



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.¹

SATA 6Gb/s interface optimizes burst performance.1

 ${\small 1\ Performance\ may\ vary\ depending\ on\ user's\ hardware\ configuration\ and\ operating\ system}.$





Specifications	8TB	6TB	4TB	3ТВ	2TB	
Standard Model Number	ST8000DM004	ST6000DM003	ST4000DM004	ST3000DM007	ST2000DM005	
Bytes per Sector	4096	4096	4096	4096	4096	
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)	190MB/s	185MB/s	190MB/s	185MB/s	190MB/s	
Cache, Multisegmented (MB)	256	256	256	256	256	
Rotational Speed (RPM)	5400	5400	5400	5400	5400	
Recording Technology	SMR	SMR	SMR	SMR	SMR	
Reliability/Data Integrity	eliability/Data Integrity					
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000	
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	2.0	2.0	2.0	2.0	
Operating Mode, Typical (W)	5.3	5.3	3.7	3.7	3.7	
Idle Average (W)	3.4W	3.4W	2.5W	2.5W	2.5W	
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 (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)	26.11mm/1.028in	26.11mm/1.028in	20.20mm/0.795in	20.20mm/0.795in	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, typical)	630g/1.389lb	610g/1.345lb	490g/1.08lb	490g/1.08lb	490g/1.08lb	
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	2TB	1TB	500GB				
Standard Model Number	ST2000DM008	ST1000DM010	ST500DM009				
Bytes per Sector	4096	4096	4096				
Performance							
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, Multisegmented (MB)	256	64	32				
Rotational Speed (RPM)	7200	7200	7200				
Recording Technology	SMR	CMR	CMR				
Reliability/Data Integrity							
Load/Unload Cycles	600,000	50,000	50,000				
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14				
Power-On Hours (per year)	2400	2400	2400				
Workload Rate Limit (TB/Year)	55	55	55				
Warranty, Limited (years)	2	2	2				
Power Management							
Startup Power (A)	2.0	2.0	2.0				
Operating Mode, Typical (W)	5.1	5.3	5.3				
Idle Average (W)	3.9W	4.60W	4.60W				
Standby Mode/Sleep Mode, Typical (W)	0.3/0.3	0.94/0.94	0.94/0.94				
Voltage Tolerance, Inc. Noise (5V)	±5%	±5%	±5%				
Voltage Tolerance, Inc. Noise (12V)	±10%	±10%	±10%				
Environmental/Temperature							
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				
Physical							
Height (mm/in, max)	20.20mm/0.795in	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, typical)	490g/1.08lb	400g/0.88lb	400g/0.88lb				
Carton Unit Quantity	25	25	25				
Cartons per Pallet/Cartons per Layer	40 / 8	40 / 8	40 / 8				

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