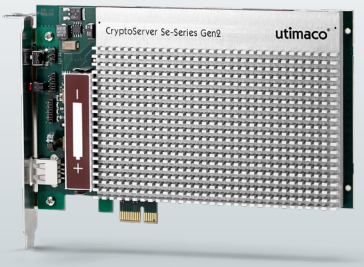
Product Brief

UTIMACO SecurityServer Se Gen2

The Root-of-Trust of high performance Hardware Security Modules



Product Platform

HSM
UTIMACO
CryptoServer

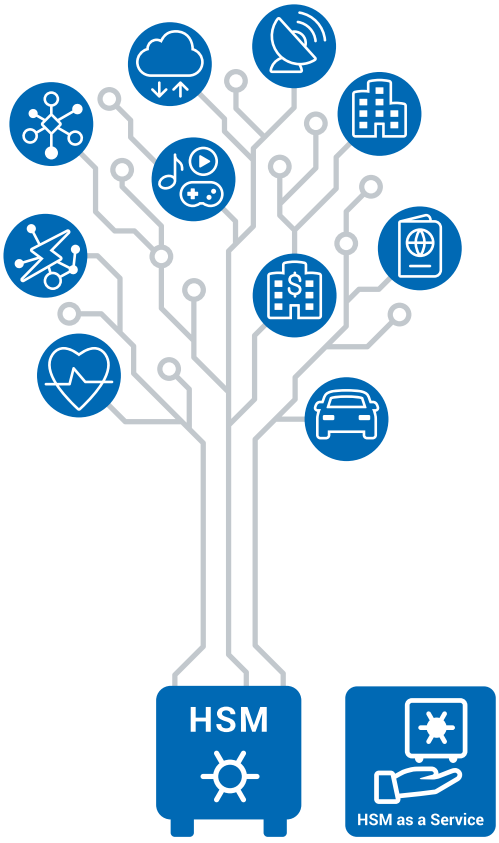
Firmware Option

Se Gen2
UTIMACO
SecurityServer Se Gen2

Creating Trust in the Digital Society

utimaco®

Flexibly applicable for numerous applications, including e.g. public key infrastructures (PKIs), database encryption.



Key Features

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.

Product Highlights

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

HSM Functionalities

Features

- Secure key storage and processing
- Extensive key management
- Secure key storage inside HSM, as encrypted key blobs in file system or in enterprise-grade database
- 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

Cryptographic algorithms

- RSA, DSA, ECDSA with NIST and Brainpool curves, EdDSA
- DH, ECDH with NIST, Brainpool and Montgomery 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

Technical Specifications PCIe Card

Physical Dimensions

- **Form factor:** Half-length, full-height single lane PCI Express card
- **Compatibility:** PCIe 1.1, PCIe 2.0 and PCIe 3.0 slots
- **Height:** 4.38 in (111.15 mm) "full" height
- **Weight:** 0.88 lb (0.4 kg)

Connectivity

- **Interface:** USB

Electrical characteristics

- **Power Supply:** 3 V lithium battery, Ø 12 mm, length 60 mm, FDK CR 12600 SE or VARTA CR2NP
- **Operating voltage:** 3.3 V

Operating Environment

- **Operating temperature:** 50°F to 113°F (10°C to 45°C)
- **Operating relative humidity:** 10% to 95%, non-condensing
- **Storage temperature:** 14°F to 131°F (-10°C to 55°C)
- **MTBF:** 360,000 hours at 25°C / 77°F, environment GB, GC – Ground Benign, Controlled

Certification/Compliance

- **Safety and Electromagnetic Compliance:** IEC/EN 60950-1, IEC/EN 62368-1, UL, CB certificate, CE, FCC Class B
- **Environmental:** RoHS II, WEEE
- **Security:** FIPS 140-2 Level 3

Technical Specifications Network Appliance

Physical Dimensions

- **Form factor:** 19" 1U
- **Weight:** 22.05 lb (10 kg)
- **Width:** 17.56 in (446 mm) excluding brackets
- **Depth:** 21.79 in (533.4 mm) excluding handles
- **Height:** 1.73 in (44 mm)

Connectivity

- **Interfaces:** 2 RJ45, 1 Gb/s

Electrical characteristics

- **Power Supply:** 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

Operating Environment

- **Operating temperature:** +50°F to +122°F (+10°C to +50°C)
- **Operating relative humidity:** 10% to 95%, non-condensing
- **Storage temperature:** 14°F to 131°F (-10°C to 55°C)
- **MTBF:** 100,000 hours at 25°C / 77°F, environment GB, GC – Ground Benign, Controlled

Certification/Compliance

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About UTIMACO

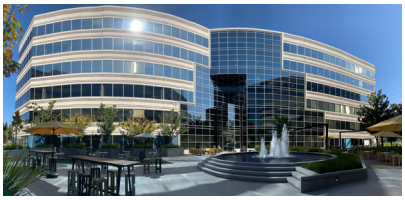
UTIMACO is an international provider of IT security solutions with headquarters in Aachen (Germany) and Campbell, CA (USA).

UTIMACO develops hardware-based, high-security appliances (Hardware Security Modules) and compliance solutions for telecommunication provider regulations (lawful interception and data retention). UTIMACO is one of the world's leading manufacturers in both of these market segments.

Customers and partners of UTIMACO in all parts of the world trust the company's long-term, proven reliability and investment protection, as well as its many certified IT security standards. UTIMACO stands for recognized product quality, user-friendly software, excellent support and trusted high security — made in Germany. Over 280 employees have committed to the company's goal to protect people, ideas and data.

Cyber Security gains dramatically in importance throughout all industries. For over 30 years now, UTIMACO products have been protecting people around the world against terrorism and organized crime and have secured private and sensitive data against theft or abuse.

Headquarters Aachen, Germany



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For more information about UTIMACO® HSM products, please visit:

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