nSHIELD CONNECT

- Maximizes performance and availability with high cryptographic transaction rates and flexible scaling.
- Supports a wide variety of applications including certificate authorities, code signing and more.
- nShield CodeSafe protects your applications within nShield’s secure execution environment.
- nShield Remote Administration helps you cut costs and reduce travel.

nSHIELD CONNECT HSMs
Certified Appliances that Deliver Cryptographic Key Services Across Networks
nShield Connect HSMs are FIPS-certified appliances that deliver cryptographic services to applications across the network. These tamper-resistant platforms perform such functions as encryption, digital signing and key generation and protection over an extensive range of applications, including certificate authorities, code signing, custom software and more.

The nShield Connect series includes nShield Connect+ and the new, high-performance nShield Connect XC.

**HIGHLY FLEXIBLE ARCHITECTURE**
Thales’s unique Security World architecture lets you combine nShield HSM models to build a mixed estate that delivers flexible scalability and seamless failover and load balancing.

**PROCESS MORE DATA FASTER**
nShield Connect HSMs support high transaction rates, making them ideal for enterprise, retail, IoT and other environments where throughput is critical.

**PROTECT YOUR PROPRIETARY APPLICATIONS**
The CodeSafe option provides a secure environment for running sensitive applications within nShield boundaries.

**CERTIFIED HARDWARE SOLUTIONS**
Thales’s broad set of certifications help you demonstrate compliance and meet stringent industry standards.

**TECHNICAL SPECIFICATIONS**

**Supported Cryptographic Algorithms**
- Asymmetric algorithms: RSA, Diffie-Hellman, ECDH, DSA, KCDSA, ECDSA, ECDH
- Symmetric algorithms: AES, AES-GCM, ARIA, Camellia, CAST, RijMD, HMAC, SEED, Triple DES
- Hash/message digest: SHA-1, SHA-2 (224, 256, 384, 512 bit), HAS-160
- Full Suite B implementation with fully licensed ECC, including Brainpool and custom curves

**Supported Operating Systems**
- Windows and Linux
- Connect+ additionally supports Solaris, IBM AIX, HP-UX and virtual environments AIX LPARs, VMware and Windows Server 2012R2 Hyper-V
- Connect XC also supports virtual environment: Citrix XenServer 6.5, VMware ESXi 5.5 and Windows Server 2012R2 Hyper-V

**Application Programming Interfaces (APIs)**
- PKCS#11, OpenSSL, Java (JCE), Microsoft CAPI and CNG nCore

**Host Connectivity**
- Dual Gigabit Ethernet ports (two network segments)

**Security Compliance**
- FIPS 140-2 Level 2 and Level 3 for Connect+; Connect XC is FIPS-pending.
- USG6 accreditation for Connect+ / XC
- Common Criteria EAL4+ (AVA_VAN.5) for Connect+
- Connect+ recognized as a Secure Signature Creation Device

**Safety and Environmental Standards Compliance**
- UL, CE, FCC, C-Tick, Canada ICES RoHS2, WEEE

**High Availability**
- All solid-state storage
- Dual hot-swap power supplies
- Field serviceable components

**Management and Monitoring**
- Cut costs using nShield Remote Administration. Please consult the nShield Remote Administration data sheet to learn more.
- Syslog diagnostics support Windows performance monitoring
- SNMP monitoring agent

**Physical Characteristics**
- Standard 1U 19in. rack mount Dimensions: 43.4 x 430 x 70.3mm (1.7 x 16.9 x 27.8in)
- Weight: 1.6kg (3.5lb)
- Input voltage: 100-240V AC auto switching 50-60Hz
- Power consumption: up to 2.0A at 110V AC, 60Hz | 1.0A at 220V AC, 50Hz
- Heat dissipation: 327.6 to 362.0 BTU/hr (full load)

**LEARN MORE**
Visit us at www.thales-esecurity.com to learn how our advanced data security solutions and services deliver trust wherever information is created, shared or stored.

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**nShield Connect Models**

<table>
<thead>
<tr>
<th>RSA Signing (tps) for NIST Recommended Key Lengths</th>
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<tbody>
<tr>
<td>2048 bit</td>
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<tr>
<td>4096 bit</td>
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<tr>
<th>ECC Prime Curve Signing Performance (tps) for NIST Recommended Key Lengths</th>
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<tbody>
<tr>
<td>256 bit</td>
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