

nShield Edge

- Maximizes cost efficiency. nShield Edge is the most economical HSM in the nShield family
- Supports a wide variety of applications including certificate authorities, code signing and more
- Delivers strong security. nShield Edge HSMs are certified up to FIPS 140-2 Level 3



nShield Edge HSMs



nShield Edge HSMs

Feature Overview



nShield Edge hardware security modules (HSMs) are full-featured, FIPS-certified, USB-connected devices that deliver encryption, key generation and key protection along with convenience and economy.

DESIGNED FOR LOW-VOLUME TRANSACTION **ENVIRONMENTS**

Suits off-line key generation and development environments, while delivering complete algorithm and API support.

HIGHLY PORTABLE

Small, lightweight design with convenient USB interface supports a variety of platforms, including laptops and other portable devices.

COST EFFECTIVE AND SCALABLE

The most economical HSM in the nShield family, nShield Edge gives you an entry-point HSM, while affording you the option to scale your environment as your needs grow. nCipher's unique Security World architecture lets you combine nShield HSM models to build a mixed estate that delivers flexible scalability, key sharing, seamless failover and load balancing.

TECHNICAL SPECIFICATIONS

Supported Cryptographic Algorithms

- o Asymmetric algorithms: RSA, Diffie-Hellman, ECMQV, DSA, El-Gamal, KCDSA, ECDSA, ECDH, Edwards (X25519, Ed25519ph)
- Symmetric algorithms: AES, Arcfour, ARIA, Camellia, CAST, DES, MD5 HMAC, RIPEMD160 HMAC, SEED, SHA-1 HMAC, SHA-224 HMAC, SHA-256 HMAC, SHA-384 HMAC, SHA-512 HMAC, Tiger HMAC, Triple DES
- Hash/message digest: MD5, SHA-1, SHA-2 (224, 256, 384, 512 bit), HAS-160, RIPEMD160
- Full Suite B implementation with fully licensed ECC, including Brainpool and custom curves

Supported Operating Systems

- o Microsoft Windows 7 x64, 10 x64, Windows Server 2008 R2 x64, 2012 R2 x64, 2016 x64
- Red Hat Enterprise Linux AS/ES 6 x64, x86 and 7 x64; SUSE Enterprise Linux 11 x64 SP2, 12 x64
- Oracle Enterprise Linux 6.8 x64, 7.1 x64

Application Programming Interfaces (APIs)

• PKCS#11, OpenSSL, Java (JCE), Microsoft CAPI and CNG, nCore, nShield Web Services Crypto API

Compatibility and Upgradeability

USB port (1.x, 2.x compliant)

Security Compliance

FIPS 140-2 Level 2 and Level 3, and NIST SP 800-131A

Safety and Environmental Standards Compliance

• UL, CE, FCC, C-TICK, and Canada ICES RoHS2, WEEE

Management and Monitoring

- Remote unattended operator/multi-user access control
- Secure audit logging
- Syslog diagnostics support
- Windows performance monitoring
- SNMP monitoring agent

Physical Characteristics

- Portable desktop device with integrated smart card reader
- Dimensions with stand open 120 x 118 x 27mm (4.7 x 4.6 x 1in)
- Weight: 340g (0.8lb)
- o Input voltage: 5v DC powered by USB host device
- Power consumption: 700mW

Performance

- Signing performance for NIST recommended key lengths:
- o 2048 bit RSA: 2 tps
- 4096 bit RSA: 0.2 tps

AVAILABLE MODELS

LEARN MORE

To find out more how nCipher Security can deliver trust, integrity and control to your business critical information and applications, visit www.ncipher.com







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