Data Sheet

Momentus® 5400 FDE.3

Two types of Seagate Secure™ government-grade encryption

320 GB and 160 GB • 5400 RPM • SATA 1.5Gb/s and 3Gb/s with NCQ • Seagate Secure self-encrypting hard drive

Key Advantages

- Two types of government-grade security—enterprise mode and BIOS mode
- Hardware-based full disk encryption
- Encryption is transparent to the end user—no performance impact
- 5400-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 1.5Gb/s and 3Gb/s interfaces with NCQ
- 350 Gs shock tolerance at 2 ms, 1000 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

Seagate Secure™

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Two types of Seagate Secure™ government-grade encryption

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 designed-in, hardware-based security at the core of where all digital data lives, 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 designed-in encryption is an unnecessary hassle—and you wind up with less security. Hardware-based encryption is transparent to the user, with no performance overhead, and it's harder to break. With Seagate Secure technology at the core of the drive, all data is automatically encrypted when it's 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, there are two self-encrypting solutions available: BIOS mode and Enterprise mode. BIOS mode security can be easily set up for personal laptops and industrial applications. Enterprise mode is a comprehensive, centrally managed solution for enterprises; this mode requires security management software from an independent software vendor. For a list of Seagate Secure independent software vendors, visit www.seagate.com/security.

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

Specifications	320 GB[1]	160 GB[1]
Model Number		
Enterprise Mode[2]	ST9320322AS	ST9160312AS
BIOS Mode	ST9320329AS	ST9160319AS
Interface Options	SATA 1.5Gb/s and SATA 3Gb/s NCQ	SATA 1.5Gb/s and SATA 3Gb/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)	5400	5400
Configuration/Organization		
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
Nonrecoverable Read Errors per Bits Read	1 per 10E14	1 per 10E14
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
Nonoperating (°C)	–40 to 70	–40 to 70
Shock		
Operating: 2 ms (Gs)	350	350
Nonoperating: 1 ms (Gs)	1000	1000
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/gm)	0.212/98	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.
2 Enterprise mode FDE drives are limited availability, build-to-order only.

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