



BARRACUDA

COMPUTE



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 HDDs—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 specification 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 ¹	3TB ¹	2TB ¹	1TB ¹	500GB ¹
Standard Model Numbers	ST4000DM004	ST3000DM008	ST2000DM006	ST1000DM010	ST500DM009
Seagate Secure Model Numbers	—	ST3000DM009	ST2000DM007	—	—
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 Data Rate, OD Read (MB/s)	190	210	210	210	210
Cache, Multisegmented (MB)	256	64	64	64	32
Reliability/Data Integrity					
Load/Unload Cycles	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)	2400	2400	2400	2400	2400
Workload Rate Limit (TB/year)	55	55	55	55	55
Warranty, Limited (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)	5.0	8.0	8.0	5.3	5.3
Idle Average (W)	2.5	5.4	5.4	4.6	4.6
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.75/0.75	0.75/0.75	0.94/0.94	0.94/0.94
Voltage Tolerance, Including Noise (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12V)	±10%	±10%	±10%	±10%	±10%
Environmental					
Temperature (°C)					
Operating (ambient, min)	0	0	0	0	0
Operating (drive case, max)	60	60	60	60	60
Nonoperating (ambient)	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Halogen Free	Yes	Yes	Yes	Yes	Yes
RoHS Compliance	Yes	Yes	Yes	Yes	Yes
Physical					
Height (mm/in, max)	20.17/0.794	26.11/1.028	26.11/1.028	19.99/0.787	19.99/0.787
Width (mm/in, max)	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0
Depth (mm/in, max)	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787
Weight (g/lb, typical)	490/1.08	626/1.38	626/1.38	400/0.88	400/0.88
Carton Unit Quantity	25	20	20	25	25
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

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