

# Secure, Fast & Easy to Use Encrypted Portable Hard Drive

Ultra-secure, super speed USB 3.1, PIN authenticated, hardware encrypted portable hard drive incorporating unique iStorage EDGE™ technology

## Protecting You Always with Advanced Data Security

The diskAshur PRO² is an easy to use, ultra-secure, hardware encrypted portable hard drive with capacities of up to 5TB. 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 PRO² from the host computer and the entire contents of the drive will be encrypted (full disk encryption) using military grade AES 256-bit hardware encryption (XTS mode). If the drive is lost or stolen and an incorrect PIN is entered 15 consecutive times, the drive will reset, the encryption key will be deleted and all data previously stored on the drive will be lost forever.

One of the unique and underlying security features of the GDPR compliant diskAshur PRO² 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 fault injections. Unlike other solutions, the diskAshur PRO² 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 PRO² is platform/device agnostic 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!

The diskAshur PRO² is NLNCSA BSPA Certified as is designed to be certified to FIPS 140-2 Level 3, NCSC CPA Foundation Level & Common Criteria government accreditations, water and dust resistant (IP 56 certified) and supplied with a protective carry 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

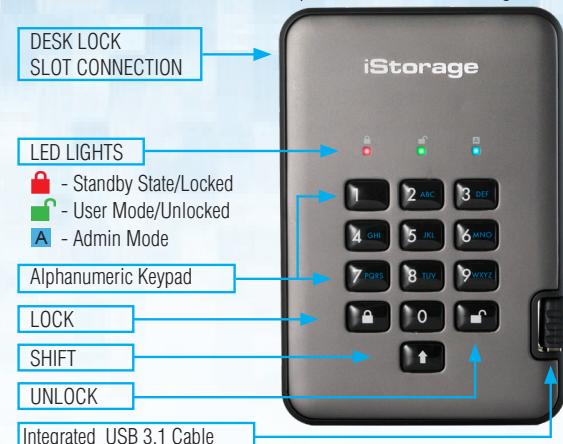
✓ Common Criteria EAL4+ ready on-board secure microprocessor	✓ Designed to be certified to FIPS 140-2 Level 3, NCSC CPA (foundation level) & Common Criteria
✓ Real-time military grade AES-XTS 256-bit Full-Disk Hardware Encryption	✓ NLNCSA BSPA Certified (Dutch certification)
✓ FIPS PUB 197 Validated Encryption Algorithm	✓ Read-Only (Write Protect) & Read/Write modes
✓ Encryption keys are always encrypted while at rest	✓ PIN authenticated - Supports Admin and User Independent PINs 7-15 digits in length
✓ Brute Force Hack Defence Mechanism	✓ Self Destruct Feature
✓ Tamper Proof and Tamper Evident Design	✓ Drive Reset Feature for easy redeployment
✓ Immune to BadUSB	✓ Super Speed USB 3.1 with integrated cable
✓ Water & Dust Resistant - IP 56 certified	✓ Unattended Auto-Lock feature
✓ Epoxy coated wear resistant keypad	✓ No admin rights needed
✓ No speed degradation - as fast as any non-encrypted USB 3.1 HDD	OS & Platform Independent - Works on any device with a USB port. No software or drivers required - 100% Hardware Encryption
✓ Desk Lock Slot	All components covered with a layer of super tough epoxy resin



## Technical Specifications

Capacity	500GB, 1TB, 2TB, 3TB, 4TB, 5TB
Data Transfer Speed	Up to: Read 148 MBps / Write 140 MBps
Power Supply	USB Bus Powered
Dimensions (W, D, H)	500GB/1/2TB- 124 mm x 84 mm x 20 mm 3/4/5TB- 124 mm x 84 mm x 28 mm
Weight	500GB/1/2TB- max. 225 grams approx. 3/4/5TB- max. 331 grams approx.
Approvals	FIPS PUB 197 Validated, FCC, CE, RoHS, WEEE, TAA Compliant
Accreditations	NLNCSA BSPA Certified and is designed to be certified to FIPS 140-2 Level 3, NCSC CPA (foundation level) & Common Criteria.
Interface	Super Speed USB 3.1 - up to 5Gbps. Backward compatible with USB 3.0/2.0/1.1
Operating System Compatibility	MS Windows, 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	2 Years
iStorage Part Number	IS-DAP2-256-XXXX-C-G (XXXX = Capacity)
Box Contents	Portable Hard Drive, Protective Carry Case and Quick Start Guide

Tamper Proof and Evident Design



## EDGE™ 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 FIPS validated wrapping algorithm.
- ✓ 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).
- ✓ All authentication parameters are encrypted and physically protected by the microprocessors' memory encryption (scrambler) and access control schemes.
- ✓ The security lock feature protects the device against any unauthorised firmware modifications from the host side (fully protected against BadUSB)

## Main Security Features Explained

**Brute Force Hack Defence Mechanism:** The iStorage diskAshur PRO<sup>2</sup> 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 PRO<sup>2</sup> 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 PRO<sup>2</sup> 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 PRO<sup>2</sup> 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 PRO<sup>2</sup> to automatically lock after a pre-determined amount of time where the drive has not been used.

**Tamper Proof and Tamper Evident Design:** In addition to incorporating a secure microprocessor, encrypting the data and the encryption key, the diskAshur PRO<sup>2</sup> adds another barrier between your data and a hacker. All of the components of the diskAshur PRO<sup>2</sup> 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. Furthermore, the tamper evident design of the diskAshur PRO<sup>2</sup> if breached, will provide visible evidence that tampering has occurred.

**Wear Resistant Epoxy Coated Keypad:** Designed with protection in mind, the diskAshur PRO<sup>2</sup> 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.

## iStorage Product Range - Innovative data security solutions



Trade Agreements Act (TAA) Compliant



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