



256-bit AES HARDWARE ENCRYPTED PRODUCT RANGE



integralmemory.com



Introducing integral

Integral Memory plc are one of the largest digital memory producers in Europe with more than 25 years of sales success.

Integral was founded in London, England during 1989 and quickly became one of Europe's leading DRAM specialists. Over the next two decades Integral expanded its product range as the solid-state flash memory market matured. Integral has long-term partnerships with leading component suppliers including Toshiba, Samsung and Hynix. International sales offices have been established in France, Spain, the Netherlands and UAE.

The Integral range includes a cutting-edge FIPS 140-2 validated Hardware Encrypted SSD and a selection of FIPS 140-2 validated, USB Flash Drives with AES 256-bit encryption; ensuring sensitive data stored on the USB cannot be compromised.

Our passion is to bring you the latest memory products built on quality, reliability and great prices.

For detailed product information and technical support please visit our website www.integralmemory.com

Hardware Encrypted USB Flash Drives

Portable data security is a challenge facing all IT departments and government bodies. All data that is off company premises is at risk.

Integral produce a range of AES 256-bit hardware encrypted USB Flash Drives that provide an easy to use, cost effective and highly secure solution that is designed to work with your end-point security. Dual password versions are also available, making these more easy to manage in I.T. departments.

Our encrypted USB Flash Drive range is FIPS 197/140-2 validated and all models are zero footprint, so no software installation is required. All files transferred to the drive are automatically encrypted and are protected by a mandatory high-strength password. All Crypto products will securely destroy data safely if the set password attempts are exceeded, protecting your data if lost or stolen.

Hardware Encrypted Solid State Drives

Hard Drive security is a challenge facing all IT departments and government bodies.

Integral produce a range of AES 256-bit hardware encrypted SSDs that provide an easy to use, cost effective and highly secure solution that is designed to work with your end-point security.

If a PC/laptop/ultrabook/tablet protected with an Integral Crypto SSD is lost or stolen, sensitive data is securely encrypted and cannot be accessed without the high-strength password. This includes the operating system as well as all other files that are stored on the drive. An unauthorised user WILL NOT be able to boot the system or access any data by transferring the Crypto SSD to another system or by cloning the drive.

Our Crypto range is FIPS 140-2 validated and all models are zero footprint, so no software installation is required. All files on the drive are automatically encrypted and are protected by a mandatory high-strength password. All Crypto products will securely destroy data safely if the set password attempts are exceeded, protecting your data if lost or stolen.

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

Hardware encryption in 3 easy steps

- 1. Install the Crypto SSD in your host device. A Windows operating system is required. This can be cloned from an existing drive or image (with OS and data) before the Crypto SSD is fitted, or a fresh installation can be completed after the Crypto SSD is fitted in your host device, by using the manufacturers setup disks.
- 2. Run the "SSDLock" program once (supplied on a USB) to set the encryption and specify usernames and passwords. Power down.
- 3. Your system is now protected with Full Disk Encryption (FDE). On every boot up, a valid username and password is required to access the system.

Why choose hardware encryption over software encryption?

The major difference between hardware encryption and software encryption is that with hardware based encryption, the encryption and decryption processes are carried out by a dedicated processor (part of the Integral Crypto hardware). In software encryption, the resources of the device on which the software is installed are used for the encrypting and decrypting of data. This makes hardware encryption much faster. Another significant advantage of hardware encryption is that the cryptographic key is stored in a separate inaccessible portion of memory storage, making it more secure than software encryption.

What is the difference between FIPS 140-2 and FIPS 197 certification?

FIPS 197 certification looks at the hardware encryption algorithms used to protect the data. FIPS 140-2 is the next, more advanced level of certification. FIPS 140-2 includes a rigorous analysis of the product's physical properties. So, with a FIPS 140-2 certified SSD the tamper-proof design of the circuit board has been approved, as well as the data encryption. FIPS certification proves that the product has been tested by an independent government approved laboratory.

