# diskashur<sup>2</sup> SSD

## Secure, Fast & Easy to Use Encrypted Portable Solid State Drive

Introducing the latest in PIN authenticated, hardware encrypted portable Solid State Drive incorporating unique iStorage Enhanced Dual Generating Encryption (EDGE<sup>™</sup>) technology

### Maximum protection for your data

Choose iStorage diskAshur<sup>2</sup> SSD, an easy to use, ultra-secure, super-fast PIN authenticated hardware encrypted portable Solid State Drive with capacities of up to 4TB. Using the diskAshur<sup>2</sup> SSD could not be easier, simply connect the integrated USB 3.1 cable to any computer and enter a 7-15 digit PIN, if the correct PIN is entered, all data stored on the drive will be decrypted and accessible. To lock the drive and encrypt all data, simply eject the diskAshur<sup>2</sup> SSD from the host computer and the entire contents of the drive will be encrypted (full disk encryption) using military grade AES-XTS 256-bit hardware encryption. If the drive will reset, the encryption key will be deleted and all data previously stored on the drive will be lost forever.



**iStorage** 

One of the unique and underlying security features of the GDPR compliant diskAshur<sup>2</sup> SSD is the dedicated hardware based secure microprocessor (Common Criteria EAL4+ ready), which employs built-in physical protection mechanisms designed to defend against external tamper, bypass attacks and more. Unlike other solutions, the diskAshur<sup>2</sup> SSD reacts to an automated attack by entering the deadlock frozen state, which renders all such attacks as useless.

In plain and simple terms, without the PIN there's no way in!

### OS and Platform Independent

With software free setup and operation, the diskAshur<sup>2</sup> SSD is platform/device independent and works across all operating systems including all versions of MS Windows, macOS, Linux, Android, Chrome, Thin Clients, Zero Clients and embedded systems. In fact it will work on any device with a USB port!

Elegantly designed and available in 4 striking colours - Phantom Black, Ocean Blue, Fiery Red and Racing Green, the diskAshur<sup>2</sup> SSD features an ultra smooth fascia that doubles up as shock-absorbers, is water and dust resistant (IP 56 certified) and supplied with a stylish and sturdy travel case. You will be the envy of your peers, friends and family and be safe in the knowledge that your data remains your data and is protected at all times.

Main Features				
Ø	Common Criteria EAL4+ ready on-board secure microprocessor	<b>Ø</b>	No software or drivers required - 100% Hardware Encryption	
Ø	Real-time military grade AES-XTS 256-bit Full-Disk Hardware Encryption		Read-Only (Write Protect) & Read/Write modes	
Ø	FIPS PUB 197 Validated Encryption Algorithm		PIN authenticated - Supports Admin and User Independent PINs 7-15 digits in length	
Ø	PINs and encryption keys are always encrypted while at rest		Self Destruct Feature	
Ø	Brute Force Hack Defence Mechanism		Drive Reset Feature for easy redeployment	
	Tamper Proof	$\checkmark$	Super Speed USB 3.1 with integrated cable	
	Immune to BadUSB		Unattended Auto-Lock feature	
	Water & Dust Resistant - IP 56 certified		No admin rights needed	
Ø	Epoxy coated wear resistant keypad		OS & Platform Independent - Works on any device with a USB port	
	No speed degradation - as fast as any non-encrypted USB 3.1 SSD		All components covered with a layer of super tough epoxy resin	
Ø	Desk Lock Slot		Available in four colours: Phantom Black, Ocean Blue, Fiery Red & Racing Green	

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Technical Specifications		
Capacity	128GB, 256GB, 512GB, 1TB, 2TB, 4TB	
Data Transfer Speed	Up to: Read 294 MBps / Write 319 MBps	
Power Supply	USB Bus Powered	
Dimensions (W, D, H)	124 mm x 84 mm x 19 mm	
Weight	max. 180 grams approx. (based on a 1TB drive, other capacities may vary)	
Approvals	FIPS PUB 197 Validated, FCC, CE, RoHS, WEEE, TAA Compliant	
Interface	Super Speed USB 3.1 - up to 5Gbps. Backward compatible with USB 3.0/2.0/1.1	
OperatingSystemCompatibility	MSWindows, macOS, Linux, Android, Chrome, Thin Clients, Zero Clients and embedded systems	
Hardware Data Encryption	Real-Time Military Grade AES-XTS 256-bit Full-Disk Hardware Encryption	
Warranty	3 Years	
iStorage Part Numbers	IS-DA2-256-SSD-xxxx-xx (xxxx-xx = Capacity and Colour) B = Phantom Black: BE = Ocean Blue: R = Fiery Red: GN = Racing Green	
Box Contents	Portable Solid State Drive, Protective Carry Case and Quick Start Guide	

