

Data Sheet

DiamondMax 20 and DiamondMax 21

Reliability, performance and leading
mainstream features

**320, 250, 160, 80 and 40 GB • 7200 RPM • ATA/100 and
SATA 3Gb/s**

Key Advantages

Maxtor® DiamondMax® 20 and DiamondMax 21 hard drives continue the Maxtor tradition of delivering well-engineered, reliable storage solutions. The DiamondMax family of hard drives provides a value solution for applications that require a balance of the most popular capacities, basic performance and reliability.

DiamondMax 20 and DiamondMax 21 drives are ideal for entry and mainstream, home and office PC applications and an excellent solution for integrators and system builders. DiamondMax 20 and DiamondMax 21 drives are widely available from Maxtor Authorized Distributors.

DiamondMax 20 drives

DiamondMax 20 drives are an excellent value for solid performance and popular capacities for high-volume entry and mainstream computing applications.

DiamondMax 21 drives

DiamondMax21 drives provide larger capacities for mainstream systems with more advanced features for increased storage needs.

Designed for

- Home desktop PCs
- Office and business PCs
- General, non-PC, ATA storage applications



DiamondMax 20 and DiamondMax 21



Reliability, performance and leading mainstream features

Seagate Service Centers— Worldwide Support

- Presales and technical support at 1-800-SEAGATE
- Free technical support for the life of the product
- Expert email support and complete historical web content available online
- Certified, experienced support staff

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

Specifications	320 GB ¹	250 GB ¹	160 GB ¹	80 GB ¹	40 GB ¹
Product	DiamondMax 21	DiamondMax 21	DiamondMax 20	DiamondMax 20	DiamondMax 20
Model Number	STM3320820AS STM3320820A	STM3250820AS STM3250820A	STM3160211AS STM3160212A	STM380211AS STM380211A	STM340211AS STM340211A
Performance					
Transfer Rate (MB/s)					
SATA 3Gb/s	300	300	300	300	300
ATA/100	100	100	100	100	100
Cache, Multisegmented (MB)	8	8	2	2	2
Average Latency (msec)	4.17	4.17	4.17	4.17	4.17
Spin Speed	7200	7200	7200	7200	7200
Configuration/Organization					
Bytes per Sector	512	512	512	512	512
Reliability/Data Integrity					
Contact Start-Stops	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
Annualized Failure Rate (AFR)	0.34%	0.34%	0.34%	0.34%	0.34%
Limited Warranty	3 years	3 years	3 years	3 years	3 years
Power Management					
+12V Peak (A ±10%)	2.8	2.8	2.8	2.8	2.8
Seek, Average (W)	12.4	12.4	12.4	12.4	12.4
Operating, Average (W)	12.8	12.8	12.8	12.8	12.8
Idle, Average (W)	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
Nonoperating (°C)	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock					
Operating, 2 ms (G)	63	63	63	63	63
Nonoperating, 2 ms (G)	350	350	350	350	350
Acoustics (bels—sound power)					
Idle	2.7	2.7	2.7	2.7	2.7
Seek	2.9	2.9	2.9	2.9	2.9
Physical					
Height (in/mm)	0.79/20.99	0.79/20.99	0.79/20.99	0.79/20.99	0.79/20.99
Width (in/mm)	4.00/101.6	4.00/101.6	4.00/101.6	4.00/101.6	4.00/101.6
Depth (in/mm)	5.87/146.99	5.87/146.99	5.87/146.99	5.87/146.99	5.87/146.99
Weight (lb/g)	1.28/580	1.28/580	1.28/580	1.28/580	1.28/580

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

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 SAS 130-136, rue de Sully, 92773, Boulogne-Billancourt Cedex, France 33 1-4186 10 00

Copyright © 2006 Seagate Technology LLC. All rights reserved. Printed in USA. Seagate, Seagate Technology and the Wave logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. DiamondMax, Maxtor and the Maxtor logo are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. One gigabyte, or GB, equals one billion bytes when referring to hard drive capacity. Accessible capacity may vary depending on operating environment and formatting. Seagate reserves the right to change, without notice, product offerings or specifications. Publication Number: DS1602.2, December 2006