

CyberCog's hardware security modules (HSM) defend information systems from cybersecurity attacks with tamper-protected separation of sensitive keys, data, and operations. Multiple card choices and robust suite of cryptographic services supports standard security protocols to simplify development and provide a security solution for every system.



# PRODUCT DETAILS



### **TECHNICAL SPECIFICATIONS**

- Symmetric: AES 128, 192, 256 (CBC, ECB, CTR, CMAC, GCM, GMAC, XTS, XEX)
- Asymmetric: RSA (1024, 2048, 3072, 4096), ECC
  (P-224, P-254, P-384, P-521), ECDSA (224, 283, 256, 384, 521)
- Hashing: HMAC-SHA-1, HMAC-SHA-256, HMAC SHA-384, HMAC-SHA-512, SHA-1, SHA-256, SHA384, SHA-512
- Key Derivation: PBKDF2 (SP 800 132)
- · Key Wrapping: SP800-38F
- · Key Agreement / Transport: DH, ECDH, RSA
- Random Number Generation: HW based true noise source alongside NIST 800-90A compliant CTR DRBG CNSA Suite Support
- PKI Certificate Management: PEM & DER x509v3, PKCS #7, CRL, PKCS#1, PKCS#8, PKCS#12
- API Support: PKCS#11, OpenSSL, Java (JCE), Mirosoft CAPI, and CNG
- Assurance: FIPS 140-2 Level3 and Level 4.
  Meet compliance needs for GDPR, HIPAA,
  PCI-DSS, eIDAS
- Compliance: UL, CSA, CE, FCC, CE, VCCI, C-TICK, KC MARK, RoHS2, WEEE, TAA
- Dimensions: Low Profile PCIe card, 2.74" x 6.57" x .074"
- Power: 18W maximum, 14W typical
- Temperature Range: Operating 0° to 50°C
- American designed and manufactured

## **USER APPLICATIONS**

- PKI Certificate Signing & Validation
- Secure Communication: SSL & TLS
- Storage (online CA keys & offline CA keys)
- Smart Card Issuance & Management
- · Code & Document Signing
- · Database & File Encryption
- Email Encryption
- Infrastructure Security
- · Identity & Rights Management
- · Key Management
- · Cryptographic Acceleration
- · Secure Manufacturing

#### **FEATURES**

- Tamper protected generation, storage, and management of cryptographic keys
- Cryptographic operations isolated from potentially compromised software
- Loadable software modules for execution of custom modules in a trusted environment
- Out-of-the-box integration with open source security protocols and stacks
- · Role based access control and management
- Audit logging
- M of N Backup, Restore, and Decommission

## **About CyberCogs**

As gears turn big wheels with less energy, making the work easier, CyberCogs offers system developers with the highest grade security building blocks to make cybersecurity easy

