

Data Sheet

Momentum 5400.3

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

160, 120, 100, 80 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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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.

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 Service Centers—Worldwide Support

- Presales and technical support at 1-800-SEAGATE
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- Seagate Design Service Centers (DSC) help companies transform innovative ideas into viable products.

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Specifications	160 GB ¹	120 GB ¹	100 GB ¹	80 GB ¹	40 GB ¹
Model Number	ST9160821A ST9160821AS	ST9120822A ST9120822AS	ST9100828A ST9100828AS	ST980815A ST980811AS	ST940815A
Interface	ATA SATA w/NCQ	ATA SATA w/NCQ	ATA SATA w/NCQ	ATA SATA w/NCQ	ATA
Performance					
Transfer Rate					
Sustained Internal (MB/s)	44	44	44	44	44
Maximum External (MB/s)	100/150	100/150	100/150	100/150	100
Cache, Multisegmented (MB)	8	8	8	8	8
Average Seek (ms)	12.5	12.5	12.5	12.5	12.5
Average Latency (ms)	5.6	5.6	5.6	5.6	5.6
Performance Level	5400	5400	5400	5400	5400
Configuration/Organization					
Disks/Heads	2/4	2/3	2/3	1/2	1/1
Bytes per Sector	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
Recording Method	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
Load/Unload Cycles	>600,000	>600,000	>600,000	>600,000	>600,000
Nonrecoverable Read Errors per Bits Read	1 per 10 ¹⁴ bits read	1 per 10 ¹⁴ bits read	1 per 10 ¹⁴ bits read	1 per 10 ¹⁴ bits read	1 per 10 ¹⁴ bits read
Power Management					
Startup Current 5v (amps max)	1.0	1.0	1.0	1.0	1.0
Power Management (watts)					
Seek	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
Read/Write, SATA	1.9/1.8	1.9/1.8	1.9/1.8	1.9/1.8	—
Idle/Standby	0.8/0.2	0.8/0.2	0.8/0.2	0.8/0.2	0.8/0.2
Environmental					
Temperature, Operating (°C)	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
Shock, Operating: 2 ms (Gs)	350	350	350	350	350
Shock, Nonoperating: 1 ms (Gs)	900	900	900	900	900
Acoustics (bels—sound power)					
Idle	2.3	2.3	2.3	2.3	2.3
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, PATA (in/mm)	3.945/100.2	3.945/100.2	3.945/100.2	3.945/100.2	3.957/100.5
Depth, SATA (in/mm)	3.957/100.5	3.957/100.5	3.957/100.5	3.957/100.5	—
Weight (lb/g)	.22/100	.22/100	.22/100	.21/96	.21/96

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

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