

Data Sheet

Barracuda® 7200.12

Performance and reliability for everyone

**1 TB, 750 GB, 500 GB, 320 GB, 250 GB, 160 GB •
7,200 RPM • SATA 6 Gb/s with NCQ**

Key Advantages

- Seagate® technology leadership now yields the industry's first one-disc 500 GB and two-disc 1 TB hard drives — lowering storage costs and improving performance simultaneously
- Now delivering predicted failure rates of 0.34%, the Barracuda 7200.12 hard drive continues to provide industry-leading reliability
- Produced by the hard drive industry's most sophisticated and automated manufacturing process, customers can feel confident that Barracuda 7200.12 hard drives will deliver the same rock-solid performance and reliability every time
- With capacity points of 1 TB, 750 GB, 500 GB, 320 GB, 250 GB and 160 GB, there is a Barracuda 7200.12 hard drive to meet every desktop storage need



Best-fit Applications

- Desktop PCs
- Workstations
- Direct attached external storage devices (DAS)
- Network attached storage devices (NAS)
- PC-based game systems
- Home servers

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Specifications	1 TB ¹	750 GB ¹	500 GB ¹	320 GB ¹	250 GB ¹	160 GB ¹
Model Number	ST31000524AS	ST3750525AS	ST3500413AS	ST3320413AS	ST3250312AS	ST3160316AS
Interface Options	SATA 6 Gb/s NCQ	SATA 6 Gb/s NCQ	SATA 6 Gb/s NCQ	SATA 6 Gb/s NCQ	SATA 6 Gb/s NCQ	SATA 6 Gb/s NCQ
Performance						
Transfer Rate, Max Ext (MB/s)	600	600	600	600	600	600
Sustained Data Rate OD (MB/s)	125	125	125	125	125	125
Cache (MB)	32	32	16	16	8	8
Average Latency (ms)	4.17	4.17	4.17	4.17	4.17	4.17
Spindle Speed (RPM)	7,200	7,200	7,200	7,200	7,200	7,200
Configuration/Organisation						
Bytes per Sector	512	512	512	512	512	512
Reliability/Data Integrity						
Contact Start-Stops	50,000	50,000	50,000	50,000	50,000	50,000
Non-recoverable Read Errors per Bits Read	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴
Annualised Failure Rate	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
Power Management						
Start-up Current +12V Peak (A, ±10%)	2.0	2.0	2.0	2.0	2.0	2.0
Operating, Average (W)	<9.4	<9.4	<8.0	<8.0	<8.0	<8.0
Idling, Average (W)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Environmental						
Temperature (°C)						
Operating	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60
Non-operating	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock (Gs)						
Operating: 2 ms	70	70	70	70	70	70
Non-operating: 1 ms	300	300	350	350	350	350
Acoustics (bels – sound power)						
Idling	2.5	2.5	2.6	2.6	2.6	2.6
Seek	2.7	2.7	2.75	2.75	2.75	2.75
Physical						
Height (in/mm)	1.02/26.1	1.02/26.1	0.78/20	0.78/20	0.78/20	0.78/20
Width (in/mm)	4.00/101.6	4.00/101.6	4.00/101.6	4.00/101.6	4.00/101.6	4.00/101.6
Depth (in/mm)	5.787/146.99	5.787/146.99	5.787/146.99	5.787/146.99	5.787/146.99	5.787/146.99
Weight (lb/kg)	1.4/0.64	1.4/0.64	1.2/0.54	1.2/0.54	1.2/0.54	1.2/0.54

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

Technology Leadership for Desktop Storage

The Seagate® Barracuda® hard drive continues a long tradition of Seagate technology leadership resulting in new capacity milestones, faster performance and rock-solid reliability. The drive delivers 500 GB per disc densities with the fast performance and huge capacities to power today's storage-hungry applications at prices more affordable than ever!

Available in capacities of up to 1 TB or as low as 160 GB, there is a Barracuda hard drive for every desktop need. With over 600,000,000 Barracuda drives installed, it is no wonder that Barracuda hard drives are recognised as the de facto standard for desktop storage.

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