

# Thales Luna Network HSM



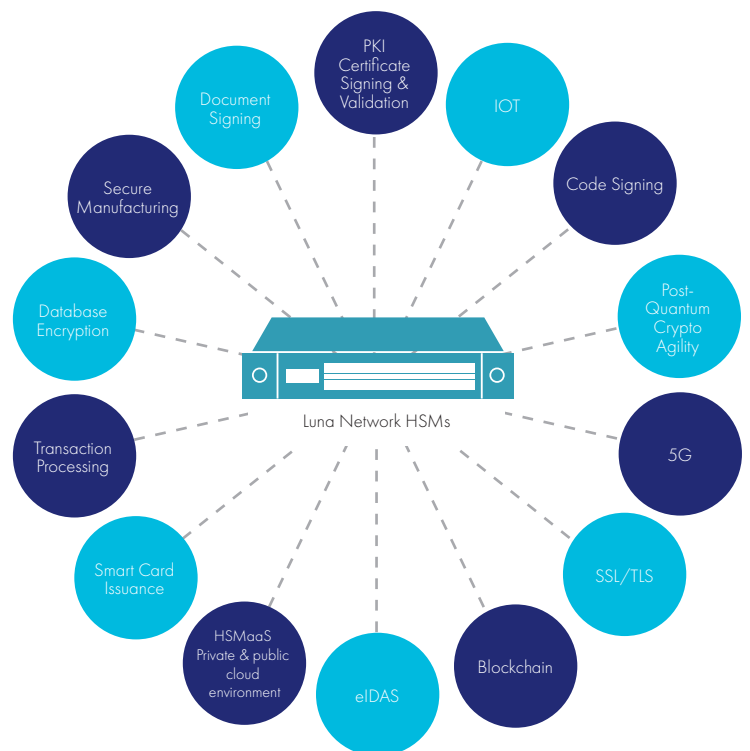
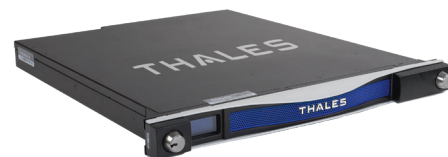
Secure your sensitive data and critical applications by storing, protecting and managing your cryptographic keys in Thales Luna Network Hardware Security Modules (HSMs) - high-assurance, tamper-resistant, network-attached appliances offering market-leading performance.

Contact us to learn how you can integrate Luna Network HSMs into a wide range of applications to accelerate cryptographic operations, secure the crypto key lifecycle, and provide a root of trust for your entire encryption infrastructure.

## What you need to know:

### Superior Performance:

- Meet your high throughput requirements with over 20,000 ECC and 10,000 RSA operations per second for high performance use cases
- Lower latency for improved efficiency



## Highest Security & Compliance:

- Keys always remain in FIPS-validated, tamper-evident hardware
- Meet compliance needs for GDPR, eIDAS, HIPAA, PCI-DSS, and more
- De facto standard for the cloud
- 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
- High quality keys through external Quantum RNG seeding
- Securely backup and duplicate keys in hardware with Luna Backup HSM or to the cloud with Data Protection on Demand for redundancy, reliability and disaster recovery

## Reduce Costs & Save time:

- Remotely manage HSMs - no need to travel
- Reduced audit and compliance costs and burdens
- Automate enterprise systems to manage HSMs via REST API
- Efficiently administer resources by sharing HSMs amongst multiple applications or tenants
- Flexible partition policies to meet your key management and compliance needs
- Increased portability, greater efficiency and less overhead using SafeNet Luna Client in a container
- Functionality Modules
  - Extend native HSM functionality
  - Develop and deploy custom code within the secure confines of the HSM

## Technical Specifications

### Supported Operating Systems

- Windows, Linux, Solaris, AIX
- Virtual: VMware, Hyper-V, Xen, KVM

### API Support

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

### Cryptography

- Full Suite B support
- Asymmetric: RSA, DSA, Diffie-Hellman, Elliptic Curve Cryptography (ECDSA, ECDH, Ed25519, ECIES) with named, user-defined and Brainpool curves, KCDSA, and more
- Symmetric: AES, AES-GCM, Triple DES, DES, ARIA, SEED, RC2, 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
- Digital Wallet Encryption: BIP32
- 5G Cryptographic Mechanisms for Subscriber Authentication: Milenage, Tuak, and Comp128

