

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
- Drives automatically configure to either new 3-Gbit/second or legacy 1.5-Gbit/second SATA systems for ease of integration and highest performance.
- 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 fill all of your integration requirements

Best-Fit Applications

- SATA Servers
- Ultra ATA Servers
- High-Performance PCs
- Workstations/Media PCs
- PC Gaming Systems
- Mainstream PCs





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Specifications	500 GB ¹	400 GB ¹	300 GB ¹	250 GB ¹	200 GB ¹	160 GB ¹	120 GB ¹	80 GB ¹	40 GB ¹
Model Number	ST3500641A ST3500641AS	ST3400633A ST3400633AS	ST3300622A ST3300622AS	ST3250824A ST3250624A ² ST3250824AS ST3250624AS ²	ST3200827A ST3200827AS	ST3160812A ST3160212A ST3160812AS ST3160212AS ²	ST3120814A ST3120213A ST3120813AS ST3120213AS ²	ST3802110A ST3808110AS ST3802110AS ²	ST3402111A ST3402111AS ²
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 Ultra ATA/100 SATA 3Gb/s NCQ SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ	Ultra ATA/100 Ultra ATA/100 SATA 3Gb/s NCQ SATA 3Gb/s NCQ	Ultra ATA/100 Ultra ATA/100 SATA 3Gb/s NCQ SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ SATA 3Gb/s NCQ	Ultra ATA/100 SATA 3Gb/s NCQ
Performance									
Transfer Rate, Max Ext (Mbytes/sec)	100/300	100/300	100/300	100/100/300/300	100/300	100/100/300/300	100/100/300/300	100/300/300	100/300
Cache (Mbytes)	16/16	16/16	16/16	8/16/8/16	8/8	8/2/8/2	8/2/8/2	2/8/2	2/2
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
Configuration/Organization									
Available Sectors	976,773,168	781,422,768	586,072,368	488,397,168	390,721,968	312,581,808	234,441,648	156,301,488	78,165,360
Bytes per Sector	512	512	512	512	512	512	512	512	512
Logical CHS	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63
Reliability/Data integrity									
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 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴
Limited Warranty (years)	5	5	5	5	5	5	5	5	5
Power Management									
+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
Environmental									
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	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Acoustics, Seek (bels—sound power)	3.2	3.2	2.8	2.8	2.8	2.8	2.8	2.7	2.7
Physical									
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	1.028/26.1	1.028/26.1	1.028/26.1
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	1.28/580	1.28/580	1.28/580

¹ One gigabyte, or GB, equals one billion bytes when referring to hard drive capacity.

² New products recently added

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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- Certified, experienced support staff
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- Support lines with the shortest wait times in the industry
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- Seagate Design Service Centers (DSC) help companies transform innovative ideas into viable products.

AMERICAS Seagate Technology LLC 920 Disc Drive, Scotts Valley, California 95066, United States, 831-438-6550
 ASIA/PACIFIC Seagate Technology International Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888
 EUROPE, MIDDLE EAST AND AFRICA Seagate Technology SA 130-136, rue de Sully, 92773 Boulogne-Billancourt Cedex, France, 33 1-41 86 10 00

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