Crypto SSD and USB drives are used and trusted worldwide by government departments, global corporations and SMEs.

NEW

USB 3.0





Courier Dual USB 3.0 FIPS 197

- **Dual password / Master password override** in addition to a high-strength user password. If a user forgets their password the Courier Dual can be accessed with a master password by an IT administrator (optional)
- AES 256-bit hardware encryption
- FIPS 197 Validated Certificate No. 2590
- USB 3.0 SuperSpeed data transfer with compatible PC/ Mac hardware
- Secure Entry Data cannot be accessed or removed without the correct high strength 8-16 character password
- Brute-force Password Attack Protection Data will be automatically erased after 6 failed access attempts and Drive reset
- Dual OS Compatible with both Windows and Mac
- Personal ID Function (optional) Contact details can be added so that Drive can be returned, whilst confidential data remains secure
- Zero Footprint No software installation required
- Multi-lingual interface and a simple user interface for "out of the box" use





Hardware Unique ID available for use with Endpoint software, see page 11

Courier Dual USB 3.0 FIPS 197	
	Courier Dual 3.0 FIPS 197
8GB	INFD8GCOUDL3.0-197
16GB	INFD16GCOUDL3.0-197
32GB	INFD32GCOUDL3.0-197
64GB	INFD64GCOUDL3.0-197

Courier USB 3.0 FIPS 197

- AES 256-bit hardware encryption
- FIPS 197 Validated Certificate No. 2590
- USB 3.0 SuperSpeed data transfer with compatible PC/ Mac hardware
- Secure Entry Data cannot be accessed or removed without the correct high strength 8-16 character password
- Brute-force Password Attack Protection Data will be automatically erased after 6 failed access attempts and Drive reset
- Dual OS Compatible with both Windows and Mac
- **Personal ID Function (optional)** Contact details can be added so that Drive can be returned, whilst confidential data remains secure
- Zero Footprint No software installation required
- Multi-lingual interface and a simple user interface for "out of the box" use
- Single user password





Hardware Unique ID available for use with Endpoint software, see page 11

Courier USB 3.0 FIPS 197		
	Courier 3.0 FIPS 197	
8GB	INFD8GCOU3.0-197	
16GB	INFD16GCOU3.0-197	
32GB	INFD32GCOU3.0-197	
64GB	INFD64GCOU3.0-197	



Crypto Dual FIPS 140-2 / FIPS 197

- Dual password / Master password override in addition to a highstrength user password. If a user forgets their password the Crypto Dual can be accessed with a master password by an IT administrator (optional)
- Dual OS Compatible with both Windows and Mac AES 256-bit hardware encryption
- FIPS 140-2/FIPS 197 Validated Certificate No. 1821/1137
- Secure Entry Data cannot be accessed without the correct high strength alphanumeric 8-16 character password. A password hint option is available. The password hint cannot match the password
- Brute-Force Password Attack Protection Data is automatically erased after 6 failed access attempts. The data and encryption key are securely destroyed and the Crypto Drive is reset
- Auto-lock The Crypto Drive will automatically encrypt all data and lock when removed from a PC or when the screen saver or "computer lock" function is activated on the host PC
- Password Entry Count The Crypto Drive records the failed entry count. e.g. if the Crypto is removed after 2 failed attempts and reinserted, the drive will resume with the 3rd attempt
- Personal ID Function As an option, contact details can be added to the Crypto that can be viewed without compromising encrypted data
- **Unique number** The USB pin on each drive is etched with a unique and random 7-digit code. This allows a record to be kept of which drive has been allocated to a specific user
- Rugged triple-layer waterproof design Protects the Crypto Drive against knocks, drops, break-in and submerging in water. The electronics are sealed in epoxy resin and then shielded by a steel inner case. The rubberised silicone outer casing provides a final layer of protection
- Multi-lingual interface and a simple user interface for "out of the box" use



