

Data Sheet

Momentum 5400.4

Durable mobility—anywhere, anytime

**120, 160, 200, 250 GB • 5400-RPM Performance •
2.5-Inch Laptop**

Key Advantages

- Industry's most reliable hard drive with proven second-generation Seagate® perpendicular magnetic recording technology
- SATA 3Gb/s interface with Native Command Queuing, the fastest interface option available today, to enhance system performance levels
- Sustained data rate: 806 Mb/s
- Power:
 - Seek: 2.0 watts
 - Read: 2.0 watts
 - Write: 1.6 watts
- 8-MB cache
- 56 percent areal density increase from previous product generation
- Robust design and high shock tolerance enable mobility in rugged operating environments.
- 325 Gs of operating shock tolerance and 900 Gs of nonoperating shock tolerance make the drive ideal for laptop PCs and industrial applications.



Best-Fit Applications

- Mainstream laptops
- Workstations
- Gaming systems
- Small form factor PCs
- External boxes
- Non-mission-critical blade servers

Momentum 5400.4

Durable mobility—anywhere, anytime



Seagate Makes the Best Even Better With a 5-Year Limited 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, laptop computers and entry-level servers is covered by a 5-year limited warranty.

Seagate Global Customer Support

- Get presales and technical support at support.seagate.com.
- Visit our knowledge base for answers to common support questions.
- Find documentation for current and legacy drives.
- Utilize our online troubleshooting and diagnostic tools.
- Download DiscWizard™ to help migrate data from an older drive.
- Seagate also offers multi-lingual phone, email and chat support.
- Seagate Design Service Centers (DSC) help companies transform innovative ideas into viable products.

www.seagate.com

1-800-SEAGATE (1-800-732-4283)

Specifications	250 GB ¹	200 GB ¹	160 GB ¹	120 GB ¹
Model Number	ST9250827AS	ST9200827AS	ST9160827AS	ST9120817AS
Interface	SATA 3Gb/s NCQ SATA 1.5Gb/s NCQ	SATA 3Gb/s NCQ SATA 1.5Gb/s NCQ	SATA 3Gb/s NCQ SATA 1.5Gb/s NCQ	SATA 3Gb/s NCQ SATA 1.5Gb/s NCQ
Performance				
Transfer Rate (MB/s)				
Sustained Internal	58	58	58	58
Maximum External	300	300	300	300
Cache, Multisegmented (MB)	8	8	8	8
Average Seek (ms)	<12	<12	<12	<12
Average Latency (ms)	5.6	5.6	5.6	5.6
Spindle Speed (RPM)	5400	5400	5400	5400
Configuration/Organization				
Disks/Heads	2/4	2/4	2/3	1/2
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	Perpendicular	Perpendicular	Perpendicular	Perpendicular
Reliability/Data Integrity				
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
Load/Unload Cycles	>600,000	>600,000	>600,000	>600,000
Nonrecoverable Read Errors per Bits Read	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Limited Warranty (years)	5	5	5	5
Power Management				
Startup Current 5V (amps max)	1.0	1.0	1.0	1.0
Power Management (W)				
Seek Avg	2.0	2.0	2.0	2.0
Read/Write Avg	2.0/1.6	2.0/1.6	2.0/1.6	2.0/1.6
Idle/Standby Avg	0.6/0.2	0.6/0.2	0.6/0.2	0.6/0.2
Environmental				
Temperature (°C)				
Operating	0 to 60	0 to 60	0 to 60	0 to 60
Nonoperating	–40 to 70	–40 to 70	–40 to 70	–40 to 70
Shock (Gs)				
Operating: 2 ms	325	325	325	325
Nonoperating: 1 ms	900	900	900	900
Acoustics (bels—sound power)				
Idle	2.4	2.4	2.4	2.4
Performance Seek	2.6	2.6	2.6	2.6
Physical				
Height (in/mm)	0.374/9.5	0.374/9.5	0.374/9.5	0.374/9.5
Width (in/mm)	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85
Depth (in/mm)	3.957/100.5	3.957/100.5	3.957/100.5	3.957/100.5
Weight (lb/g)	0.225/102	0.225/102	0.225/102	0.225/102

¹ One gigabyte, or GB, equals one billion bytes when referring to hard drive 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 Silly, 92773, Boulogne-Billancourt Cedex, France 33 1-4186 10 00

Copyright © 2007 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. DiscWizard, Momentum and QuietStep 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 and one terabyte, or TB, equals one trillion 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: DS1643.1-0711US, November 2007