Data Sheet

Momentus® 5400 FDE Family

Self-Encrypting Drives with Seagate Secure® technology for mainstream laptop computers

500 GB and 250 GB • 5400 RPM • SATA 3Gb/s with NCQ

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

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 Momentus 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 family 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.

www.seagate.com
1-800-SEAGATE (1-800-732-4283)

Specifications	500 GB[1]	250 GB[1]
Model Number	ST9500327AS	ST9250317AS
Interface Options	SATA 3Gb/s NCQ	SATA 3Gb/s NCQ
Performance		
Transfer Rate		
Maximum Internal (Mb/s)	1175	1175
Maximum External (MB/s)	300	300
Cache (MB)	8	8
Average Latency (ms)	5.6	5.6
Spindle Speed (RPM)	5400	5400
Areal Density (Gb/in²)	394	394
Configuration/Organization		
Disks/Heads	2/4	1/2
Bytes per Sector	512	512
Reliability/Data Integrity		
G-Force Protection™	—	—
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
Annualized Failure Rate (AFR)	<0.48%	<0.48%
Power Management		
Startup Current 5V (amps max)	1.0	1.0
Power Management (W)		
Seek	1.54	1.54
Read/Write Avg	1.40/1.78	1.40/1.78
Idle/Standby Avg	0.67/0.22	0.67/0.22
Environmental		
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	2.4	2.4
Seek	2.6	2.6
Physical		
Height (in/mm)	0.374/9.5	0.374/9.5
Width (in/mm)	2.75/69.85	2.75/69.85
Depth (in/mm)	3.957/100.5	3.957/100.5
Weight (lb/kg)	0.218/98.8	0.206/93.5

1 One gigabyte, or GB, equals one billion bytes when referring to hard drive capacity.
2 Drive with G-Force Protection™ feature

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