



Simple, Stable, Secure:
ProCrypt HSM

SINGLE PLATFORM FOR PAYMENT SYSTEMS AND GENERAL PURPOSE

Meet the needs for both payment systems and general purpose in a single platform with ProCrypt HSM, which is the Turkey's first and among the firsts in the world that received PCI HSM 4.x certificate.

ProCrypt HSM offers a high level of security and performance in banking transactions, digital transformation projects and general data protection with its scalable architecture and platform-independent 24/7 operating principle.





General Purpose – Payment Systems



ProCrypt HSM



ProCrypt HSM's protected, hardened and innovative design enables it to perform **cryptographic operations** and protect encryption keys at the hardware security level.



Being both internationally certified (**PCI HSM, CC EAL 4+, RoHs, CE, Made in Türkiye**) and local and national production ProCrypt HSM can be used in different areas with only one hardware and the appliance can run all the functions about HSM simultaneously.



High-tech product ProCrypt HSM is designed with **uninterruptable spec (24/7)** and **high performance (up to 12.000 TPS)**.



ProCrypt HSM can be scaled horizontally with the compact and scalable architecture and is **platform independent** for usage to different scenarios.



With PCAM (ProCrypt Admin Management) ProCrypt HSM provides **ease to key configuration** and importing and allow the user to manage these operations with an easy and secure GUI.



ProCrypt HSM provides strong authentication, **hierarchical and independent role-based user management with a high-security point of view**.



ProCrypt HSM stores strong integration specs with **a simple, stable, and high-tech infrastructure**.



KM-X Performance



KM-X Premium

	KM-X Performance	KM-X Premium	
Physical Characteristics	Size	1 U - 482.6mm x 738mm x 44.1mm (19" x 29" x 1.74")	1 U - 482.6mm x 738mm x 44.1mm (19" x 29" x 1.74")
	Weight	12kg (26,45 lbs)	12kg (26,45 lbs)
	Input Voltage	100 - 240V, 50 - 60Hz, 40w Dual Hot Swappable Power Supply	100 - 240V, 50 - 60Hz, 40w Dual Hot Swappable Power Supply
	Operating Temperature	0°C - 40°C (32°F - 104°F)	0°C - 40°C (32°F - 104°F)
	Humidity	%10 - %90 (relative, non-condensing)	%10 - %90 (relative, non-condensing)
	Connection Interface	2 x 10/100/1000 Mbps	2 x 10/100/1000 Mbps
	Reliability	Mean Time Between Failures (MTBF) 100,536 hrs	
Cryptographic Algorithms	HASH/Message Digest/HMAC		MDS, MDS-HMAC, SHA-1, SHA-2, SHA-1 HMAC, SHA-2 HMAC, RIPEMD, RIPEMD160, RIPEMD160_HMAC, RIPEMD160_RSA_PKCS, BLAKE2B, BLACK2s, MD4, SM3, SipHash
	Symmetric		AES, DES, DES3 (TripleDES), ARIA, BLOWFISH, CAMELLIA, RC2, RC4, SEED, DES-X, SM4
	Assymmetric		RSA (up to 4096 bits), DHE, ECDH, DSA, ECDSA, X9.42 DH, ED25519, ED448, Poly1305, SM2, CMAC
	RNG		NIST SP 800-90 Compatible TRNG
	5G - Post Quantum		MILENAGE, TUAK, SNOW 3G, ZUC, SNOW V
Performance	RSA 2048	4.250 TPS	10.000 TPS
	ECDSA 256-bit Prime Signing	4.000 TPS	15.000 TPS
	RSA Key Generation 2048 bit	3 per second (with key pooling features 100+)	3 per second (with key pooling features 100+)
	Partition/Slot	5.000	5.000
API (Application Programming Interfaces)		PKCS#11, OpenSSL Engine, PKM Interface	
Operating Systems		Windows, Linux	
Certification and Compliance		Common Criteria EAL4+ (ADV_IMP.2, ALC_CMCS, ALC_DVS.2, AVA_VAN.5, ALC_FLR.2) PCI HSM v4.0, CE, RoHS	
Performance and Scalability		Scalable up to 5.000 cryptographically isolated partitions/slot, Performance options up to 12.000 TPS, provided by hardware based, encryption, Multi-Threading to optimize performance, Various performance optionsfor diffrent requirements, Upgradable performance levels, Linear increased performance with additional hardware security modules, Load-Balancing	
Functions and Applications		Payment Systems, e-Signature, e-Correspondence, e-Invoice Infrastructures, e-Correspondence 2.0 Support, Digital Transformation Projects, Mobile App Security, File/Disk Encryption, Database Encryption, SSL Offloading, Electronic Authentication Systems, Cloud HSM, EMV, NFC and Contactless Payments, IoT and 5G Security, Blockchain Infrastructure	



