Crypto SSD - SATA III - FIPS 197

Full Disk Encryption
AES 256-bit

64 GB   128 GB   256 GB   512 GB

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 encryption** - More secure than a software-only solution.

• **FIPS 197 Validated** - Certificate No. 1832

• **Multi-lingual interface** – in 13 languages*

Security Features

– **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.

– **Total Drive Encryption** - All data stored on the Crypto SSD is encrypted (including the Operating System).

– **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.

• **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 420MB/s (R) and 340MB/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** – 2 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 and 512GB = 512MB DDR 3 Cache Buffer

- CE and FCC certified and RoHs compliant

- Compatible with Windows XP, Vista, 7 and 8

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	INSSD64GS625M7CR197	5055288421264
128GB	INSSD128GS625M7CR197	5055288421257
256GB	INSSD256GS625M7CR197	5055288421240
512GB	INSSD512GS625M7CR197	5055288421233

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

This device should not be used as your sole backup.

Product design and specification subject to change or modification without notice. E&OE.

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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

[1]Performance based on internal testing.

PERFORMANCE & INTERFACE		
64GB	Read	420MB/s (max)[1]
	Write	190MB/s (max)[1]
128GB	Read	420MB/s (max)[1]
	Write	200MB/s (max)[1]
256GB	Read	420MB/s (max)[1]
	Write	340MB/s (max)[1]
512GB	Read	420MB/s (max)[1]
	Write	340MB/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	2.6W*	
Write Mode	3W (64GB/128GB)	5W (256GB/512GB)
Sleep Mode	0.3W	

*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)

integral™