

Crypto SSD - SATA III - FIPS 140-2

**Full Disk Encryption
AES 256-bit**



64 GB

128 GB

256 GB

512 GB

1 TB

INTRODUCTION

The Integral Crypto SSD is the ideal solution for data protection. When the system is shut down, 256-bit full disk encryption is instigated.

If a PC or laptop with an Integral Crypto SSD installed is lost or stolen, sensitive data is secure and cannot be accessed without the high-strength password.

Crypto SSD is the no-fuss and highly-secure solid state encryption solution for many industries including; finance, legal, health, education and government.

FEATURES

- **Military level security with AES 256-bit hardware encryption** - More secure than a software-only solution.
- **FIPS 140-2 Validated** - Certificate No. 2126
- **Multi-lingual interface** – in 14 languages*

Security Features

- **Total Drive Encryption** - All data stored on the Crypto SSD is encrypted (including the Operating System).
- **Dual Password** - As an option an Administrator can setup a user password and a master override password. If the user forgets their password, the Crypto SSD can be unlocked by the Administrator and the user password reset.
- **Secure Entry** - Encrypted data cannot be accessed without the correct high-strength 8-16 character alphanumeric password. An optional password hint can be set-up which cannot be the same as the password. Before use a high-strength password must be set.

- **Brute-Force Password Attack Protection** - Encrypted data is automatically erased after the default 6 failed password attempts (password attempts configurable to a maximum of 20). The data and encryption key are securely destroyed and the Crypto SSD is reset and can then be reused.

- **Anti-Clone** - Crypto SSD cannot be cloned once encryption is set.

- **Tamper-Proof Design** - The electronics are sealed in tamper-proof epoxy resin.

- **Rugged Design** - The electronics are sealed in tamper-free epoxy resin and then shielded by a steel outer case.

- **High-speed Read/Write** – The Crypto SSD has both high encryption and the main benefit of a standard SSD; a high-speed sustained data transfer rate. Read and Write times are up to 450MB/s (R) and 350MB/s (W).

- **Quick Boot** - Using a Crypto SSD in place of a traditional HDD can cut your desktop computer or laptop's boot time in half.

- **No moving parts** - greater resistance to shock and vibration

- **Noise free** - no spin or seek time

- **Endpoint security software compatible** – The Integral Crypto SSD operates comfortably with endpoint security solutions by using the configurable unique ID feature, which is part of the software

- **Warranty** – 3 Years

Green Computing

- Uses 1/10 of the power of a normal spinning disk HDD
- Extends laptop battery life
- Super low power consumption during operation and sleep modes

Technical Features

- MLC-NAND Flash Technology
- SATA III 2.5" - 7mm Height (9mm with adapter provided)
- SATA Revision 3.0 compliant
- TRIM option
- S.M.A.R.T. option
- Power management supported
- 64GB and 128GB = 256MB DDR 3 Cache Buffer
- 256GB, 512GB and 1TB = 512MB DDR 3 Cache Buffer
- CE and FCC certified and RoHS compliant
- Compatible with Windows XP, Vista, 7 and 8

PERFORMANCE & INTERFACE		
64GB	Read	450MB/s (max) ¹
	Write	190MB/s (max) ¹
128GB	Read	450MB/s (max) ¹
	Write	330MB/s (max) ¹
256GB, 512GB, 1TB	Read	450MB/s (max) ¹
	Write	350MB/s (max) ¹
Interface		SATA III (SATA 6Gbps, 3Gbps and 1.5Gbps)
RELIABILITY		
Wear levelling		Static & Dynamic
MTBF		1,000,000 hours
ECC		72 bit per 1KB
Data Retention		10 years
POWER CONSUMPTION		
Power requirement		5V
Read Mode (mW)		64GB = 2340; 128GB = 2435; 256GB = 2445; 512GB = 2500; 1TB = 2610
Write Mode (mW)		64GB = 2305; 128GB = 3500; 256GB = 4180; 512GB = 4560; 1TB = 4515
Sleep Mode (mW)		64GB = 295; 128GB = 305; 256GB = 300; 512GB = 295; 1TB = 290
*The power consumption may vary depending on flash configuration and platform setting.		
ENVIRONMENTAL		
Operating Temp		0° - +70°C
Non - Operating Temp		-40° - +85°C
Humidity		RH=90% under 40°C
Vibration		20G (80-2000Hz)
Shock		500G (0.2msec)
PHYSICAL		
Length		100.1mm
Width		69.85mm
Height		7mm (9mm with height adjustment adapter applied)
Weight		76(g)
WARRANTY		
3 years		

APPROVED SECURITY FUNCTION	CERTIFICATE
AES (H/W implementation) • CBC (enc/dec; 256)	2175
XTS 128, XTS 256	2175
HMAC 512 HMAC 256	1335
DRBG	254
SHA 512 SHA 256	1887

*14 languages supported by the software GUI -

- | | |
|-----------|--------------|
| - Arabic | - Italian |
| - Chinese | - Norwegian |
| - Dutch | - Polish |
| - English | - Portuguese |
| - French | - Russian |
| - German | - Spanish |
| - Hindi | - Swedish |

CAPACITY	PART CODE	BARCODE (EAN)
64GB	INSSD64GS625M7CR140	5055288425828
128GB	INSSD128GS625M7CR140	5055288425835
256GB	INSSD256GS625M7CR140	5055288425842
512GB	INSSD512GS625M7CR140	5055288425859
1TB	INSSD1TS625M7CR140	5055288427358

Please Note: No security software can be guaranteed 100% secure.

This device should not be used as your sole backup.

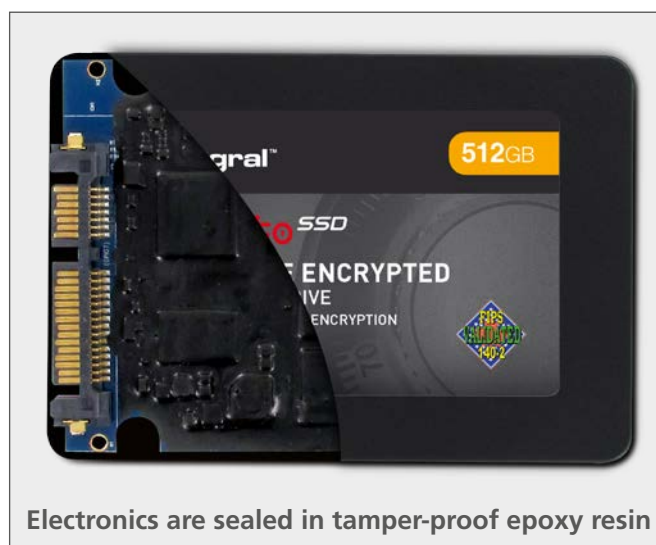
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For products with security software or hardware; the product cannot be guaranteed to be fully secure. No security system can be considered absolute.

For warranty information please visit www.integralmemory.com/warranty

¹Performance based on internal testing.



Electronics are sealed in tamper-proof epoxy resin