

Data Sheet

Momentum® 5400 FDE.3

Two types of Seagate Secure™ government-grade encryption

320 GB and 160 GB • 5,400 RPM • SATA 1.5 Gb/s and 3 Gb/s with NCQ • Seagate Secure self-encrypting hard drive

Key Advantages

- Two types of Seagate Secure government-grade security — enterprise mode and BIOS mode
- Hardware-based full disc encryption
- Encryption is transparent to the end user — no performance impact
- 5,400-RPM spindle speed
- Capacities of 320 GB and 160 GB with 8-MB cache
- Ultra-quiet acoustics
- Internal data rate of 1.1 Gb/s
- SATA 1.5-Gb/s and 3-Gb/s interfaces with NCQ
- 350 Gs shock tolerance at 2 ms, 1,000 Gs at 1 ms
- Perpendicular recording technology

Best-fit Applications

- Executive laptops that contain confidential employee, customer or corporate information
- Field sales, service and support laptops that contain critical customer data
- Personal laptops that contain sensitive information
- Industrial applications such as ATMs, POS systems and other teller-like systems



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Achieving True Digital Security

Businesses, government agencies and even private citizens need to protect themselves from digital data breaches or personal data theft. The problem is that all digital data is created and stored at some point in time on a hard drive device that will eventually leave their control.

Without hardware-based security integrally designed into the core of digital data storage, they can never truly be digitally secure.

Get your Data Security Built-in – and Government-grade

Having to install third-party software encryption, as opposed to integrally designed encryption, is an unnecessary hassle – and you end up with less security. Hardware-based encryption is transparent to the user, with no performance overhead, and it is harder to break. With Seagate Secure technology at the core of the drive, all data is automatically encrypted when it is written to the hard drive. The encryption technology itself is government grade as defined by the United States National Security Agency, National Security Telecommunications and Information Systems Security Policy (NSTISSP) No. 11. Keep in mind, this is a much more comprehensive solution and deployment, and requires security management software from an independent software vendor. For a list of Seagate Secure independent software vendors please visit www.seagate.com/security_gb/.

www.seagate.com

Toll free: 00 8004 SEAGATE (732 4283)
(non toll free: 001 405 324 4714)

Specifications	320 GB ¹	160 GB ¹
Model Number	ST9320322AS	ST9160312AS
Enterprise Mode	ST9320329AS	ST9160319AS
BIOS Mode		
Interface Options	SATA 1.5-Gb/s and SATA 3-Gb/s NCQ	SATA 1.5-Gb/s and SATA 3-Gb/s NCQ
Performance		
Cache (MB)	8	8
Recording Density	Perpendicular	Perpendicular
Areal Density (Gb/in ² ,avg)	253	253
Max Internal Transfer Rate (Mb/s)	830	830
Spindle Speed (RPM)	5,400	5,400
Configuration/Organisation		
Bytes per Sector	512	512
Logical CHS	16,383/16/63	16,383/16/63
Recording Method	16/17 EPRML	16/17 EPRML
Reliability/Data Integrity		
Head-rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load
Load/Unload Cycles	600,000	600,000
Non-recoverable Read Errors per Bits Read	1 per 10 ¹⁴	1 per 10 ¹⁴
Power Management		
Startup Current 5v (amps max)	1.0	1.0
Power Management (W)		
Seek	2.0	2.0
Read/Write	1.6/1.9	1.6/1.9
Environmental		
Temperature		
Operating (°C)	0 to 60	0 to 60
Non-operating (°C)	-40 to 70	-40 to 70
Shock		
Operating: 2 ms (Gs)	350	350
Non-operating: 1 ms (Gs)	1,000	1,000
Physical		
Height (in/mm)	0.374 ± 0.0078/9.5 ± 0.2	0.374 ± 0.0078/9.5 ± 0.2
Width (in/mm)	2.75 ± 0.0098/69.85 ± 0.249	2.75 ± 0.0098/69.85 ± 0.249
Depth (in/mm)	3.95 ± 0.010/100.33 ± 0.25	3.95 ± 0.010/100.33 ± 0.25
Weight (lb/g)	0.216/98	0.205/93

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

AMERICAS Seagate Technology LLC 920 Disc Drive, Scotts Valley, California 95066, United States, +1 831 438 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 41 86 10 70

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