Secure sensitive data and critical applications by storing, protecting and managing cryptographic keys in SafeNet Luna PCIe HSMs – high-assurance, tamper-resistant PCIe cards. Provide applications with dedicated access to a purpose-built, high-performance cryptographic processor. Quickly embed this cost-efficient solution directly into servers and security appliances for FIPS 140-2 validated assurance.

Contact us to learn how SafeNet Luna PCIe HSMs can help you ensure the integrity and protection of your encryption keys throughout their life cycle.

**What you need to know:**

**Superior Performance & Usability:**
- Fastest HSM on the market with over 20,000 ECC and 10,000 RSA operations per second for high-performance use cases
- Lower latency for improved efficiency
- Dedicated access for applications
- Low profile PCIe card

**Highest Security & Compliance:**
- Keys always remain in FIPS-validated, tamper-evident hardware
- Meet compliance needs for GDPR, eIDAS, HIPAA, PCI-DSS, and more
- Multiple roles for strong separation of duties
- Multi-person MofN with multi-factor authentication for increased security
- Secure audit logging
- High-assurance delivery with secure transport mode
## Technical Specifications

### Supported Operating Systems
- Windows, Linux

### API Support
- PKCS#11, Java (JCA/JCE), Microsoft CAPI and CNG, OpenSSL

### Cryptography
- Full Suite B support
- Asymmetric: RSA, DSA, Diffie-Hellman, Elliptic Curve Cryptography (ECDSA, ECDH, Ed25519, ECIES) with named, user-defined and Brainpool curves, KCSA, and more
- Symmetric: AES, AES-GCM, Triple DES, DES, ARIA, SEED, RCS, RC4, RC5, CAST, and more
- Hash/Message Digest/HMAC: SHA-1, SHA-2, SM3, and more
- Key Derivation: SP800-108 Counter Mode
- Key Wrapping: SP800-38F
- Random Number Generation: designed to comply with AIS 20/31 to DRG.4 using HW based true noise source alongside NIST 800-90A compliant CTR-DRBG

### Security Certifications
- FIPS 140-2 Level 3—Password and Multi-Factor (PED)
- eIDAS CC EAL4+ (AVA_VAN.5 and ALC_FLR.2) against the Protection Profile 419221-5 *

### Physical Characteristics
- Low profile PCIe card
- Dimensions: 69.6mm x 167mm x 187.mm (2.74” x 6.57” x 0.74”)
- Power Consumption: 18W maximum, 14W typical
- Heat Dissipation: 61.4 BTU/hr maximum, 47.8 BTU/hr typical
- Temperature: operating 0°C–50°C, storage -20°C–60°C
- Relative Humidity: 5% to 95% (38°C) non-condensing

### Safety & Environmental Compliance
- UL, CSA, CE
- FCC, CE, VCCI, C-TICK, KC MARK
- RoHS2, WEEE
- TAA

### Host Interface
- PCI-Express CEM 3.0, PCI, PCI Express Base 2.0

### Reliability
- Backup/restore
- High Availability (HA)
- Mean Time Between Failure (MTBF) 997,508 hours

* under evaluation

## Available Models

Choose from two series of SafeNet Luna PCIe HSMs, each one with 3 different models to fit your requirements.

### Luna A Series: Password Authentication for easy management.

<table>
<thead>
<tr>
<th>Model</th>
<th>Memory</th>
<th>Standard Performance</th>
<th>Enterprise Performance</th>
<th>Maximum Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A700</td>
<td>2 MB Memory</td>
<td>RSA-2048: 1,000 tps</td>
<td>RSA-2048: 5,000 tps</td>
<td>RSA-2048: 10,000 tps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECC P256: 2,000 tps</td>
<td>ECC P256: 10,000 tps</td>
<td>ECC P256: 22,000 tps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AES-GCM: 2,000 tps</td>
<td>AES-GCM: 10,000 tps</td>
<td>AES-GCM: 17,000 tps</td>
</tr>
<tr>
<td>A750</td>
<td>16 MB Memory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A790</td>
<td>32 MB Memory</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Luna S Series: Multi-factor (PED) Authentication for high assurance use cases.

<table>
<thead>
<tr>
<th>Model</th>
<th>Memory</th>
<th>Standard Performance</th>
<th>Enterprise Performance</th>
<th>Maximum Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>S700</td>
<td>2 MB Memory</td>
<td>RSA-2048: 1,000 tps</td>
<td>RSA-2048: 5,000 tps</td>
<td>RSA-2048: 10,000 tps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECC P256: 2,000 tps</td>
<td>ECC P256: 10,000 tps</td>
<td>ECC P256: 22,000 tps</td>
</tr>
<tr>
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<td></td>
<td>AES-GCM: 2,000 tps</td>
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<td>AES-GCM: 17,000 tps</td>
</tr>
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<td>S750</td>
<td>16 MB Memory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S790</td>
<td>32 MB Memory</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

tsp = transactions per second

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**Contact Us:** For all office locations and contact information, please visit safenet.gemalto.com/contact-us

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