

Data Sheet

## Momentum® 7200 FDE Family

Self-Encrypting Drives with Seagate Secure® technology for high-performance laptops and workstations

**500 GB and 250 GB • 7200 RPM • SATA 3Gb/s with NCQ • Optional G-Force Protection™ technology**

### Key Advantages

- Designed to help companies protect important data and comply with an increasing number of regulations
- Easy to implement and manage, as encryption is always on
- No impact on system performance, unlike software encryption
- Only drive accepted by the National Security Agency (NSA) to protect classified, mission-critical and national security information
- Works with multiple security software applications to provide greater functionality
- Adopted by global companies and government agencies with the highest standards of security protection
- Optional G-Force Protection feature adds another layer of robustness for road warriors.

### Best-Fit Applications

- Corporate 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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## Encryption Integration Without Headaches

The need for better, stronger security has never been greater. However, some companies have not yet implemented an encryption solution because of concerns over cost, complexity and a noticeable performance hit to employee's systems.

Hardware encryption is preferable to software solutions because it provides stronger security and has no negative impact on PCs.

The Momentum FDE drives were the first to be introduced, and they have been adopted by small and large businesses and government agencies around the world. This is the only drive to have NSA acceptance for protecting classified, mission-critical and national security information, making it the drive of choice for companies who want this extra measure of confidence.

Seagate Secure® technology enables IT departments to manage the security features of the drive via an enterprise security server. In fact, IT departments can manage multi-user and admin passwords that can invoke multi-factor logins as well as single sign-on and crypto erase functionality without ever touching the laptop. This can be done for a handful of laptop PCs or a worldwide enterprise. The management is all done via independent software vendors who have designed security management software to integrate with the Seagate Secure technology.

Seagate Self-Encrypting Drives are easy to deploy and manage, and a variety of security software companies have partnered with Seagate to provide additional levels of security management and protection. Keep in mind, this solution requires security management software from an independent software vendor. For a list of Seagate Secure independent software vendors please visit [www.seagate.com/security](http://www.seagate.com/security).

## G-Force Protection

The G-Force Protection feature provides enhanced data protection against shock that may occur while the drive is operating. This feature is designed to decrease the likelihood of data loss by detecting a freefall event and unloading the actuator before a shock takes place in falls of greater than 8 inches (nominal).

[www.seagate.com](http://www.seagate.com)

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

Specifications	500 GB <sup>1</sup>	250 GB <sup>1</sup>
Model Number	ST9500421AS	ST9250411AS
Interface Options	SATA 3Gb/s NCQ	SATA 3Gb/s NCQ
<b>Performance</b>		
Cache (MB)	16	16
Spindle Speed (RPM)	7200	7200
<b>Configuration/Organization</b>		
Bytes per Sector	512	512
Logical CHS	16,383/16/63	16,383/16/63
<b>Reliability/Data Integrity</b>		
Recording Method	16/17 EPRML	16/17 EPRML
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load
Load/Unload Cycles	600,000	600,000
Nonrecoverable Read Errors per Bits Read	1 per 10E14	1 per 10E14
<b>Power Management</b>		
Power (W)		
Seek, Typical	2.2	2.2
Idle, Typical	0.69	0.69
<b>Environmental</b>		
Temperature (°C)		
Operating	0 to 60	0 to 60
Nonoperating	-40 to 70	-40 to 70
Shock (Gs)		
Operating: 2 ms	350	350
Nonoperating: 1 ms	1000	1000
Acoustics (bels-sound power)		
Idle, Typical	2.3	2.3
Seek, Typical	2.6	2.6
<b>Physical</b>		
Height (in/mm)	0.370/9.5	0.370/9.5
Width (in/mm)	2.75/69.85	2.75/69.85
Depth (in/mm)	3.951/100.35	3.951/100.35
Weight (lb/g)	0.238/110	0.227/105

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

AMERICAS Seagate Technology LLC 920 Disc Drive, Scotts Valley, California 95066, United States, 831-438-6550  
ASIA/PACIFIC Seagate Singapore International Headquarters Pte. 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 1-4186 10 00

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