

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 4TB.



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 4TB 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 6Gb/s interface optimizes 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	4TB	3TB	2TB	2TB	1TB
Standard Model Numbers	ST4000DM004	ST3000DM008	ST2000DM006	ST2000DM008	ST1000DM010
Seagate Secure [®] Model Numbers	—	ST3000DM002	ST2000DM002	—	—
Bytes per Sector	4096	4096	4096	4096	4096
Heads/Disks	4/2	6/3	6/3 or 4/2	2/1	2/1
Performance					
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	210MB/s	210MB/s	220MB/s	210MB/s
Cache, Multisegmented (MB)	256	64	64	256	64
Reliability/Data Integrity					
Load/Unload Cycles	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
Power Management					
Startup Power (A)	2.0	2.5	2.5	2.0	2.0
Operating Mode, Typical (W)	3.7	8	8	4.3	5.3
Idle Average (W)	2.5W	5.40W	5.40W	3.0W	4.60W
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.75/0.75	0.75/0.75	0.3/0.3	0.94/0.94
Voltage Tolerance, Inc. Noise (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Inc. Noise (12V)	±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
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
Physical					
Height (mm/in, max)	20.17mm/0.794in	26.11mm/1.028in	26.11mm/1.028in	20.17mm/0.794in	19.99mm/0.787in
Width (mm/in, max)	101.6mm/4.0in	101.6mm/4.0in	101.6mm/4.0in	101.6mm/4.0in	101.6mm/4.0in
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)	490g/1.08lb	626g/1.38lb	626g/1.38lb	415g/0.915lb	400g/0.88lb
Carton Unit Quantity	25	20	20	25	25
Cartons per Pallet/Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8	40 / 8



Specifications	500GB
Standard Model Numbers	ST500DM009
Seagate Secure [®] Model Numbers	—
Bytes per Sector	4096
Heads/Disks	2/1
Performance	
Interface	SATA 6Gb/s
SATA Transfer Rates Supported (Gb/s)	6.0/3.0/1.5
Max. Sustained Transfer Rate OD (MB/s)	210MB/s
Cache, Multisegmented (MB)	32
Reliability/Data Integrity	
Load/Unload Cycles	—
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14
Power-On Hours per Year (24x7)	2400
Workload Rate Limit (TB/Year)	55
Limited Warranty (years)	2
Power Management	
Startup Power (A)	2.0
Operating Mode, Typical (W)	5.3
Idle Average (W)	4.60W
Standby Mode/Sleep Mode, Typical (W)	0.94/0.94
Voltage Tolerance, Inc. Noise (5V)	±5%
Voltage Tolerance, Inc. Noise (12V)	±10%
Environmental/Temperature	
Operating (ambient, min)	0°C
Operating (drive case, max)	60°C
Nonoperating (ambient)	-40°C – 70°C
Halogen Free	Yes
RoHS Compliance	Yes
Physical	
Height (mm/in, max)	19.99mm/0.787in
Width (mm/in, max)	101.6mm/4.0in
Depth (mm/in, max)	146.99mm/5.787in
Weight (g/lb)	400g/0.88lb
Carton Unit Quantity	25
Cartons per Pallet/Cartons per Layer	40 / 8

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