



The development environment for the successful realization of your requirements

The CryptoServer Software Development Kit (SDK) is the professional development environment for all Utimaco Hardware Security Modules. It enables integrators and end-users to create specific applications, e.g. proprietary algorithms, custom key derivation procedures or complex protocols that run in the tamper-proof environment of the CryptoServer Hardware Security Module. As the SDK provides full access to the Utimaco base firmware, custom firmware modules can be developed in a very short time frame.

Cost-effective development

- No additional license fees for runtime environments or per delivered application
- Minimal training effort thanks to the use of standard programming languages and common development environments
- Complete description of internal programming interfaces (API) allows for maximum utilization of base firmware modules
- Efficient testing and debugging using the CryptoServer software simulator
- Reduced price for Hardware Security Modules in development environments



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Development environment

- Common development environment for all CryptoServer models
- Independence from manufacturer
- Full control over functionality of user-created firmware
- Include files for Utimaco's base firmware and interface libraries
- Programming examples for firmware modules and applications
- Project files for compilation of programming examples in Microsoft Visual Studio
- Makefiles for compilation of programming examples (Linux gcc)

Test environment

- Full simulation of CryptoServer Hardware Security Modules in software
- Testing and debugging of new firmware in Windows or Linux development environment

Documentation

- Programming manual
- Full description of internal interfaces of Utimaco's base firmware
- Comprehensive documentation for all tools

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 (as from CryptoServer SDK 4.10), RIPEMD
- Hash-based Deterministic Random Number Generator (DRNG)
- True Random Number Generator (TRNG acc. AIS31 class PTG.2)
- All algorithms included in product price

Programming model

- Modular software architecture of the base firmware offers maximum design optimization capabilities for applications
- Through the use of ANSI C/C++, no low-level programming knowledge is required

Support

- Developer training
- Qualified developer-level support via phone and email

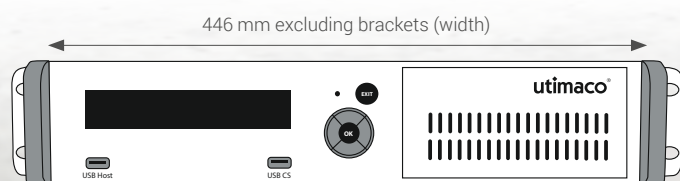
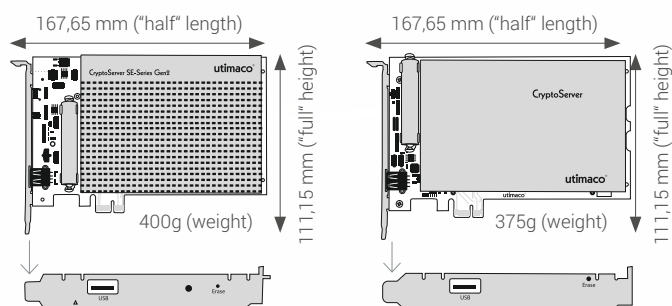
Typical fields of application

- Banking & Finance
 - Card personalization
 - PIN-Brief generation
 - Acquirer and processor
- Healthcare
 - Card personalization
 - Health record security
- Automotive
 - Code signing and secure manufacturing
 - Key injection
 - Birth certificate generation
 - Toll charging system
- Consumer Industry
 - IP/content protection

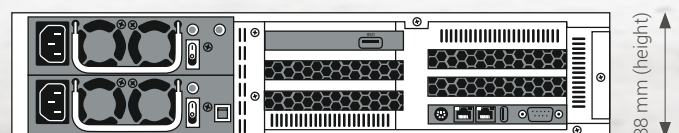
Supported CryptoServer Hardware

- CryptoServer Se-Series Gen2*
- CryptoServer CSe-Series*
- CryptoServer Se-Series*

*Full support of hardware acceleration and ECC library



510 mm excluding handles (depth)



14 kg (weight)