


## Barracuda 7200.9

Leading combination of capacity, performance and reliability, backed by a five-year warranty



From a Massive  
Half Terabyte With  
16MB Cache  
to 40GB With  
2MB Cache

### Capacities, Interfaces and Cache Sizes—Barracuda 7200.9 Has It All

#### Key Advantages

- Highest available capacity and largest cache size—up to one-half terabyte—enables OEMs and system builders to qualify one family of drives for most personal computing systems.
- SATA 3Gb/s with NCQ enables fast data transfer rates for high performance.
- SATA click connectors and thin cables for easier integrations and better cooling airflow
- Seagate SoftSonic motor enables whisper-quiet operation.
- RoHS-compliant—environmentally conscious product
- A proven design and industry's most comprehensive compatibility, integration and benchmark testing for shorter qualification times, easier integration and top reliability
- Enhanced G-Force protection defends against handling damage.
- Entire product line backed by a five-year warranty
- “One-stop shopping” for innovative and reliable products that fulfill all of your integration requirements

#### Desktop and High-Performance PCs

- Gamer PCs
- Workstations
- High-end PCs
- Desktop RAID
- Mainstream PCs
- Entry level PCs

#### Low-Cost Servers and External Storage

- Entry-level servers
- USB/FireWire/eSATA external storage





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Specifications	500 GB <sup>1</sup>	400 GB <sup>1</sup>	300 GB <sup>1</sup>	250 GB <sup>1</sup>	200 GB <sup>1</sup>	160 GB <sup>1</sup>	120 GB <sup>1</sup>	80 GB <sup>1</sup>	40 GB <sup>1</sup>
Model Number	ST3500641A ST3500641AS	ST3400633A ST3400633AS	ST3300622A ST3300622AS	ST3250824A ST3250624A ST3250824AS ST3250624AS	ST3200827A ST3200827AS	ST3160812A ST3160212A ST3160812AS ST3160212AS ST3160811AS <sup>2</sup> ST3160211AS <sup>2</sup>	ST3120814A ST3120213A ST3120813AS ST3120213AS ST3120811AS <sup>2</sup> ST3120211AS <sup>2</sup>	ST3802110A ST3808110AS ST3802110AS ST380811AS <sup>2</sup> ST380211AS <sup>2</sup>	ST3402111A ST3402111AS ST340211AS <sup>2</sup>
Interface Options	Ultra ATA/100 SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ
<b>Performance</b>									
Available Transfer Rates (Mbytes/sec)	100, 300	100, 300	100, 300	100, 300	100, 300	100, 300	100, 300	100, 300	100, 300
Cache Options (Mbytes)	16	16	16	8, 16	8	2, 8	2, 8	2, 8	2
Average Latency (msec)	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16
Spindle Speed (RPM)	7200	7200	7200	7200	7200	7200	7200	7200	7200
<b>Configuration/Organization</b>									
Bytes per Sector	512	512	512	512	512	512	512	512	512
<b>Reliability/Data integrity</b>									
Contact Start-Stops	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Nonrecoverable Read Errors per Bits Read	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>
Annualized Failure Rate (AFR) (%)	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Limited Warranty (years)	5	5	5	5	5	5	5	5	5
<b>Power Management</b>									
+12 VDC +/-10% (amps peak)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Power Management (watts)									
Seek Avg	12.6	12.6	12.4	12.4	12.4	12.4	12.4	12.4	12.4
Operating Avg	13.0	13.0	12.8	12.8	12.8	12.8	12.8	12.8	12.8
Idle Avg	7.4	7.4	7.2	7.2	7.2	7.2	7.2	7.2	7.2
<b>Environmental</b>									
Temperature, Operating (°C)	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60
Temperature, Nonoperating (°C)	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock, Operating: 2 msec (Gs)	63	63	63	63	63	63	63	63	63
Shock, Nonoperating: 1 msec (Gs)	350	350	350	350	350	350	350	350	350
Acoustics, Idle (bels—sound power)	2.8	2.8	2.7	2.7	2.7	2.5, 2.7 <sup>3</sup>	2.5, 2.7 <sup>3</sup>	2.5, 2.7 <sup>3</sup>	2.5, 2.7 <sup>3</sup>
Acoustics, Seek (bels—sound power)	3.7	3.7	3.4	3.4	3.4	3.0, 2.9 <sup>3</sup>	3.0, 2.9 <sup>3</sup>	3.3, 2.9 <sup>3</sup>	3.3, 2.9 <sup>3</sup>
<b>Physical</b>									
Height (in/mm)	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1	1.028/26.1 0.787/19.99 <sup>2</sup>	1.028/26.1 0.787/19.99 <sup>2</sup>	1.028/26.1 0.787/19.99 <sup>2</sup>	1.028/26.1 0.787/19.99 <sup>2</sup>
Width (in/mm)	4.000/101.6	4.000/101.6	4.000/101.6	4.000/101.6	4.000/101.6	4.000/101.6	4.000/101.6	4.000/101.6	4.000/101.6
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	5.787/146.99	5.787/146.99	5.787/146.99
Weight (lb/g)	1.52/690	1.4/635	1.4/635	1.4/635	1.4/635	1.28/580 0.79/360 <sup>2</sup>	1.28/580 0.79/360 <sup>2</sup>	1.28/580 0.79/360 <sup>2</sup>	1.28/580 0.79/360 <sup>2</sup>

<sup>1</sup> One gigabyte, or GB, equals one billion bytes when referring to hard drive capacity. <sup>2</sup> Models with lower drive height, weight and acoustics

## Seagate Makes the Best Even Better With a 5-Year Warranty

Seagate offers the industry's leading warranty to demonstrate our commitment to product reliability and our customers' success. Every Seagate internal hard drive for PCs, notebook computers and entry-level servers is covered under our unprecedented five-year warranty.

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