Crypto Dual + FIPS 140-2 / FIPS 197

- Feature set as above
- Expanded design allows for massive storage capacity of 64GB and 128GB
- 4-Channel access for faster read/ write



Hardware Unique ID available for use with Endpoint software, see page 11



Crypto Dual FIPS 140-2

2GB	INFD2GCRYPTODL140-2
4GB	INFD4GCRYPTODL140-2
8GB	INFD8GCRYPTODL140-2
16GB	INFD16GCRYPTODL140-2
32GB	INFD32GCRYPTODL140-2

Crypto Dual FIPS 197

2GB	INFD2GCRYPTODL197
4GB	INFD4GCRYPTODL197
8GB	INFD8GCRYPTODL197
16GB	INFD16GCRYPTODL197
32GB	INFD32GCRYPTODL197



Crypto Dual P	lus FIPS 140-2	
64GB	INFD64GCRYDLPL140-2	
128GB	INFD128GCRYDLPL140-2	
Crypto Dual P	lus FIPS 197	
Crypto Dual P 64GB	IUS FIPS 197 INFD64GCRYDLPL197	

Crypto Drive FIPS 140-2 / FIPS 197

- · AES 256-bit hardware encryption
- FIPS 140-2/FIPS 197 Validated Certificate No. 1821/1137
- Dual OS (FIPS 197 only) Compatible with both Windows and Mac
- Secure Entry Data cannot be accessed without the correct high strength alphanumeric 8-16 character password. A password hint option is available. The password hint cannot match the password
- Brute-Force Password Attack Protection Data is automatically erased after 6 failed access attempts. The data and encryption key are securely destroyed and the Crypto Drive is reset
- Auto-lock The Crypto Drive will automatically encrypt all data and lock when removed from a PC or when the screen saver or "computer lock" function is activated on the host PC
- Zero Footprint No software installation required
- Password Entry Count The Crypto Drive records the failed entry count. e.g. if the Crypto is removed after 2 failed attempts and reinserted, the drive will resume with the 3rd attempt
- Personal ID Function As an option, contact details can be added to the Crypto that can be viewed without compromising encrypted data
- Unique number (FIPS 140-2 only) The USB pin on each drive is etched with a unique and random 7-digit code. This allows a record to be kept of which drive has been allocated to a specific user
- Rugged triple-layer waterproof design Protects the Crypto Drive against knocks, drops, break-in and submerging in water. The electronics are sealed in epoxy resin and then shielded by a steel inner case. The rubberised silicone outer casing provides a final layer of protection
- Multi-lingual interface and a simple user interface for "out of the box" use "Up to 4 ft. water; conforms to IEC 60529 IPX8







Hardware Unique ID available for use with Endpoint software, see page 11



Crypto Drive FIPS140-2 / FIPS 197		
	Crypto FIPS 140-2	Crypto FIPS 197
2GB	INFD2GCRYPTO140-2	INFD2GCRYPTO197
4GB	INFD4GCRYPTO140-2	INFD4GCRYPTO197
8GB	INFD8GCRYPTO140-2	INFD8GCRYPTO197
16GB	INFD16GCRYPTO140-2	INFD16GCRYPTO197
32GB	INFD32GCRYPTO140-2	INFD32GCRYPTO197

Courier FIPS 197

The best selling Integral Courier is available in an Advanced Encryption Standard (AES) Security Edition.

- AES 256-bit hardware encryption
- FIPS 197 Validated Certificate No. 1137
- Secure Entry Data cannot be accessed or removed without the correct high strength 8-16 character password
- Brute-force Password Attack Protection Data will be automatically erased after 6 failed access attempts and Drive reset
- Zero Footprint No software installation required
- Multi-lingual interface and a simple user interface for "out of the box" use
- Cap stores in base when Drive is in use
- 2 year warranty



