

Data Sheet

Momentum 5400.3

The freedom of mobility and enhanced productivity with 5400-RPM performance

160, 120, 100, 80, 60 and 40 GB • 5400-RPM Performance • 2.5-Inch Laptop

Key Advantages

- Nearly 50 percent more performance than systems with 4200-RPM drives
- 4200-RPM-like battery consumption enables higher productivity.
- Robust design and high shock tolerance enable mobility in rugged laptop operating environments.
- 350 Gs of operating shock and 900 Gs of nonoperating shock make the drive ideal for laptop PCs and industrial applications.
- Best-in-class 5400-RPM laptop performance

Best-Fit Applications

- Mainstream laptop PCs
- Tablet PCs
- External 2.5-inch drives
- MP3 players
- Printers and copiers



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The Momentum 5400.3 drive is the first Seagate product to utilize perpendicular recording technology. This innovative technology enables Seagate to deliver the industry's highest capacity of 160 GB in a single, 2.5-inch hard drive without sacrificing best-in-class features.

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	160 GB ¹	120 GB ¹	100 GB ¹	80 GB ¹	60 GB ¹	40 GB ¹
Model Number	ST9160821A ST9160821AS	ST9120822A ST9120822AS	ST9100828A ST9100828AS	ST980815A ST980811AS	ST960815A ST960813AS	ST940815A ST940814AS
Interface	ATA SATA w/NCQ	ATA SATA w/NCQ	ATA SATA w/NCQ	ATA SATA w/NCQ	ATA SATA w/NCQ	ATA SATA w/NCQ
Performance						
Transfer Rate						
Sustained Internal (MB/s)	44	44	44	44	44	44
Maximum External (MB/s)	100/150	100/150	100/150	100/150	100/150	100/150
Cache, Multisegmented (MB)	8	8	8	8	8	8
Average Seek (ms)	12.5/13.0	12.5/13.0	12.5/13.0	12.5/13.0	13.0	12.5/13.0
Average Latency (ms)	5.6	5.6	5.6	5.6	5.6	5.6
Performance Level	5400	5400	5400	5400	5400	5400
Configuration/Organization						
Disks/Heads	2/4	2/3	2/3	1/2	1/2	1/1
Bytes per Sector	512	512	512	512	512	512
Logical CHS	92,049/16/63	92,049/16/63	92,049/16/63	92,049/16/63	92,049/16/63	92,049/16/63
Recording Method	Perpendicular	Perpendicular	Perpendicular	Perpendicular	Perpendicular	Perpendicular
Reliability/Data Integrity						
Head-Rest Method	QuietStep™ Ramp Load	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	>600,000
Nonrecoverable Read Errors per Bits Read	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Power Management						
Startup Current 5v (amps max)	1.0	1.0	1.0	1.0	1.0	1.0
Power Management (watts)						
Seek	2.0	2.0	2.0	2.0	2.0	2.0
Read/Write, PATA	2.0/1.8	2.0/1.8	2.0/1.8	2.0/1.8	2.0/1.8	2.0/1.8
Read/Write, SATA	1.9/1.8	1.9/1.8	1.9/1.8	1.9/1.8	1.9/1.8	1.9/1.8
Idle/Standby, PATA	0.8/0.2	0.8/0.2	0.8/0.2	0.8/0.2	0.8/0.2	0.8/0.2
Idle/Standby, SATA	0.6/0.2	0.6/0.2	0.6/0.2	0.6/0.2	0.6/0.2	0.6/0.2
Environmental						
Temperature, Operating (°C)	0 to 60	0 to 60	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	-40 to 70
Shock, Operating: 2 ms (Gs)	350	350	350	350	350	350
Shock, Nonoperating: 1 ms (Gs)	900	900	900	900	900	900
Acoustics (bels—sound power)						
Idle	2.4	2.4	2.4	2.4	2.4	2.4
Performance Seek	3.0	3.0	3.0	3.0	3.0	3.0
Physical						
Height (in/mm)	0.374/9.5	0.374/9.5	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	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	3.957/100.5
Weight, PATA (lb/g)	0.22/102	0.22/102	0.22/102	0.216/98	0.216/98	0.216/98
Weight, SATA (lb/g)	0.22/100	0.22/100	0.22/100	0.21/96	0.21/96	0.21/96

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

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