

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

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## Seagate Global Customer Support

- Get presales and technical support at [support.seagate.com](http://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](http://www.seagate.com)

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

Specifications	250 GB <sup>1</sup>	200 GB <sup>1</sup>	160 GB <sup>1</sup>	120 GB <sup>1</sup>
<b>Model Number</b>	ST9250827AS	ST9200827AS	ST9160827AS	ST9120817AS
<b>Interface</b>	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
<b>Performance</b>				
<b>Transfer Rate (MB/s)</b>				
Sustained Internal	58	58	58	58
Maximum External	300	300	300	300
<b>Cache, Multisegmented (MB)</b>	8	8	8	8
<b>Average Seek (ms)</b>	<12	<12	<12	<12
<b>Average Latency (ms)</b>	5.6	5.6	5.6	5.6
<b>Spindle Speed (RPM)</b>	5400	5400	5400	5400
<b>Configuration/Organization</b>				
<b>Disks/Heads</b>	2/4	2/4	2/3	1/2
<b>Bytes per Sector</b>	512	512	512	512
<b>Logical CHS</b>	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63
<b>Recording Method</b>	Perpendicular	Perpendicular	Perpendicular	Perpendicular
<b>Reliability/Data Integrity</b>				
<b>Head-Rest Method</b>	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
<b>Load/Unload Cycles</b>	>600,000	>600,000	>600,000	>600,000
<b>Nonrecoverable Read Errors per Bits Read</b>	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
<b>Power Management</b>				
<b>Startup Current 5V (amps max)</b>	1.0	1.0	1.0	1.0
<b>Power Management (W)</b>				
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
<b>Environmental</b>				
<b>Temperature (°C)</b>				
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
<b>Shock (Gs)</b>				
Operating: 2 ms	325	325	325	325
Nonoperating: 1 ms	900	900	900	900
<b>Acoustics (bels—sound power)</b>				
Idle	2.4	2.4	2.4	2.4
Performance Seek	2.6	2.6	2.6	2.6
<b>Physical</b>				
<b>Height (in/mm)</b>	0.374/9.5	0.374/9.5	0.374/9.5	0.374/9.5
<b>Width (in/mm)</b>	2.75/69.85	2.75/69.85	2.75/69.85	2.75/69.85
<b>Depth (in/mm)</b>	3.957/100.5	3.957/100.5	3.957/100.5	3.957/100.5
<b>Weight (lb/g)</b>	0.225/102	0.225/102	0.225/102	0.225/102

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

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