	Tamper Proof and Soft Touch Shock Absorbent Fascia
DESK LOCK SLOT CONNECTION	iStorage"
LED LIGHTS	
<ul> <li>Standby State/Locked</li> <li>User Mode/Unlocked</li> <li>Admin Mode</li> </ul>	1 2 AC 3 DF 4 CH 5 K 6 MNO
Alphanumeric Keyp <mark>ad</mark>	7 PORS 8 TUV 9 WXYZ
LOCK	
SHIFT	
UNLOCK	
IntegratedUSB3.1Cable	
Available in 4 Colours	→ 📰 📰 📰

**iStorage**<sup>®</sup>

### **EDGE<sup>™</sup> Security Features**

Offering advanced portable data security via built-in FIPS PUB 197 validated AES-XTS 256-bit hardware encryption engine. The data encryption key is randomly generated by a Common Criteria EAL4+ ready Random Number Generator and protected by NCSC, FIPS and Common Criteria validated wrapping algorithms.

- Uniquely featuring a dedicated on-board Common Criteria EAL4+ ready secure microprocessor to enhance security through true random number generation and built-in cryptography. The security component employs physical protection mechanisms to protect itself from any external tamper, bypass laser attacks and fault injections and incorporates active-shield violation technology. More specifically, the secure microprocessor reacts to all forms of automated hacking attempts by entering the deadlock frozen state where the device can only restart through a Power On Reset procedure (i.e. power off/power on).
- The security lock feature protects the device against any unauthorised firmware modifications from the host side (fully protected against BadUSB)
- Essentially the diskAshur<sup>2</sup> SSD uniquely incorporates a secure microprocessor providing secure algorithms to encrypt both the data and the encryption key, giving you confidence that your data is protected to the highest standards at any given time.

### Main Security Features Explained

Brute Force Hack Defence Mechanism: The iStorage diskAshur<sup>2</sup> SSD is intelligently programmed to protect against all forms of Brute Force attacks. After five consecutive incorrect PIN entries the drive will freeze, requiring the drive to be disconnected and reconnected to the USB port to get a further five PIN entry attempts. If a further five (10 in total) consecutive incorrect PIN attempts are entered again, the diskAshur<sup>2</sup> SSD will freeze again. To get a further and final five PIN attempts (15 in total), the "shift" button must be pressed whilst inserting the USB cable to the USB port and then an iStorage preset PIN will need to be entered. On the fifteenth consecutive incorrect PIN entry, the diskAshur<sup>2</sup> SSD assumes it is being attacked and will delete the encryption key and lock itself, rendering all data previously stored on the drive as lost forever. At this point the drive can be reset to factory default settings and redeployed.

Self Destruct Feature: You can pre-program the diskAshur<sup>2</sup> SSD with your own unique Self Destruct PIN which, once implemented, instantly deletes the encryption key, all PINs, data and then creates a new encryption key.

Unattended Auto-Lock Feature: Set the unattended diskAshur<sup>2</sup> SSD to automatically lock after a pre-determined amount of time where the drive has not been used.

Tamper Proof Design: In addition to incorporating a secure microprocessor, encrypting the data and the encryption key, the diskAshur<sup>2</sup> SSD adds another barrier between your data and a hacker. All of the components of the diskAshur<sup>2</sup> SSD are completely covered by a layer of super tough epoxy resin, which is virtually impossible to remove without causing permanent damage to the components. This barrier prevents a potential hacker from accessing the critical components and launching a variety of futile attacks.

Wear Resistant Epoxy Coated Keypad: Designed with protection in mind, the diskAshur<sup>2</sup> SSD wear resistant epoxy coated keypad hides key usage to avoid tipping off a potential hacker to commonly used keys.

Designed, Developed and Assembled in the UK.

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