

# Meet the PocketVault P-3X™

Smart USB 3.0 PKI and Encrypted Storage Device Secured by SPYRUS®

## Like A Bank Vault In Your Pocket

The PocketVault P-3X USB 3.0 secure storage device is a high-security, use-anywhere encrypting solid-state disk (SSD) drive that protects data like a bank vault.

The combination of USB 3.0 and SSD storage adds up to the fastest performance available.

PocketVault P-3X is easy to use, too. Just log on and drag files to it as you would with any USB drive. Every file on the PocketVault P-3X is securely protected in its encrypted solid-state storage.

The cryptographic components in every SPYRUS secure storage device are designed, engineered, and manufactured in the United States by carefully vetted personnel.

The PocketVault P-3X PKI smartcard is used for two factor authentication to Windows PCs and cloud services!



## PocketVault P-3X Features and Benefits

- Incredibly fast USB 3.0 and SSD performance. No waiting to access your data.
- Absolute security from XTS-AES 256 full disk encryption and next-generation P-384, SHA-2 384 cryptography promoted by the multiple governments for unclassified information and even classified information.
- Keys are generated in the FIPS 140-2 Level 3 device and are never exported or escrowed.
- Patent pending technology reconstitutes keys as required—they are not stored anywhere.
- Passwords are never stored on the device, even in hashed form.
- Optional SEMS device management on premise or cloud service.
- Can be set to hardware read only mode for protection against malware from untrusted computers.
- Simple user interface makes logon, encryption, and setup easy.

# Technical Specifications

## Capacities & Dimensions (LxWxH)

32 GB, 64 GB, 128 GB, 256 GB  
86.1 mm x 24.2 mm x 10.8 mm (+/- 0.20)

512 GB capacity  
101.6 mm x 24.2 mm x 10.8 mm (+/- 0.20)

1 TB capacity: 104mm x 24.2 mm x 12mm (+/- 0.20)

## Performance (based on 512 GB drive)

USB 3.0 Super Speed; USB 2.0 Compatible

Please note Random Read and Random Write Performance is the most important matrix for bootable live drives.

Sequential Read: up to 249 MB/sec  
Sequential Write: up to 238 MB/sec

## Reliability

Data Retention: 10 years

## Other Certifications

FIPS 140-2 Algorithm Certificates  
FIPS 140-2 Level 3  
MIL-810 Tested to no failure (40 + approved testing scenarios)

## Electrical

Operating Voltage Vcc = 3.3 to 5 VDC  
Power Consumption 275mA @ 3.3 VDC

## Other

Humidity 90%, noncondensing

## Physical Device Integrity:

At SPYRUS, we understand that people rely on their USB device for mission critical functions. In essence, it is their computer SSD drive. So unlike a traditional USB that is used less regularly and is much easier to replace, we realized early-on in our customer deployments that the device must withstand punishment from a physical design perspective. To that end we designed our Windows To Go devices meet the highest physical standards in design and component materials. The combination of stringent environmental testing and additional testing for magnetic fields, X-Ray and long term immersion demonstrate the usability of this high security configuration of the SPYRUS USB devices in the challenging healthcare environments as well.



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## Environmental

Operating Temperature (MIL-STD-202, METH 503) 0°C - 70°C  
Non-Operating Temperature Cycling (MIL-STD-810, METH 503) -40°C - 85°C  
High Temperature Storage (MIL-STD-810, METH 501) 85°C; 96 hours  
EMI (FCC/CE) FCC Part 15, Class B/EN55022 - EN55024/etc  
ESD (EN61000-4-2) Enclosure Discharge - Contact & Air  
Dust Test (IEC 60529, IP6) As per defined  
Waterproof Test (IEC 60529, IPX7) As per defined  
Operating Shock, MIL-STD 883J, Method 2002.5, Cond. B, 1500g, 0.5ms, 1/2 sine wave  
High Temperature Storage/Data Retention, MIL-STD-810, METH 501, 100°C; 96 hours  
Waterproof test, MIL-STD-810, METH 512.6.1 meter depth, 30 minutes

## Hardware Security & Cryptographic Standards

SPYRUS Algorithm Agility includes Suite B (a set of cryptographic algorithms used for cryptographic modernization) and RSA based cryptography.

XTS - AES 256 Full Disk Encryption  
AES 128, 196, and 256 ECB, CBC, CTR, and Key Wrap Modes  
SP800 - 90 DRBG (Hash DRBG)  
Elliptic Curve Cryptography (P-256, P-384, P-521)  
ECDSA Digital Signature Algorithm  
CVL (ECC CDH) [ECDH per SP 800-56A]  
Concatenation KDF (SP800-56A)  
RSA 1024 and 2048 Signature Algorithm (Note RSA 1024 has been deprecated by NIST.)  
RSA 1024 and 2048 Key Exchange (Note RSA 1024 has been deprecated by NIST.)  
PBKDF - 2 (per PKCS#5 version 2)  
DES, two- & three-key triple DES with ECB, CBC Mode (Note DES has been deprecated by NIST.)  
SHA-1 and SHA-224/256/384/512 hash algorithms with HMAC Support

Support for the cryptography can vary depending on version.

FIPS 140-2 Level 3 opaque epoxy filled housing can be modified by special order.