

The general purpose Hardware Security Module

The SecurityServer Se Gen2 from Utimaco ensures the security of cryptographic key material for servers and applications. It includes integration software that supports the industry standard PKCS#11, Microsoft CSP/CNG/SQLEKM and JCE interfaces. It can therefore be used for numerous applications, including e.g. public key infrastructures (PKIs), database encryption.

The SecurityServer Se Gen2 is available as a PCIe plug-in card or as network-attached appliance.

Low operational costs

- Highest performance at an attractive price
- Inexpensive starter models for applications with low performance requirements
- Extensive remote administration
- Efficient key management and firmware updates via remote access
- Automation of remote diagnosis via SNMP (Simple Network Management Protocol)
- Software simulator for evaluation and integration testing





Features

- Secure key storage and processing
- Extensive key management
- Secure key storage inside HSM or as external encrypted key files
- 2-factor authentication with smartcards
- "m out of n" authentication (e.g. 3 out of 5)
- Configurable role-based access control and separation of functions
- Multi-tenancy support
- Remote management
- Software simulator for evaluation and integration testing
- Supported operating systems: Windows and Linux
- Multiple integrations with PKI applications, database encryption, etc.
- All features included in product price

Security, safety, environmental compliance

- FIPS 140-2 Level 3
- CE, FCC Class B
- UL, IEC/EN 60950-1
- CB certificate
- RoHS II, WEEE

PCIe card physical specifications

- Half-length, full-height single lane PCI Express card
- Supports PCIe 1.1, PCIe 2.0 and PCIe 3.0 slots
- Operating voltage: 3.3 V
- 3 V lithium battery, Ø 12 mm, length 600 mm, FDK CR 12600 SE or VARTA CR2NP
- USB interface

167.65 mm ("half" length)

- Operating temperature: +10°C to +45°C (+50°F to +113°F)
- Storage temperature: -10°C to +55°C (+14°F to +131°F)
- Relative humidity: 10% to 95%, noncondensing
- MTBF 360,000 hours at 25°C / 77°F

Cryptographic algorithms

- RSA, DSA, ECDSA with NIST and Brainpool curves
- DH, ECDH with NIST and Brainpool curves
- AES, Triple-DES, DES
- MAC, CMAC, HMAC
- SHA-1, SHA2-Family, SHA3, RIPEMD
- Hash-based deterministic random number generator (DRG.4 acc. AIS 31)
- True random number generator (PTG.2 acc. AIS 31)
- Up to 10,000 RSA or 6,000 ECDSA signing operations in bulk processing mode
- All algorithms included in product price

Application programming interfaces (APIs)

- PKCS#11
- Java Cryptography Extension (JCE)
- Microsoft Crypto API (CSP), Cryptography Next Generation (CNG) and SQL Extensible Key Management (SQLEKM)
- Cryptographic eXtended services Interface (CXI) – Utimaco's high performance interface ensures easy integration of cryptographic functionality into client applications

Network appliance physical specifications

- 19" 1U form factor
- Redundant field-replaceable power supply: 2 x 100 ~ 240 V AC, 50 ~ 60 Hertz, 300 W
- Power consumption: typically 45 W / 66 VA, max. 50 W / 70 VA
- Heat dissipation: max. 171 BTU/h
- 2 RJ45 1 Gb/s network interfaces
- Operating temperature: +10°C to +50°C (+50°F to +122°F)
- Storage temperature: -10°C to +55°C (+14°F to +131°F)
- Relative humidity: 10% to 95%, noncondensing
- MTBF 100,000 hours at 25°C / 77°F, environment GB, GC – Ground Benign, Controlled