## 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 \*

## Host Interface

- 2 options: 4 Gigabit ethernet ports with Port Bonding, or 2 x 10G fiber network connectivity and 2 x 1G with Port Bonding
- IPv4 and IPv6

## Physical Characteristics

- Standard 1U 19in. rack mount appliance
- Dimensions: 19" x 21" x 1.725" (482.6mm x 533.4mm x 43.815mm)
- Weight: 28lb (12.7kg)
- Input Voltage: 100-240V, 50-60Hz
- Power Consumption: 110W maximum, 84W typical
- Heat Dissipation: 376BTU/hr maximum, 287BTU/hr typical
- Temperature: operating 0°C – 35°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
- India BIS [IS 13252 (Part 1)]/IEC 60950-1]

## Reliability

- Dual hot-swap power supplies
- Field-serviceable components
- Mean Time Between Failure (MTBF) 171,308 hrs

## Management & Monitoring

- HA disaster recovery
- Backup and restore hardware to hardware on-premises or in the cloud
- SNMP, Syslog

\* under evaluation

## Available Models

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

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

A700	A750	A790
2 MB Memory	16 MB Memory	32 MB Memory
Partitions: 5	Partitions: 5	Partitions: 10
Maximum Partitions: 5	Maximum Partitions: 20	Maximum Partitions: 100

Standard Performance:	Enterprise Performance:	Maximum Performance:
RSA-2048: 1,000 tps	RSA-2048: 5,000 tps	RSA-2048: 10,000 tps
ECC P256: 2,000 tps	ECC P256: 10,000 tps	ECC P256: 22,000 tps
AES-GCM: 2,000 tps	AES-GCM: 10,000 tps	AES-GCM: 17,000 tps

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

S700	S750	S790
2 MB Memory	16 MB Memory	32 MB Memory
Partitions: 5	Partitions: 5	Partitions: 10
Maximum Partitions: 5	Maximum Partitions: 20	Maximum Partitions: 100





Standard Performance:	Enterprise Performance:	Maximum Performance:
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ECC P256: 2,000 tps	ECC P256: 10,000 tps	ECC P256: 22,000 tps
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tps = transactions per second

## About Thales

The people you rely on to protect your privacy rely on Thales to protect their data. When it comes to data security, organizations are faced with an increasing number of decisive moments. Whether the moment is building an encryption strategy, moving to the cloud, or meeting compliance mandates, you can rely on Thales to secure your digital transformation.

Decisive technology for decisive moments.

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**Americas** – Arboretum Plaza II, 9442 Capital of Texas Highway North, Suite 100, Austin, TX 78759 USA • Tel: +1 888 343 5773 or +1 512 257 3900 • Fax: +1 954 888 6211 • E-mail: [CPL\\_Sales\\_AMS\\_TG@thalesgroup.com](mailto:CPL_Sales_AMS_TG@thalesgroup.com)  
**Asia Pacific** – Thales Transport & Security (HK) Lt, Unit 4101-3, 41/F, Sunlight Tower, 248 Queen's Road East, Wanchai, Hong Kong • Tel: +852 2815 8633 • Fax: +852 2815 8141 • E-mail: [CPL\\_Sales\\_APAC\\_TG@thalesgroup.com](mailto:CPL_Sales_APAC_TG@thalesgroup.com)  
**Europe, Middle East, Africa** – 350 Longwater Ave, Green Park, Reading, Berkshire, UK RG2 6GF • Tel: +44 (0)1844 201800 • Fax: +44 (0)1844 208550 • E-mail: [CPL\\_Sales\\_EMEA\\_TG@thalesgroup.com](mailto:CPL_Sales_EMEA_TG@thalesgroup.com)



**Planet Communications Asia PLC.**

157 Soi Ramindra 34, Ramindra Rd., Tarang, Bangkhen, Bangkok 10230  
 Tel: +66 2 792 2400 | Fax: +66 2 792 2499, +66 2 943 5771 | E-mail: [sales@planetcomm.com](mailto:sales@planetcomm.com)



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