

Barracuda 7200.8

High-capacity Ultra ATA and Serial ATA desktop drives



Reliable, Top-Performing Storage for High-End PCs and Advanced Applications, Including Entry-Level RAID Servers and Gaming Systems

400, 300, 250 and 200 Gbytes • 7200 RPM • SATA/150 NCQ and Ultra ATA/100

Key Advantages

- Highest available capacity—up to 400 Gbytes, enabling OEMs and system builders to qualify one family of drives for a wide range of personal storage, entry-level server and fixed-content storage applications
- Native SATA interface with Native Command Queuing (NCQ) enables fast data transfer rates for high-performing, low-cost servers and hot-rod gaming systems
- A proven design for shorter qualification times and top reliability
- Inaudible acoustics with sound barrier technology (SBT), including the Seagate®-exclusive SoftSonic™ motor
- RoHS-compliant—significantly reduced levels of lead to comply with all environmental legislation

Best Fit Applications

- Mainstream and high-performance PCs
- Small workgroup servers in businesses, education and government
- Video, digital photo and e-mail storage on PC-based home media servers
- Storage of fixed-content information that is actively referenced but changed infrequently (medical records, active data archives, financial statements, videos, digital photos)
- PCs optimized for gaming





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High-capacity, high-speed ATA drives for PCs and advanced storage applications

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.



Highest Available Capacity Enables New Opportunities

- Industry's highest areal density lowers cost per Gbyte of storage
- High capacity demand continues to increase as storage needs proliferate
- Increased demand coming from users requiring more storage capacity on their PCs and small businesses implementing RAID servers
- Various-sized enterprises are replacing tape with high-capacity HDDs in low-cost backup or fixed content applications

Native Serial ATA Interface With Native Command Queuing (NCQ)

- Native SATA interface with NCQ and support for latest PC technology, including Intel Hyper-Threading
- Point-to-point interface eliminates need for jumper settings
- Easy-to-use connectors for simple installation
- 100 percent software compatible with existing PCs
- Thinner, longer cable provides improved system airflow

World-Class Technical Support

- Certified, experienced support staff
- Rated "Above Average to Excellent"
- Support lines with shortest wait times
- Individually archived case histories
- Web-based Q&A forum and autoreply e-mail
- Seagate Design Service Centers (DSC) to help companies transform innovative ideas into viable products

www.seagate.com
1-800-732-4283 (1-800-SEAGATE)

Specifications	400GB ¹	300GB ¹	250GB ¹	200GB ¹
Model Number	ST3400832AS ST3400832A	ST3300831AS ST3300831A	ST3250823AS ST3250823A	ST3200826AS
Interface/External Transfer Rate (Mbytes/sec)	SATA/150 NCQ Ultra ATA/100	SATA/150 NCQ Ultra ATA/100	SATA/150 NCQ Ultra ATA/100	SATA/150 NCQ
Performance				
Transfer Rate				
Maximum Internal (Mbytes/sec)	95	95	95	95
Maximum External (Mbytes/sec)	150/100	150/100	150/100	150
Sustained Transfer Rate OD (Mbytes/sec)	65	65	65	65
Cache, Multisegmented (Mbytes)	8	8	8	8
Average Seek (msec)	8	8	8	8
Average Latency (msec)	4.16	4.16	4.16	4.16
Spindle Speed (RPM)	7200	7200	7200	7200
Configuration/Organization				
Available Sectors	781,422,768	586,072,368	488,397,168	390,721,968
Bytes per Sector	512	512	512	512
Logical CHS	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63
Recording Method	EPRML (16/17)	EPRML (16/17)	EPRML (16/17)	EPRML (16/17)
Reliability/Data integrity				
Contact Start-Stops	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
Limited Warranty (years)	5	5	5	5
Power Management				
+12 VDC ±10% (amps peak)	2.8	2.8	2.8	2.8
Power Management (watts)				
Seek Avg	12.4	12.4	12.4	12.4
Operating Avg	12.8	12.8	12.8	12.8
Idle Avg	7.2	7.2	7.2	7.2
Standby Avg (SATA/PATA)	1.4/0.8	1.4/0.8	1.4/0.8	1.4/0.8
Environmental				
Temperature, Operating (°C)	0°C to 60°C	0°C to 60°C	0°C to 60°C	0°C to 60°C
Temperature, Nonoperating (°C)	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock, Operating: 2 msec (Gs)	63	63	63	63
Shock, Nonoperating: 2 msec (Gs)	300	300	≥300	≥300
Acoustics				
Idle (bels—sound power)	2.8	2.8	≤2.8	≤2.8
Quiet Seek (bels—sound power)	3.2	3.2	≤3.2	≤3.2
Performance Seek (bels—sound power)	3.7	3.7	≤3.7	≤3.7
Physical				
Height (in/mm)	1/26.11	1/26.11	1/26.11	1/26.11
Width (in/mm)	4/101.85	4/101.85	4/101.85	4/101.85
Depth (in/mm)	5.78/146.99	5.78/146.99	5.78/146.99	5.78/146.99
Weight (lb/g)	1.4/635	1.4/635	1.4/635	1.4/635

¹ Capacity calculated as 1 Gbyte = 10⁹ bytes

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