reliability to the Seagate $^{\rm B}$ BarraCuda $^{\rm B}$ 3.5-inch HDD — now available in capacities up to 8 TB.





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 8 TB for desktops, BarraCuda leads the market with the widest range of storage options available.

Advanced Power modes help save energy without sacrificing performance.1

SATA 6 Gb/s interface optimises burst performance.1

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.^{2,3}

¹ Performance may vary depending on user's hardware configuration and operating system.

 $^{2\,}Seagate\,Secure\,models\,are\,not\,available\,in\,all\,\,countries.\,May\,\,require\,TCG-compliant\,host\,or\,\,controller\,\,support.$

³ Refer to specifications table for further information and feature options.





Specifications	8 TB	6 TB	4 TB	3 TB	3 TB			
Standard Model Numbers	ST8000DM004	ST6000DM003	ST4000DM004	ST3000DM007	ST3000DM008			
Seagate Secure® Model Numbers	_	_	_	_	ST3000DM002			
Bytes per Sector	4,096	4,096	4,096	4,096	4,096			
Heads/Discs	8/4	6/3	4/2	3/2	6/3			
Performance								
Interface	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	185MB/s	190MB/s	185MB/s	210MB/s			
Cache, Multi-segmented (MB)	256	256	256	256	64			
Reliability/Data Integrity								
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000			
Non-recoverable Read Errors per Bits Read, Max	1 per 10E14							
Power-On Hours per Year (24×7)	2,400	2,400	2,400	2,400	2,400			
Workload Rate Limit (TB/Year)	55	55	55	55	55			
Limited Warranty (years)	2	2	2	2	2			
Power Management								
Startup Power (A)	2	2	2	2	2.5			
Operating Mode, Typical (W)	5.3	5.3	3.7	3.7	8			
Idling Average (W)	3.4 W	3.4 W	2.5 W	2.5 W	5.4 W			
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.25/0.25	0.25/0.25	0.25/0.25	0.75/0.75			
Voltage Tolerance, Inc. Noise (5 V)	±5%	±5%	±5%	±5%	±5%			
Voltage Tolerance, Inc. Noise (12 V)	±10%	±10%	±10%	±10%	±10%			
Environmental/Temperature								
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							
Halogen-free	Yes	Yes	Yes	Yes	Yes			
RoHS compliance	Yes	Yes	Yes	Yes	Yes			
Physical								
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	26.11 mm/1.028 in			
Width (mm/in, max)	101.85 mm/4.01 in							
Depth (mm/in, max)	146.99 mm/5.787 in							
Weight (lb/g)	630 g/1.389 lb	610 g/1.345 lb	490 g/1.08 lb	490 g/1.08 lb	626 g/1.38 lb			
Carton Unit Quantity	20	20	25	25	20			
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8	40/8			





Specifications	2 TB	2 TB	1 TB	500 GB				
Standard Model Numbers	ST2000DM008	ST2000DM006	ST1000DM010	ST500DM009				
Seagate Secure® Model Numbers	_	ST2000DM002	_	_				
Bytes per Sector	4,096	4,096	4,096	4,096				
Heads/Discs	2/1	6/3 or 4/2	2/1	2/1				
Performance								
Interface	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				
Max. Sustained Transfer Rate OD (MB/s)	220MB/s	210MB/s	210MB/s	210MB/s				
Cache, Multi-segmented (MB)	256	64	64	32				
Reliability/Data Integrity								
Load/Unload Cycles	300,000	300,000	_	_				
Non-recoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14				
Power-On Hours per Year (24×7)	2,400	2,400	2,400	2,400				
Workload Rate Limit (TB/Year)	55	55	55	55				
Limited Warranty (years)	2	2	2	2				
Power Management								
Startup Power (A)	2	2.5	2	2				
Operating Mode, Typical (W)	4.3	8	5.3	5.3				
Idling Average (W)	3 W	5.4 W	4.6 W	4.6 W				
Standby Mode/Sleep Mode, Typical (W)	0.3/0.3	0.75/0.75	0.94/0.94	0.94/0.94				
Voltage Tolerance, Inc. Noise (5 V)	±5%	±5%	±5%	±5%				
Voltage Tolerance, Inc. Noise (12 V)	±10%	±10%	±10%	±10%				
Environmental/Temperature								
Operating (ambient, min)	0°C	0°C	0°C	0°C				
Operating (drive case, max)	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				
Halogen-free	Yes	Yes	Yes	Yes				
RoHS compliance	Yes	Yes	Yes	Yes				
Physical								
Height (mm/in, max)	20.2 mm/0.795 in	26.11 mm/1.028 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	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				
Weight (lb/g)	415 g/0.915 lb	626 g/1.38 lb	400 g/0.88 lb	400 g/0.88 lb				
Carton Unit Quantity	25	20	25	25				
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8				

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AMERICAS Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, 408-658-1000
ASIA/PACIFIC Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888
EUROPE, MIDDLE EAST AND AFRICA Seagate Technology SAS 16-18, rue du Dôme, 92100 Boulogne-Billancourt, France, 33 1-4186 10 00

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