Hardware Unique ID available for use with Endpoint software, see page 11



Courier - FIPS 197		
2GB	INFD2GBCOUAT	
4GB	INFD4GBCOUAT	
8GB	INFD8GBCOUAT	
16GB	INFD16GBCOUAT	
32GB	INFD32GBCOUAT	

Crypto	Lintegral Og	integral Co	Preagraf Con-	Integral Of the second
Specs Available Capacities	Crypto 140-2 2GB, 4GB, 8GB,	Crypto 197 2GB, 4GB, 8GB,	Crypto Dual 197 2GB, 4GB, 8GB,	Crypto Dual 140-2 2GB, 4GB, 8GB,
Available Gapacities AES 256-bit	16GB, 32GB	16GB, 32GB	16GB, 32GB	16GB, 32GB
hardware encryption	✓	✓	✓	✓
FIPS Validation and Certificate number	FIPS 140-2 Level 2 Certificate No. 1424	FIPS 197 Certificate No. 1137	FIPS 197/140-2 Level 2 Certificate No. 1137	FIPS 197/140-2 Level 2 Certificate No. 1821
Mandatory encryption of all files	✓	✓	✓	✓
USB	2.0	2.0	2.0	2.0
Zero Footprint - No software required	✓	\checkmark	\checkmark	✓
Compatible with Endpoint security systems	~	✓	~	✓
Works on Windows without administrator privileges	~	~	~	✓
Works on Mac OS X without administrator privileges	-	~	~	✓
Secure Entry - Password Mandatory	\checkmark	\checkmark	\checkmark	\checkmark
	\checkmark	\checkmark	\checkmark	\checkmark
Brute-Force Password Attack Protection	\checkmark	\checkmark	\checkmark	\checkmark
Auto-Lock	✓	√1	√1	√ 1
Password Entry Count	√	√	√	\checkmark
Personal ID Function	\checkmark	\checkmark	\checkmark	\checkmark
Rugged triple-layer waterproof design	\checkmark	\checkmark	\checkmark	\checkmark
User manual stored on drive	~	\checkmark	~	✓
Multi-lingual interface	24 Languages	24 Languages	26 Languages	26 Languages
Dual Password	-	-	~	✓
Dual OS - PC & Mac compatible	-	\checkmark	\checkmark	✓
4 Channel access (faster read & write speeds)	-	-	-	-
Serial Number Etching	√	available on request	✓	\checkmark

What is FIPS?

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FIPS (Federal Information Processing Standards) is a US & Canadian certification which is recognised around the world as AES compliant devices that can be utilized by Federal agencies or departments for the purpose of protecting sensitive data. For more on FIPS, please see page 2

Hardware Unique ID available for use with Endpoint software, see page 11

			NEW USB 3.0	NEW USB 3.0
			USB 3.0	USB 3.0
integral 07274 Dual 2015 201	Crype DIAL- 70% 10-1	integral attra som	E E E E E E E E E E E E E E E E E E E	COVIL-
Crypto Dual+ 197	Crypto Dual+ 140-2	Courier FIPS 197	Courier Dual 3.0 197	Courier 3.0 197
64GB, 128GB	64GB, 128GB	2GB, 4GB, 8GB, 16GB, 32GB	8GB, 16GB, 32GB, 64GB	8GB, 16GB, 32GB, 64GB
\checkmark	\checkmark	×	\checkmark	\checkmark
FIPS 197 Level 2 Certificate No. 1137	FIPS 140-2 Level 2 Certificate No. 1821	FIPS 197 Level 2 Certificate No. 1137	FIPS 197 Certificate No. 2590	FIPS 197 Certificate No. 2590
~	✓	✓	\checkmark	✓
2.0	2.0	2.0	2.0/3.0	2.0 /3.0
✓	~	✓	\checkmark	\checkmark
✓	~	✓	\checkmark	\checkmark
✓	~	✓	\checkmark	\checkmark
✓	✓	✓	\checkmark	\checkmark
✓	✓	×	✓	\checkmark
✓	✓	×	\checkmark	\checkmark
✓	✓	✓	\checkmark	\checkmark
√1	✓1	✓1	√ 1	√1
✓	~	✓	\checkmark	\checkmark
\checkmark	~	✓	\checkmark	\checkmark
\checkmark	✓	-	-	-
~	~	✓	\checkmark	\checkmark
26 Languages	26 Languages	24 Languages	26 Languages	26 Languages
~	~	-	\checkmark	-
✓	~	✓	\checkmark	\checkmark
~	~	-	-	-
~	~	available on request	available on request	available on request

What is AES Hardware Encryption?

