

3.5 HDD DATA SHEET

## Amazing Versatility and Trusted Dependability Meet Incredible Speed



Lightning-fast performance and titanic storage up to 14TB give your desktop or creative professional system the edge you need to be your very best. BarraCuda® Pro 3.5-inch drives are also backed by a 5-year limited warranty.



### Best-Fit Applications

- Creative pros systems
- Desktop or all-in-one PCs
- Home servers
- Entry-level direct-attached storage devices (DAS)



## Key Advantages

**Highest capacity.** Up to 14TB means you get the highest storage capacity available in the 3.5-inch PC class.

**Peace of mind.** A 5-year limited warranty and 300TB/year workload limit means this drive has your back.

**Incredible speed.** Delivers 7200-RPM spin speed along with sustained data rates up to 250MB/s and burst data rates of 6Gb/s.

**Energy efficient.** This drive is one of the lowest-power 3.5-inch drives on the market.

**Ultimate protection.** Bundled with Seagate® Rescue Data Recovery Services, this drive is protected for 2 years against any mechanical, accidental, or natural disaster—with a 90% success rate for in-house recovery.<sup>1</sup>

**History of reliability.** For 20+ years, the Barracuda family has had a reputation for complete reliability.

**Optimized for creative pros.** Designed and tuned for creative applications, these drives feature higher random performance and drive reliability than typical PC compute drives.

<sup>1</sup> Registration required to activate.



Specifications	14TB	12TB	12TB	10TB	10TB
Standard Model Numbers	ST14000DM001	ST12000DM001	ST12000DM0007	ST10000DM001	ST10000DM0004
Bytes per Sector	512	512	512	512	512
<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)	250MB/s	250MB/s	250MB/s	220MB/s	220MB/s
Cache, Multisegmented (MB)	256	256	256	256	256
Recording Technology	CMR	CMR	CMR	CMR	CMR
<b>Reliability/Data Integrity</b>					
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours (per year)	8,760	8,760	8,760	8,760	8,760
Data Recovery and Rescue Services	Yes	Yes	Yes	Yes	Yes
Workload Rate Limit (TB/year) <sup>1</sup>	300	300	300	300	300
Warranty, Limited (years)	5	5	5	5	5
<b>Power Management</b>					
Startup Power (A)	2	2	1.8	2	1.8
Operating Mode, Typical (W)	6.9	6.9	7.8	6.9	7.8
Idle Average (W)	4.9W	4.9W	5W	4.9W	5W
Standby Mode/Sleep Mode, Typical (W)	0.8/0.8	0.8/0.8	0.8/0.8	0.8/0.8	0.8/0.8
<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
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
<b>Physical</b>					
Height (mm/in, max)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in
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)	690g/1.521lb	690g/1.521lb	705g/1.55lb	690g/1.521lb	705g/1.55lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8	40 / 8

<sup>1</sup> BarraCuda Pro drives are designed for always-on workloads of 300TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings



Specifications	8TB	6TB	4TB	2TB
Standard Model Numbers	ST8000DM0004	ST6000DM004	ST4000DM006	ST2000DM009
Bytes per Sector	512	512	512	512
<b>Performance</b>				
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 Data Rate, OD Read (MB/s)	220MB/s	220MB/s	220MB/s	195MB/s
Cache, Multisegmented (MB)	256	256	128	128
Recording Technology	CMR	CMR	CMR	CMR
<b>Reliability/Data Integrity</b>				
Load/Unload Cycles	300,000	300,000	300,000	300,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours (per year)	8,760	8,760	8,760	8,760
Data Recovery and Rescue Services	Yes	Yes	Yes	Yes
Workload Rate Limit (TB/year) <sup>1</sup>	300	300	300	300
Warranty, Limited (years)	5	5	5	5
<b>Power Management</b>				
Startup Power (A)	1.8	2	2	2
Operating Mode, Typical (W)	6.8	9.0	6.7	6.7
Idle Average (W)	4.4W	7.2W	6W	4.5W
Standby Mode/Sleep Mode, Typical (W)	0.8/0.8	0.6/0.6	0.6/0.6	0.8/0.8
<b>Environmental/Temperature</b>				
Operating (ambient, min)	0°C	0°C	0°C	0°C
Operating (drive case, max)	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
Halogen Free	Yes	Yes	Yes	Yes
RoHS Compliance	Yes	Yes	Yes	Yes
<b>Physical</b>				
Height (mm/in, max)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	650g/1.433lb	780g/1.72lb	680g/1.5lb	550g/1.21lb
Carton Unit Quantity	20	20	20	20
Cartons per Pallet/Cartons per Layer	40 / 8	40 / 8	40 / 8	40 / 8

<sup>1</sup> BarraCuda Pro drives are designed for always-on workloads of 300TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings