

integral™



256-bit AES HARDWARE ENCRYPTED PRODUCT RANGE



USB 3.0 ♦ USB 2.0 ♦ SSD

integralmemory.com

Introducing **integral**™

Integral Memory plc are one of the largest digital memory producers in Europe with more than 20 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, the UAE and most recently the United States.

The Integral range includes a cutting-edge 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 and Solid State Drives

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

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

Our Crypto 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.

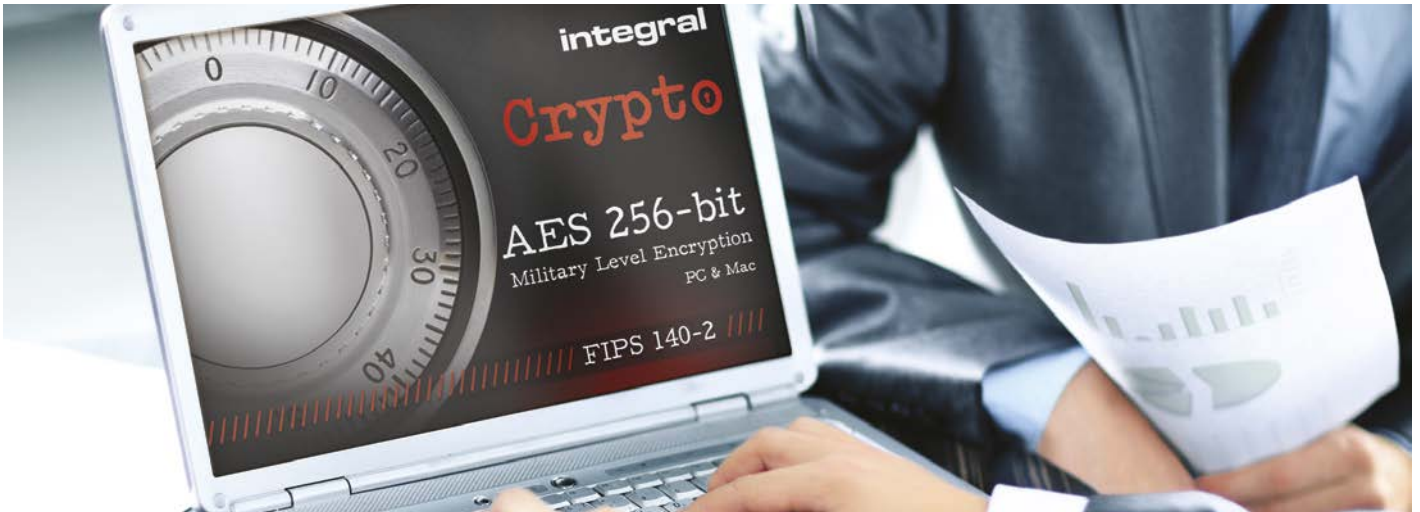
Why choose hardware encryption over software encryption?

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 Integral USB Flash Drive, the tamper-proof design of the circuit board has been approved, as well as the data encryption.

Crypto Drives are used and trusted worldwide by government departments, global corporations and SMEs.



Crypto Dual FIPS 140-2 / FIPS 197

- **Dual password / Master password override** in addition to a high-strength 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

2GB	INF22GCRYPTODL140-2
4GB	INF44GCRYPTODL140-2
8GB	INF88GCRYPTODL140-2
16GB	INF16GCRYPTODL140-2
32GB	INF32GCRYPTODL140-2

Crypto Dual FIPS 197

2GB	INF22GCRYPTODL197
4GB	INF44GCRYPTODL197
8GB	INF88GCRYPTODL197
16GB	INF16GCRYPTODL197
32GB	INF32GCRYPTODL197

Unique ID available for use with Endpoint software, see page 7

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



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Crypto Dual Plus FIPS 140-2

64GB	INF64GCRYDLPL140-2
128GB	INF128GCRYDLPL140-2

Crypto Dual Plus FIPS 197

64GB	INF64GCRYDLPL197
128GB	INF128GCRYDLPL197

Courier Dual USB 3.0 FIPS 197

NEW

- **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



USB 3.0
FLASH DRIVE



Courier USB 3.0 FIPS 197

- Feature set as above
- Single user password



USB 3.0



Courier Dual USB 3.0 / Courier USB 3.0 FIPS 197

	Courier Dual 3.0 FIPS 197	Courier 3.0 FIPS 197
8GB	INF88GCOUDL3.0-197	INF88GCOU3.0-197
16GB	INF16GCOUDL3.0-197	INF16GCOU3.0-197
32GB	INF32GCOUDL3.0-197	INF32GCOU3.0-197
64GB	INF64GCOUDL3.0-197	INF64GCOU3.0-197

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



integralmemory.com/video

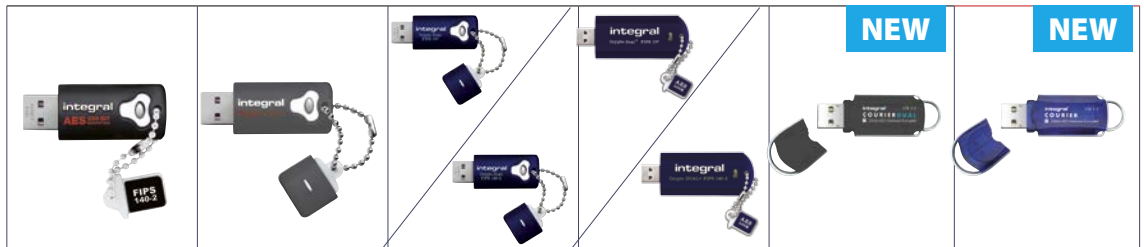


Crypto Drive FIPS140-2 / FIPS 197

	Crypto FIPS 140-2	Crypto FIPS 197
2GB	INF22GCRYPTO140-2	INF22GCRYPTO197
4GB	INF44GCRYPTO140-2	INF44GCRYPTO197
8GB	INF88GCRYPTO140-2	INF88GCRYPTO197
16GB	INF16GCRYPTO140-2	INF16GCRYPTO197
32GB	INF32GCRYPTO140-2	INF32GCRYPTO197

USB - Hardware Encryption

Crypto



Specs	Crypto 140-2	Crypto 197	Crypto Dual 197/140-2	Crypto Dual+ 197/140-2	Courier Dual 3.0 197	Courier 3.0 197
Available Capacities	2GB, 4GB, 8GB, 16GB, 32GB	2GB, 4GB, 8GB, 16GB, 32GB	2GB, 4GB, 8GB, 16GB, 32GB	64GB, 128GB	8GB, 16GB, 32GB	8GB, 16GB, 32GB
AES 256-bit 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/ 1821	FIPS 197/140-2 Level 2 Certificate No. 1137/ 1821	FIPS 197 Certificate No. 2590	FIPS 197 Certificate No. 2590
Mandatory encryption of all files	✓	✓	✓	✓	✓	✓
USB	2.0	2.0	2.0	2.0	2.0/3.0	2.0/3.0
Zero Footprint - No software required	✓	✓	✓	✓	✓	✓
Compatible with Endpoint security systems	✓	✓	✓	✓	✓	✓
Works on Windows without administrator privileges	✓	✓	✓	✓	✓	✓
Works on Mac OS X without administrator privileges	-	✓	✓	✓	✓	✓
Secure Entry - Password Mandatory	✓	✓	✓	✓	✓	✓
High-Strength Password Enforcement	✓	✓	✓	✓	✓	✓
Brute-Force Password Attack Protection	✓	✓	✓	✓	✓	✓
Auto-Lock	✓	✓ ¹	✓ ¹	✓ ¹	✓ ¹	✓ ¹
Password Entry Count	✓	✓	✓	✓	✓	✓
Personal ID Function	✓	✓	✓	✓	✓	✓
Rugged triple-layer waterproof design	✓	✓	✓	✓	-	-
User manual stored on drive	✓	✓	✓	✓	✓	✓
Multi-lingual interface	24 Languages	24 Languages	26 Languages	26 Languages	26 Languages	26 Languages
Dual Password	-	-	✓	✓	✓	-
Dual OS - PC & Mac compatible	-	✓	✓	✓	✓	✓
4 Channel access (faster read & write speeds)	-	-	-	✓	-	-
Serial Number Etching	✓	available on request	✓	✓	-	-

¹ Locks if PC is idle for more than 10 mins

What is FIPS?

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

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.



Unique ID available for use with Endpoint software, see page 7

Crypto SSD



OPAL Compliant
Specification Available

Full Disc Encryption with No licensing or subscription fees.

Crypto SSD

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).

- **Rugged Design** - The electronics are sealed in tamper-free epoxy resin and then shielded by a metal outer case
- **High-speed Read/Write** - up to 240MB/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 unique ID feature, which is part of the software
- **OPAL compliant specification available** - please contact sales team for information
- **Warranty** - 2 Years



Crypto SSD SATA III - FIPS 140-2	
64GB	INSSD64GS625M7CR140
128GB	INSSD128GS625M7CR140
256GB	INSSD256GS625M7CR140
512GB	INSSD512GS625M7CR140

Crypto SSD SATA III - FIPS 197	
64GB	INSSD64GS625M7CR197
128GB	INSSD128GS625M7CR197
256GB	INSSD256GS625M7CR197
512GB	INSSD512GS625M7CR197

Crypto mSATA SSD

Crypto mSATA SSD is the **Full Disk Encryption** solution for small form factor 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).

- **Secure Design** - the electronics are sealed in tamper-free epoxy resin
- **High-speed Read/Write** - up to 240MB/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 unique ID feature, which is part of the software
- mSATA form factor with SATA III 6Gbps interface (backwards compatible with SATA 3Gbps and SATA 1.5Gbps)
- Warranty - 2 Years



Ultra Fast



Low Power Use



Zero Noise



Shockproof



Crypto mSATA SSD - FIPS 140-2

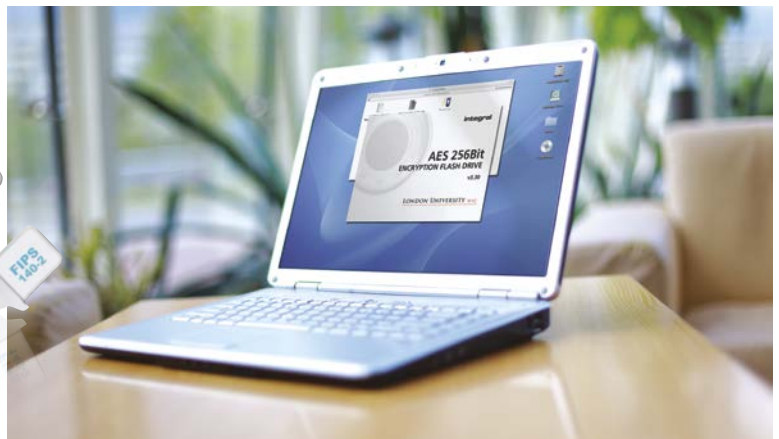
32GB	INSSD32GMSA6MCR140
64GB	INSSD64GMSA6MCR140
128GB	INSSD128GMSA6MCR140
256GB	INSSD256GMSA6MCR140

Crypto mSATA SSD- FIPS 197

64GB	INSSD64GMSA6MCR197
128GB	INSSD128GMSA6MCR197
256GB	INSSD256GMSA6MCR197

Customisation

Customisation Available - Your own serial number etching, Flash Drive and GUI can be customised to suit your brand (subject to minimum order quantities).



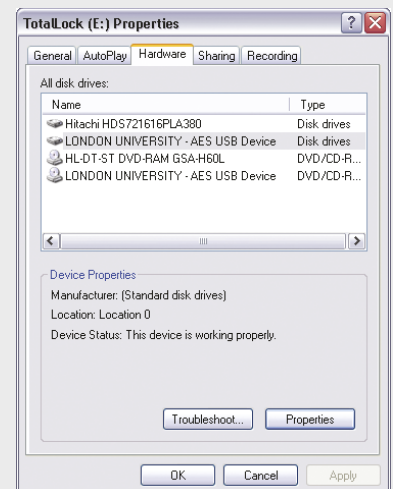
Unique ID for Endpoint software

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).



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