AES stands for Advanced Encryption Standard. Many government bodies around the world have adopted this encryption model. Integral Encrypted USB Flash Drives use the highest 256-bit AES encryption key.

¹ Locks if PC is idle for more than 10 mins



BIOS Independent Crypto SSD security system runs independently of your system BIOS, unlike other hardware encrypted SSDs

> Seamless encryption unnoticeable to the user

ADMIN+USER passwords configurable



Details on request

Full Disc Encryption with no licensing or subscription fees.

Crypto SSD 2.5" SATA III (6Gbps)

Crypto SSD is the Full Disk Encryption solution for Windows desktops and laptops. Featuring AES 256-bit Hardware Encryption so you can encrypt and protect your sensitive data and get the speed, reliability and power benefits of SSD. Once encryption is set, a valid user name and password is required to access the Crypto SSD prior to system boot (before Windows loads).

- FIPS 140-2 Validated
- Mandatory encryption
- Secure Entry Encrypted data cannot be accessed • without the correct high-strength 8-16 character alphanumeric password. Before use a high-strength password must be set
- Rugged Design The electronics are sealed in tamperfree epoxy resin and then shielded by a metal outer case
- High-speed Read/Write up to 450MB/s
- Quick Boot Using a solid state disk in place of a traditional hard drive can cut your desktop computer or laptop's boot time in half
- Shockproof no moving parts, so a greater resistance to shock and vibration than HDD
- Ultra-slim form factor (7mm) Ideal for the latest slimline laptops, 7mm → 9mm adapter also included

- Silent operation no spin or seek time
- Low heat a more comfortable user experience
- Low power usage laptop battery will last far longer with SSD than HDD
- Endpoint security software compatible The Integral Crypto SSD operates comfortably with endpoint security solutions by using the configurable hardware unique ID feature, which is part of the program
- OPAL compliant specification available please contact sales team for information
- Warranty 3 Years





Crypto SSD SATA III - FIPS 140-2		
INSSD64GS625M7CR140		
INSSD128GS625M7CR140		
INSSD256GS625M7CR140		
INSSD512GS625M7CR140		
INSSD1TS625M7CR140		





Full Disc Encryption with no licensing or subscription fees.



BIOS Independent Crypto SSD security system runs independently of your system BIOS, unlike other hardware encrypted SSDs

Crypto SSD M.2 SATA III (6Gbps)

Crypto M.2 SSD is the **Full Disk Encryption** solution for Windows laptops and UltraBooks. Featuring **AES 256-bit Hardware Encryption** so you can encrypt and protect your sensitive data and get the speed, reliability and power benefits of SSD. Once encryption is set, a valid user name and password is required to access the Crypto M.2 SSD computer with the installed prior to system boot (before Windows loads).

- FIPS 140-2
- Mandatory encryption
- Secure Entry Encrypted data cannot be accessed without the correct high-strength 8-16 character alphanumeric password. Before use a high-strength password must be set
- Secure Design the electronics are sealed in tamper-free epoxy resin
- High-speed Read/Write up to 450MB/s
- Quick Boot Using a solid state disk in place of a traditional hard drive can cut your laptop's boot time in half
- **Shockproof** no moving parts, so a greater resistance to shock and vibration than HDD
- Silent operation no spin or seek time

