



Simple, Stable, Secure:  
**ProCrypt HSM**



## What is HSM?

HSM (Hardware Security Module) is a high-security device that is used for storing encryption keys, which are compressed, tamper-protected, and react on-demand.

With HSM , security chains can be created which are based on cryptographic systems and through cryptographic keys data encryption, decryption, signing , integration protection and verification can be done.



## 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(10.000 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**.



# 🔧 Technical Specifications



KM-X Performance



KM-3000



PINPAD

Physical Characteristics		KM-X Premium		KM-3000		PINPAD	
<b>Size</b>	.1 U - 482.6mm x 210mm x 43.5mm (19" x 8.26" x 1.71")	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")				
<b>Weight</b>	3.5 kg (7.7 lbs)	12kg (26.45 lbs)	12kg (26.45 lbs)				
<b>Input Voltage</b>	100 - 240V, 50 - 60Hz, 40W Single Power Supply	100 - 240V, 50 - 60Hz, 40W Dual Hot Swappable Power Supply	100 - 240V, 50 - 60Hz, 40W Dual Hot Swappable Power Supply				
<b>Operating Temperature</b>	0°C - 40°C (32°F - 104°F)	0°C - 40°C (32°F - 104°F)	0°C - 40°C (32°F - 104°F)				
<b>Humidity</b>	%10 - %90 (relative, non condensing)	%10 - %90 (relative, non condensing)	%10 - %90 (relative, non condensing)				
<b>Connection Interface</b>	1 x 10/100/1000 Mbps	2 x 10/100/1000 Mbps	2 x 10/100/1000 Mbps				
<b>Certification and Compliance</b>		Common Criteria EAL4+ (ADV_IMP_2, ALC_CMCS, ALC_DVS_2, AIA_VAN_5, ALC_FLR_2) PCI HSM v3.0, PCI HSM v4.0 (In Progress) CE, RoHS					
<b>HASH/Message Digest/HMAC</b>		MD5, SHA-1, SHA-2, RIPEMD, BLAKE2B, BLACK2S, SHA3, MD4, SM3, SipHash					
<b>Symmetric</b>		AES, DES, DES3, ARIA, BLOWFISH, CAMELLIA, CAST-128, RC2, RC4, SEED, DES-X, SM4					
<b>Asymmetric</b>		RSA (up to 4096 bits), ECC, DH, ECDH, ECDSA, X9.42 DH, ED25519, ED448, Poly1305, SM2, CMAC					
<b>RNG</b>		NIST SP 800-90 Compatible TRNG					
<b>5G - Post Quantum</b>		MILLENAGE, TUAKE SNOW 3G, ZUC, SNOW V - Post Quantum Ready					
<b>RSA 2048</b>		10,000 TPS*					
<b>RSA Key Generation</b>		8 per second*					
<b>Partition/Slot</b>		100*					
<b>Performance</b>		PKCS#11, OpenSSL Engine, Special Programming Interfaces, Java Cryptography Architecture (JCA), Java Cryptography Extension (JCE), Microsoft CNG, PKM Interface					
<b>Operating Systems</b>		Windows, Linux (Ubuntu, Debian, Red Hat, Cent OS)					
<b>Management and Monitoring</b>		Easy and secure interface for key loading and configuration TCP/IP remote configuration, Easy and secure firmware update, Usage, health check, inspection and error logs, Remote management with PCAM (ProCrypt Admin Management), Serial console interface, SNMP, Syslog Server Support, Keys and VSM Cloning between HSMs and interface support, Secure Remote Update Support, Secure Key Component Input : PINPAD					
<b>Performance and Scalability</b>		Scalable up to 100 cryptographically isolated partitions/slot, Performance options up to 10,000 TPS, provided by hardware based, encryption, Multi-Threading to optimize performance, Various performance options for different requirements, Upgradable performance levels, Linear increased performance with additional hardware security modules, Load-Balancing					
<b>Functions and Applications</b>		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					
<b>Purpose of Usage</b>		General Purpose & Payment Systems in same appliance**					

\*Depends on HSM models and licenses. For the details please contact with [info@procenne.com](mailto:info@procenne.com)  
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DIGITAL SECURITY

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