

UTIMACO CryptoServer CP5

The eIDAS-Compliant
CC-Certified Hardware
Security Module



Product platform



UTIMACO
CryptoServer

Firmware option



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CryptoServer CP5



The UTIMACO CryptoServer CP5 supports Trust Service Providers (TSPs) in fulfilling policy and security requirements defined in various ETSI technical standards (ETSI EN 319 401, EN 319 411, EN 319 421).

With key authorization functionalities, it is ideally suited for eIDAS-compliant qualified signature creation and remote signing. Other application areas include the issuing of (qualified) certificates, OCSP (Online Certificate Status Protocol) and time stamping. The CryptoServer CP5 is based on the CryptoServer Se Gen2 hardware platform and Common Criteria-certified according to the eIDAS Protection Profile (PP) EN 419 221-5 "Cryptographic Module for Trust Services".

It is available as a PCIe plug-in card or as network-attached appliance.



Key Features

- Secure key storage and processing inside the secure boundary of the HSM
- Extensive key management with key authorization
- Key authorization API and tool (acc. PP EN 419 221-5)
- "m out of n" quorum authentication (e.g. 3 out of 5)
- 2-factor authentication with smartcards
- Configurable role-based access control and separation of duties
- Multi-tenancy support
- Remote management
- Dedicated software simulator for evaluation and integration testing
- Supported operating systems: Windows and Linux
- Multiple integrations with PKI applications, etc.
- All features included in product price



Product Highlights

- Full compliance at an attractive price
- For applications with low to highest performance requirements
- Extensive remote administration
- Efficient key management and firmware updates via remote access
- Automation of remote diagnosis via SNMP (Simple Network Management Protocol)
- Dedicated software simulator for evaluation and integration testing



HSM Functionalities

Cryptographic algorithms

- RSA, ECDSA with NIST and Brainpool curves
- ECDH with NIST and Brainpool curves
- AES
- CMAC, HMAC
- SHA2-Family, SHA3
- Hash-based deterministic random number generator (DRG.4 acc. AIS 31)
- True random number generator (PTG.2 acc. AIS 31)
- Up to 3,000 RSA or 2,500 ECDSA signing operations in bulk processing mode
- All algorithms included in product price

Application programming interfaces (APIs)

- PKCS #11
- Cryptography Next Generation (CNG)
- 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:**
111.15 mm
"full" height
- **Weight:**
400 g



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



Compliance

- **Safety:**
UL, IEC/EN 60950-1,
IEC/EN 62368-1,
CB certificate
- **Environmental:**
RoHS III, WEEE
- **Emissions:**
CE, FCC Class B



Technical Specifications Network Appliance



Physical Dimensions

- **Form factor:**
19" 1U
- **Weight:**
10 kg
- **Width:**
446 mm
excluding brackets
- **Depth:**
533.4 mm
excluding handles
- **Height:**
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:**
+10°C to +50°C
(+50°F to +122°F)
- **Operating relative humidity:**
10% to 95%,
non-condensing
- **Storage temperature:**
-10°C to +55°C
(+14°F to +131°F)
- **MTBF:**
100,000 hours
at 25°C / 77°F,
environment GB, GC –
Ground Benign,
Controlled



Compliance

- **Safety:**
UL, IEC/EN 60950-1,
IEC/EN 62368-1,
CB certificate
- **Environmental:**
RoHS III, WEEE
- **Emissions:**
CE, FCC Class B



About UTIMACO

UTIMACO is a global platform provider of trusted Cybersecurity and Compliance solutions and services with headquarters in Aachen (Germany) and Campbell, CA (USA).

UTIMACO develops on-premises and cloud-based hardware security modules, solutions for key management, data protection and identity management as well as data intelligence solutions for regulated critical infrastructures and Public Warning Systems. UTIMACO is one of the world's leading manufacturers in its key market segments.

500+ employees around the globe create innovative solutions and services to protect data, identities and communication networks with responsibility for global customers and citizens. Customers and partners in many different industries value the reliability and long-term investment security of UTIMACO's high-security products and solutions.

Find out more on utimaco.com



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Creating Trust in
the Digital Society

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