

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, 8.1

PERFORMANCE & INTERFACE		
64GB	Read	400MB/s (max) ¹
	Write	80MB/s (max) ¹
128GB	Read	250MB/s (max) ¹
	Write	160MB/s (max) ¹
256GB	Read	450MB/s (max) ¹
	Write	295MB/s (max) ¹
512GB, 1TB	Read	450MB/s (max) ¹
	Write	375MB/s (max) ¹
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 = 2,350; 128GB = 2,580; 256GB = 2,780; 512GB = 2,820; 1TB = 3,220
Write Mode (mW)		64GB = 2,480; 128GB = 2,750; 256GB = 4,395; 512GB = 5,610; 1TB = 5,860
Sleep Mode (mW)		64GB = 290; 128GB = 295; 256GB = 325; 512GB = 295; 1TB = 300
*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)
DIMENSIONS		
Length		100.1mm
Width		69.85mm
Depth		7mm (9mm with height adjustment adapter applied)
Weight		76(g)
Length (Packed)		230mm
Width (Packed)		161mm
Depth (Packed)		15mm
Weight (Packed)		157(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
- Chinese
- Dutch
- English
- French
- German
- Hindi
- Italian
- Norwegian
- Polish
- Portuguese
- Russian
- Spanish
- 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.

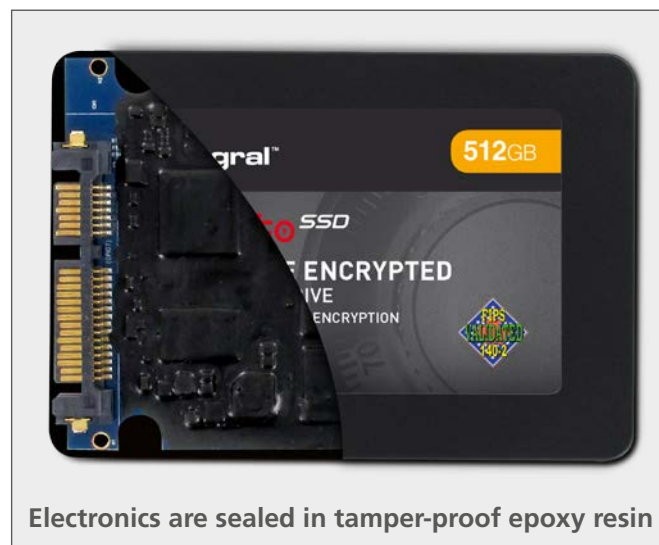
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For products with security software or hardware; the product cannot be guaranteed to be fully secure. No security system can be considered absolute.

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

¹Performance based on internal testing.



Electronics are sealed in tamper-proof epoxy resin