Barracuda® 7200.7 and Barracuda 7200.7 Plus

Best combination of performance, acoustics and reliability

The World's Toughest and Quietest High-Performance Desktop Drive With Record-Setting Storage Density

200, 160, 120, 80 and 40 Gbytes • 7,200 RPM • Ultra ATA/100 and SATA/150

Key Advantages

- Serial ATA interface for ultra-fast desktop performance, up to 200-Gbyte capacity
- Highest storage density in the world for efficient system designs
- A proven rugged design for increased reliability
- The industry's only sixth-generation FDB motor
- 3D Defense System™ for comprehensive protection against handling damage and data loss
- Inaudible acoustics with sound barrier technology (SBT), including the Seagate® exclusive SoftSonic™ motor

Best-Fit Applications

- Mainstream and High-Performance PCs
- Entry-Level ATA Servers, including RAID
- Cost-Effective Network Attached Storage
- PC Gaming Systems
- Home Media Servers
- Near-Line Storage

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High-speed, high-capacity desktop drives with record-setting storage density

The World's Only Native Serial ATA Interface

- Meeting tomorrow's performance needs today
- 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
- Highest areal density in the world— 100 Gbytes per 3.5-inch platter

The Seagate 3D Defense System— No One Does More to Protect Your Drives

DRIVE DEFENSE

- SeaShell™ packaging for drive protection against 1,000 Gs of nonoperational shock
- Enhanced G-Force Protection

DATA DEFENSE

- Error-correction code (ECC)
- Safe Sparing

DIAGNOSTIC DEFENSE

- SeaTools Suite diagnostic software
- Web-based tools
- S.M.A.R.T. Technology
- Enhanced Drive Self-Test (NDST)

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	200GB[1]	160GB[1]	120GB[1]	80GB[1]	40GB[1]
Model Number	ST3200822A[2] ST3200822AS	ST3160021A ST3160023A[2] ST3160023AS	ST3120022A ST3120026A[2] ST3120026AS	ST380011A ST380013AS	ST340014A
Interface/External Transfer Rate (Mbytes/sec)	Ultra ATA/100 SATA/150	Ultra ATA/100 Ultra ATA/100 SATA/150	Ultra ATA/100 Ultra ATA/100 SATA/150	Ultra ATA/100 SATA/150	Ultra ATA/100
Performance					
Transfer Rate					
Maximum Internal (Mbits/sec)	683	683	683	683	683
Maximum External (Mbytes/sec)	100/150 (SATA)	100/100/150	100/100/150	100/150	100
Sustained Transfer Rate (Mbytes/sec)	32 to 58	32 to 58	32 to 58	32 to 58	32 to 58
Cache, Multisegmented (Mbytes)	8, 8 (SATA)	2, 8, 8 (SATA)	2, 8, 8 (SATA)	2, 8 (SATA)	2
Average Seek (msec)	8.5	8.5	8.5	8.5	8.5
Average Latency (msec)	4.16	4.16	4.16	4.16	4.16
Spindle Speed (RPM)	7,200	7,200	7,200	7,200	7,200
Configuration/Organization					
Discs/Heads	2/4	2/4	2/3	1/2	1/1
Bytes per Sector	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
Recording Method	EPRML (16/17)	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	50,000
3D Defense System	Yes	Yes	Yes	Yes	Yes
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}
Limited Warranty (years)	3/3	1/3/3	1/3/3	1	1
Power Management					
+12 VDC ±10% (amps max)	2.8	2.8	2.8	2.8	2.8
+5 VDC ±5% (amps max)	NA	NA	NA	NA	NA
Power Management (watts) Seek	12.5	12.5	12.5	12.5	12.5
Read/Write	12.0	12.0	12.0	12.0	12.0
Idle/Standby	7.5/.7	7.5/.7	7.5/.7	7.5/.7	7.5/.7
Environmental					
Temperature, Operating (°C)	5 to 55	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
Shock, Operating: 2 msec (Gs)	63	63	63	63	63
Shock, Nonoperating: 2 msec (Gs)	350	350	350	350	350
Acoustics					
Idle (bels—sound power)	2.5	2.5	2.5	<2.5	<2.5
Quiet Seek (bels—sound power)	2.8	2.8	2.8	2.5	2.5
Performance Seek (bels—sound power)	3.4	3.4	3.4	3.1	3.1
Physical					
Height (in/mm)	1/26.1	1/26.1	1/26.1	1/26.1	1/26.1
Width (in/mm)	4/101.85	4/101.85	4/101.85	4/101.85	4/101.85
Depth (in/mm)	5.78/146.56	5.78/146.56	5.78/146.56	5.78/146.56	5.78/146.56
Weight (lb/g)	1.4/635	1.4/635	1.4/635	1.2/544	1.2/544

[1] Capacity calculated as 1 Gbyte = 10^9 bytes
[2] Barracuda 7200.7 Plus