# Luna® SP

## Central Network-Attached Hardware Security Module

**PRODUCT BRIEF**

### Benefits

- Protected Application Execution Environment
- Signed Code Prevents Unauthorized Execution
- Application Auto Restart
- Standard Tools for Rapid Development
- Reduces System Overhead
- Prevents Unauthorized Execution
- Supports Geographically Dispersed Administration of the Luna SP

Luna SP allows developers to securely deploy Web applications, Web services,and other Java applications in a protected hardened security appliance.

### Deploy Secure Applications Anywhere with Ease

SafeNet Luna SP is designed for reliable deployment of security applications anywhere on your network. Luna SP leverages standard Java development tools to simplify development of custom applications and reduce integration and testing cycles. Its programmability and security make it easy to develop custom applications, integrate them into an appliance, and deploy them securely in a very short time. Enterprises deploying security applications can streamline development processes, eliminate hardware duplication, and reduce ongoing operational costs with Luna SP.

### The Programmability of an Application Server with the Security of an HSM

Luna SP provides a secure platform for the deployment of Web applications, Web services, and Java applications that require the highest levels of trust by combining a standard application server platform and a dedicated hardware security module (HSM) within a single security appliance. The Luna SP's application server is security hardened and optimized to take advantage of the integrated HSM and its specialized hardware features.

### Standard Tools for Rapid Development

Luna SP supports the J2S development environment and is pre-populated with standard tools to simplify application development. A Web server, SOAP stack, and J2SE compliant XML Web service container are preinstalled and optimized to support XML and Web services applications running on Luna SP. Custom applications can be developed quickly and easily, simplifying design and testing, shortening development cycles, and eliminating the need for propriety development funds.

### Protected Application Environment

Applications installed on Luna SP execute within a protected application container to ensure that application code and system code are isolated. Applications executing within this trusted environment have exclusive access to the Luna SP integrated HSM through a policy layer separating the application from the HSM.

### Secures Applications and their Cryptographic Keys

Luna SP increases application security by providing a trusted execution environment that protects an application's sensitive software components and cryptographic keys from physical, logical, and operational threats. Customer-provided application code is digitally signed and securely installed on the Luna SP to assure code integrity and prevent the execution of unauthorized applications.

Luna SP features an integrated FIPS 140-2, Level 3 validated HSM that provides hardware protection for cryptographic keys and processes.

## Technical Specifications

**Java Service Environment**
Luna SP includes the following tools to support custom Java services:

- Java J2SE (JVM)
- Xerces (XML parsing)
- Apache Tomcat (Application and Webserver)
- Apache Axis (SOAP)

**Cryptographic APIs**
- JCE/JCA

**Regulatory Standards Certifications**
- FIPS 140-2 Level 3 validated HSM inside
- RoHS compliant
- U/L 1950 (EN60950) & CSA C22.2 compliant
- FCC Part 15 - Class B

**Cryptographic Performance**
- Luna SP 1.5 – Over 1200 1024-bit RSA cryptographic operations per second
- Luna SP 2.0 – 3000 & 7000 tps
- Luna SP 2.04 and SP 2.1– 3000 & 7000 tps

**Cryptographic Algorithms**

**Asymmetric Key**
- Diffie-Hellman (1024-4096 bit) RSA (512-4096 bit)

**Digital Signing**
- RSA (1024-4096 bit), DSA (512-1024 bit)

**Symmetric Keys**
- 3DES,AES,RC2,RC4,RC5

**Hash Digest**
- SHA-1,SHA-2, (160,256,512), MD-5

**Message Authentication Codes**
- HMAC -MD5, HMAC -SHA-1, SSL3-MD5-MAC , SSL3-SHA-1-MAC

**Physical Characteristics**

**Connectivity**
- 2x 10/100 Ethernet, CAT5, UTP Local administration serial console port

**Dimensions**
- 19.0" x 20.6" x 3.45" (482.6mm x 523.2mm x 87.7mm) 35lb (15.9kg)
- 1U full-length 19" rackmount chassis (Luna SA 4.0 model) (ANSI/EIA-310-compliant)

**Power Requirements**
- 1.5A@120V Max

**Temperature**
- Operating 0°C to 40°C
- Storage -20°C to +65°C

RoHS COMPLIANT

PCI SECURITY VENDOR ALLIANCE

inside

## Auditability, Authentication, and Policy Control

Luna SP combines proven hardware key management with rigorous logging features to provide non-repudiable audit records of access and cryptographic key usage. Split administrative roles, including M of N multi-person authentication, and flexible security policy management, maintain tight control over sensitive administrative functions, including code loading and management of cryptographic keys.

## Maximum Application and Cryptographic Performance

Applications running on Luna SP take advantage of a streamlined appliance platform with the minimal set of services. This reduces system overhead and maximizes application performance. Luna SP's integrated K5 Cryptographic Engine is capable of up to 4,000 transactions per second to eliminate cryptographic processing bottlenecks.

## Tamper-Protected Hardware

Integrated physical security measures include tamper-evident seals, intrusion detection switches, and shielded connectors designed to resist physical attacks.

## Simplified Administration

Luna SP features a secure Command Line Interface to simplify remote system administration and streamline maintenance. A local console port is offered for initial configuration or direct system administration.

## Two-Factor Authentication

Luna SP uses two-factor, trusted path authentication with the PED (PIN Entry Device), a handheld authentication console, to control access to HSM administration functions and applications.

## Ethernet-Attached for Flexibility

Luna SP connects to standard TCP/IP (Internet Protocol) networks to ensure ease of deployment into existing network infrastructure.

Two Ethernet interfaces with integrated firewalls can be used for services or administrative access.

## Remote PED

New to this version of Luna SP is Remote PED (PIN entry device), an authentication device that connects to a remote Windows workstation via USB, and communicates over a secure network connection to the Luna SP's integrated HSM. Full PED functionality facilitates centralized management of security administration functions by offering the security administrator the ability to remotely authenticate to any HSM role using the PED.

## Enterprise Data Protection

SafeNet Luna SP is a key component of SafeNet's comprehensive enterprise data protection solution to reduce the cost and complexity of regulatory compliance, data privacy, and information risk management. SafeNet Enterprise Data Protection (EDP) is the only solution that secures data across the connected enterprise, protection of data at rest, data in transit, and data in use. Unlike disparate, multi-vendor point solutions that can create limited "islands" of security, SafeNet EDP provides an integrated security platform with centralized policy management and reporting for seamless, cost-efficient management of encrypted data across databases, applications, networks, and endpoint devices. For more information, visit www.safenet-inc.com/EDP

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