

Data Sheet

Momentum 7200.2

The freedom of mobility, the benefit of performance and the promise of durability

**80, 100, 120, 160, 200 GB • 7200-RPM
Performance • 2.5-Inch Laptop**

Key Advantages

- G-Force Protection™—Seagate® freefall sensor technology protects data by returning drive to a nonoperating state in the event of a drop.¹ G-Force Protection delivers the robustness required to operate in a mobile computing environment.
- Highest available laptop performance—SATA 3Gb/s interface increases system performance.
- Low power consumption maximizes battery life and lets users work longer.
- Perpendicular recording technology enhances data reliability.
- 5-year limited warranty

Best-Fit Applications

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



¹ASG products include G-Force Protection feature

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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, notebook 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	200 GB ¹	160 GB ¹	120 GB ¹	100 GB ¹	80 GB ¹
Model Number	ST9200420AS ST9200420ASG ²	ST9160823AS ST9160823ASG ²	ST9120823AS	ST9100821AS	ST980813AS ST980813ASG ²
Interface Options	SATA 3Gb/s or 1.5Gb/s with NCQ	SATA 3Gb/s or 1.5Gb/s with NCQ	SATA 3Gb/s or 1.5Gb/s with NCQ	SATA 3Gb/s or 1.5Gb/s with NCQ	SATA 3Gb/s or 1.5Gb/s with NCQ
Performance					
Transfer Rate (MB/s)					
Sustained Internal	69.5	59.0	59.0	59.0	59.0
Maximum External	300/150	300/150	300/150	300/150	300/150
Cache (MB)	16	8	8	8	8
Average Seek (ms)	11	11	11	11	11
Average Latency (ms)	4.17	4.17	4.17	4.17	4.17
Spindle Speed (RPM)	7200	7200	7200	7200	7200
Configuration/Organization					
Disks/Heads	2/4	2/4	2/3	2/3	1/2
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	16/17 EPRML	16/17 EPRML	16/17 EPRML	16/17 EPRML	16/17 EPRML
Reliability/Data Integrity					
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
Load/Unload Cycles	>600,000	>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	1 per 10E14
G-Force Protection ²	Optional	Optional	No	No	Optional
Limited Warranty (years)	5	5	5	5	5
Power Management					
Startup Current 5v (amps max)	1.1	1.1	1.1	1.1	1.1
Power Management (W)					
Seek Avg	2.3	2.3	2.3	2.3	2.3
Read/Write Avg	2.1	2.1	2.1	2.1	2.1
Idle/Standby Avg ³	0.8/0.25	0.8/0.25	0.8/0.25	0.8/0.25	0.8/0.25
Environmental					
Temperature (°C)					
Operating	0 to 60	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	-40 to 70
Shock (G)					
Operating: 2 ms	300	300	300	300	300
Nonoperating: 1 ms	900	900	900	900	900
Acoustics (bels—sound power)					
Idle	2.5	2.5	2.5	2.5	2.5
Performance Seek	2.9	2.9	2.9	2.9	2.9
Physical					
Height (in/mm)	.374/9.5	.374/9.5	.374/9.5	.374/9.5	.374/9.5
Width (in/mm)	2.75/69.85	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	3.957/100.5
Weight (lb/g)	.254/115	.254/115	.254/115	.254/115	.254/115

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

² G-Force Protection enables the drive to return to a nonoperating state in the event of a drop while reading/writing.

³ Typical laptops will pull power to the drive when entering S3 and S4; while in the S3 and S4 states, drive sleep and drive standby modes will not contribute to battery power consumption.

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