Data Sheet

Atalla AT1000

◆ **Atalla**
Innovation in Payments

Atalla AT1000 is a FIPS 140-2 Level 3 & PCI PTS v3 certified payment Hardware Security Module (HSM) used to protect sensitive data and associated keys for non-cash retail payment transactions, cardholder authentication, and cryptographic keys.

Key Features

- Atalla Key Block for AES and TDEA or 3DES key management
- In-field scalable performance
- Highly scalable with more than 10,000 TPS in a single device
- Backwards compatible with the previous generation Atalla HSMs
- Easy to integrate into your existing infrastructure (managed as an IT Security device)
- Optional customization

- Multiple MFK Support – up to 10 partitions per HSM
- Integrates with all major payment and switching applications
- Close integration with HPE NonStop Systems to provide a fully redundant payment solution
- 4x1Gbps NIC – Supports Teaming
- TLS protected and authenticated sessions with host application – no performance impact

utimaco®

⭐ Product Highlights

- Atalla Key Block for AES and TDEA or 3DES key management
- In-field scalable performance
- Highly scalable with more than 10,000 TPS in a single device
- Backwards compatible with the previous generation Atalla HSMs
- Easy to integration into your existing infrastructure (managed as an IT Security device)
- Optional customization
- Multiple MFK Support – Up to 10 partitions per HSM
- Integrates with all major payment and switching applications
- Close integration with HPE NonStop Systems to provide a fully redundant payment solution
- 4x1Gbps NIC – Supports Teaming
- TLS protected and Authenticated sessions with Host application – no performance impact

Security Certifications

- PCI - PTS - HSM v3.0 certified
- FIPS 140-2 Level 3 certified (certificate #3059)

Physical Security

- Rack-mountable (1U), physically fortified form factor
- Dual redundant power supplies
- Double-locking bezel with Medeco pick-resistant locks
- Out-of-range temperature and voltage detection
- Low-battery voltage detection

Logical Security

- Dual control
- Industry-standard Atalla Key Block (AKB) key management technology
- Advanced security architecture that prevents retrieval of PINs, keys, and other sensitive data in clear text form
- Automated and manual key management options
- Encrypted, convenient configuration, management, and key loading via Atalla Secure Configuration Assistant (no clear text passing of keys or key components)
- ATM key initialization and remote key loading (RKL)
- PIN security and key management implemented within a tamper-resistant hardware security module perimeter for protection against manipulation

Key Differentiators

- The unique flexible approach to HSM configuration and key management that enables a remote workflow-based model meeting the PCI Dual Control Requirement without the need to have all of the individual officers physically present
- Robust backup/restore capability with a user-configurable policy to specify M of N smartcards required for a restore
- Full multi-domain key and policy enforcement enables enterprises to create and manage multiple segregated digital keys per business need while applying policy enforcement to govern the key on the HSM
- Integrated with Micro Focus Voltage SecureData product portfolio to protect the data encryption keys
- Integrated with HPE NonStop portfolio to provide a fully fault-tolerant payment solution

HSM Functionalities

- Symmetric Key management: TR-31, X9.24 (including AES and TDES DUKPT), X9.17, APACS 40/70
- Asymmetric Key management: TR-34, legacy RSA keying protocols including those for Diebold and NCR ATMs
- Data Encryption: AES, RSA OAEP, DES/TDES (X3.92, ISO 10126-2, X9.52)
- Message authentication: CMAC (AES and TDES), HMAC (SHA1 and SHA256), CBC MAC (ANSI X9.9, ANS1 X9.19, ISO 9797-1, ISO 16609, ISO 9807)

- Digital signatures: RSA PKCS#1 v1.5 and ISO 9796-2
- PIN management and security: ANSI X9.8/ISO 9564 PIN blocks 0 to 4, plus legacy techniques
- PIN verification: IBM 3624, PVV, Atalla Bi-Level DES, Diebold, NCR
- Payment Card Processing: MasterCard CVC, Visa CVV, American Express CSC, MasterCard CVC3, Visa dCVV, Discover DCVV, American Express Expresspay, Visa Cloud based payments
- EMV-based smart card support

Performance

- Rated at 10,000, 1080, 280, and 80 TPS (PIN translations per second)

More About Atalla Key Block

Atalla Key Block is the advanced key management complement to the Atalla HSM models. Leading financial industry independent software vendors (ISVs) have embraced Atalla Key Block. It has also been adopted as part of the industry-standard ANSI X9.24 Part 1-2009 Retail Financial Services Symmetric Key Management Part 1: Using Symmetric Techniques and ANSI X9.24 Part 2-2006 Retail Financial Services Symmetric Key Management Part 2: Using Asymmetric Techniques for Distribution of Symmetric Keys.

Technical Specifications

◆ **Atalla**

Physical Dimensions

- **Height:** 1.69 inches (4.3 cm)
- **Width:** 19.01 inches (48.3 cm)
- **Depth:** 30.87 inches (78.4 cm)
- **Weight:** 36.3 pounds (16.5 kg)
- **Controls:** Power on/off switch, unit ID switch, LCD control panel

Electrical

- **Rated input voltage:** 100 to 127 VAC 200 to 240 VAC
- **Rated input current:** 4.8 A at 100 VAC 2.4 A at 200 VAC
- **Rated input frequency:** 50 Hz to 60 Hz
- **Rated input power:** 480 W at 100 VAC 480 W at 200 VAC
- **BTUs per hour:** 1638 at 100 VAC 1638 at 200 VAC
- **Rated steady-state power:** 250 W at 100 VAC 250 W at 200 VAC
- **Maximum peak power:** 480 W at 100 VAC 480 W at 200 VAC

Operating Environment

- **Temperature:** 10°C to 35°C (50°F to 95°F)
- **Relative humidity:** 5% to 95% Non-condensing

Certification/Compliance

- **Safety:** UL, CSA, CE, TUV, GS, EAC, EK, CCC, BIS, BSMI, BIS, RCM
- **Emissions:** FCC Class A, VCCI
- **Environmental:** RoHS 2.07

Connectivity

- **Communications Ethernet:** TCP/IP, TLS 1.2 (only)
- **Connection:** 10/100/1000BASE-T (RJ45) auto-sensing

utimaco ®

EMEA	**Americas**	**APAC**
Utimaco IS GmbH	**Utimaco Inc.**	**Utimaco IS Pte Limited**
Germanusstraße 4 52080 Aachen, Germany	900 E Hamilton Ave., Suite 400 Campbell, CA 95008, USA	80 Raffles Place, #32-01, UOB Plaza Singapore 048624
+49 241 1696 200	+1 844 UTIMACO	+65 6622 5347
hsm@utimaco.com	hsm@utimaco.com	hsm@utimaco.com

For more information about Utimaco HSM products, please visit:

hsm.utimaco.com