



# UTIMACO's High Performance HSM – Taking Crypto Processing to the Next Level.



UTIMACO u.trust Anchor Se15k/Se40k

When data processing goes high speed, your HSM shouldn't be the limiting factor.

That's why UTIMACO came up with a high-performance variant of the u.trust Anchor platform.

It combines the flexibility and security of the industry proven SecurityServer with the processing power of UTIMACO's latest hardware. Experience transaction processing at an unknown speed!

# **Use Cases**

- High Frequency Transaction Processing
- Bulk Invoicing
- Mass Certificate Signing
- Ticketing
- High Speed Attestation

# **Application Programming Interfaces (APIs)**

- PKCS#11
- Microsoft Crypto API (CSP)
- Microsoft Cryptography Next Generation (CNG)
- Microsoft SQL Extensible Key Management (SQLEKM)
- Java Cryptography Extension (JCE)
- UCAPI UTIMACO Crypto API

# **Cryptographic Algorithms**

- RSA, DSA, ECC with NIST and Brainpool curves
- DH, ECDH with NIST and Brainpool curves
- 5G, Block-Chain and PQC ready
- SHA-1, SHA-2 and SHA-3 Family
- AES, Triple DES, DES
- EC-VRF
- Hash-based deterministic RNG (NIST SP800-90B, AIS31 DRG.4)
- True random number generator (AIS31 PTG.2)

# **Security Classification / Certifications**

- FIPS 140-2 Level 3\*
- FIPS 140-3\*\*

- Common Criteria EAL4+ (eIDAS)\*\*
- PCI HSM\*

#### **Features**

- "m of n" authentication
- Configurable role-based access control and separation of duties
- Multi-slot support
- Remote Management

- Software Simulator for evaluation and integration testing
- Secure key storage and processing
- Windows and Linux support
- Broad ecosystem of integrations (PKI software, database encryption, ...)

# **Performance (options)**

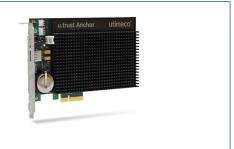
- Se15K: 15000 RSA 2K sigs/s
- Se40K: 40000 RSA 2K sigs/s

# **Product Family and Simulator Availability**

- Based on u.trust Anchor
- SecurityServer

Simulator included





# Reliability

#### MTBF

 134,250 hours, in acc. with Telcordia Issue 3, temperature 30°C, environment Ground Benign

#### Connectivity

#### Connection

- 2 RJ45 1 Gb/s network interfaces
- 2 SFP+ 10 Gb/s network interfaces as optional extension

# **Certification/Compliance**

# Safety

- UL, IEC/EN 60950-1
- CE, IEC/EN 62368-1
- CB Certificate

#### **Emissions**

FCC Class B

#### Environmental

RoHS II

# Reliability **MTBF**

PCIe Card

#### · 389,797 hours, in acc. with Telcordia Issue 3, temperature 30°C, environment Ground Fixed, temperature 50°C for parts in potting material

#### Connectivity

#### Connection

- PCle x4
- Compatible with PCle 1.1, PCle 2.0 and PCle 3 slots

# **Certification/Compliance**

#### **Emissions**

FCC Class B

#### **Environmental**

- RoHS II (pending)
- REACH

#### **Physical Specifications**

#### Form Factor

19" Rack-mountable (1U)

#### Weight

10 kg

# **Dimensions**

- Width: 446 mm (excluding brackets)
- Height: 44 mm
- Depth: 533,4 mm (excluding handles)

# **Physical Specifications**

#### Form Factor

 PCle Add-In Card (Standard Height; Half Length)

#### Weight

• < 500 g

#### **Dimensions**

- Width: 111,15 mm Height: 18,6 mm
- Depth: 167,65 mm (excluding brackets)

# **Operating Environment**

# **Temperature**

• +10°C to +50°C (+50°F to +122°F)

#### **Relative Humidity**

 10% to 95% Non-condensing

# **Operating Environment**

#### **Temperature**

- Operation: +10°C to +40°C  $(+50^{\circ}F \text{ to } +104^{\circ}F)$
- Storage: -10°C to +55°C (+14°F to +131°F)

# **Relative Humidity**

• 10% to 95% Non-condensing

# **Electrical and Heat Specifications**

#### **Power Supply**

- Redundant field-replaceable
- 2 x 100 ~ 240 V AC, 50 ~ 60 Hertz, 300 W

#### **Heat Dissipation**

Max. 222 BTU/h

# **Electrical and Heat Specifications**

#### Operating Voltage

- 12 V supplied by PCIe Connector
- 3,3 V supplied by PCIe Connector

# **Heat Dissipation**

Max. 85.3 BTU/h

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For more information about UTIMACO HSM products, please visit:

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