Crypto M.2 SATA 22X60

128GB	INSSD128GM2M2260C140
256GB	INSSD256GM2M2260C140
512GB	INSSD512GM2M2260C140

Seamless encryption unnoticeable to the user

ADMIN+USER passwords configurable

- Low heat a more comfortable user experience
- Low power usage laptop battery will last far longer with SSD than HDD
- Endpoint security software compatible The Integral Crypto M.2 SSD operates comfortably with endpoint security solutions by using the configurable hardware unique ID feature, which is part of the program
- M.2 form factor with SATA III 6Gbps interface (backwards compatible with SATA 3Gbps and SATA 1.5Gbps)
- Warranty 3 Years

Crypto M.2 SATA 22X80		
64GB	INSSD64GM2M2280C140	
128GB	INSSD128GM2M2280C140	
256GB	INSSD256GM2M2280C140	

BIOS Independent Crypto SSD security system runs independently of your system BIOS, unlike other hardware encrypted SSDs

Seamless encryption unnoticeable to the user

ADMIN+USER passwords configurable





OPAL Compliant Specification Available

Details on request

Full Disc Encryption with no licensing or subscription fees.

Crypto SSD mSATA III (6Gbps)

Crypto mSATA SSD is the **Full Disk Encryption** solution for small form factor machines, Windows laptops and UltraBooks. Featuring **AES 256-bit Hardware Encryption** so you can encrypt and protect your sensitive data and get the speed, reliability and power benefits of SSD. Once encryption is set, a valid user name and password is required to access the Crypto mSATA SSD prior to system boot (before Windows loads).

- FIPS 140-2
- Mandatory encryption
- Secure Entry Encrypted data cannot be accessed without the correct high-strength 8-16 character alphanumeric password. Before use a high-strength password must be set
- Secure Design the electronics are sealed in tamper-free epoxy resin
- High-speed Read/Write up to 450MB/s
- Quick Boot Using a solid state disk in place of a traditional hard drive can cut your desktop computer or laptop's boot time in half

- **Shockproof** no moving parts, so a greater resistance to shock and vibration than HDD
- Silent operation no spin or seek time
- Low heat a more comfortable user experience
- Low power usage laptop battery will last far longer with SSD than HDD
- Endpoint security software compatible The Integral Crypto mSATA SSD operates comfortably with endpoint security solutions by using the configurable hardware unique ID feature, which is part of the program
- mSATA form factor with SATA III 6Gbps interface (backwards compatible with SATA 3Gbps and SATA 1.5Gbps)
- Warranty 3 Years

Crypto mSATA SSD - FIPS 140-2	
32GB	INSSD32GMSA6MCR140
64GB	INSSD64GMSA6MCR140
128GB	INSSD128GMSA6MCR140
256GB	INSSD256GMSA6MCR140



Customisation



Hardware Unique ID for Endpoint software

The Integral hardware encrypted Flash Drive range can be personalised with a designated company identifying name or number. This will allow a Network Administrator to block access to unrecognised USBs for security purposes, whilst allowing the Integral encrypted Flash Drive to function as the 'official' company drive.

During production a personalised tag (e.g. "LONDON UNIVERSITY") can be embedded into the Crypto that can be viewed on a PC. The tag gives Endpoint software a convenient way to identify Integral drives.

Each drive can be personalized further (upon request) with an individual user specific personal tag e.g "LONDON UNIVERSITY" – USER1234" if required.

This personalisation can be offered on any Integral USB Flash Drive (requested at time of order).

TotalLock (E:) Properties 🛛 🔹 💽 🔀		
General AutoPlay Hardware Sharing Record	ing	
All disk drives:		
Name	Туре	
See Hitachi HDS721616PLA380	Disk drives	
CONDON UNIVERSITY - AES USB Device	Disk drives	
HL-DT-ST DVD-RAM GSA-H60L	DVD/CD-R	
School UNIVERSITY - AES USB Device	DVD/CD-R	
	>	
Device Properties		
Manufacturer: (Standard disk drives)		
Location: Location 0		
Device Status: This device is working properly.		
Troubleshoot Properties		
OK Cancel	Apply	

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