

Technical Data Sheet

cryptovision GreenShield File

File encryption with BSI approval for VS-NfD, NATO Restricted and EU Restricted

GreenShield File is a solution for encrypting and signing files. As an add-in for Windows, Green-Shield is easy to use. Encrypted files can be sent by e-mail and are recognized as encrypted mails by all common mail clients.

Functionality	 Functions for protecting files: Signing and verifying files Encryption and decryption of files Key- and certificate management
Features	 S/MIME & OpenPGP support Symmetric encryption (password-based) Key storage on smart card / USB token / softkey Generation of RSA and EC keys Generation of certificate requests and self-signed certificates Generation of key rings and revocations X.509 certificates and X.509 revocation lists Usage of several certificate authorities in parallel LDAP / OCSP / HTTP(S) support HTTP proxy support PIN caching Centralized configuration and management GUI- and commandline-based usage API for integration in third-party applications*
Scope of supply	 GreenShield Extension for Windows Explorer and Ubuntu Nautilus GreenShield Core System PKCS#11 module
Supported standards	 S/MIME version 3.2 / 4 including ECC OpenPGP PKCS#11
Accessibility	 Very good accessibility for users without sight and for users with motor or auditory impairments Good accessibility for users with impaired vision
Supported operating systems	Microsoft Windows 10Microsoft Windows 11Ubuntu Linux 20.04 LTS

^{*} Extension

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Supported algorithms	Asymmetric crypto algorithms: RSA (up to 16384 bit, up to PKCS1#v2 incl. PSS/OAEP) DSA/DH (up to 2048 Bit) ECC (up to 571 Bit): NIST and Brainpool curves PQC-Preview: Dilithium und Kyber** Symmetric crypto algorithms: DES (56 bit)* Triple-DES (168 bit)* RC2 (40 bit, 64 bit, 128 bit)* AES (128 bit, 196 bit, 256 bit) Hash algorithms: SHA-1**, SHA-224**, SHA-256, SHA-384, SHA-512 RIPEMD-128, RIPEMD-140, RIPEMD-160* MD2, MD4, MD5*
Approval and usage requirements: VS-NfD, NATO Restricted EU Restricted	 Smartcards: Cryptovision ePasslet Suite v3.0 on NXP JCOP 3 Cryptovision ePasslet Suite v3.0 on G&D Sm@rtCafé Expert 7 (Veridos Suite v3.0) CardOS V5.0 with QES V1.1 Elektronischer Dienst- und Truppenausweis, based on CardOS V5.0 (v4.2, v4.3, v4.4) PKIBw-Card (PKI-Bw v1.7, v1.8, v1.9, tPKI-Bw v7.1), based on CardOS V5.0 CardOS V5.3 QES, V1.0 CardOS DI V5.4 QES Version 1.0 CardOS V6.0 DI (R1.0, R1.1) TCOS 3.0 – Signature Card Version 2.0 Release 2 TCOS 4.0 – TeleSec IDKey with NetKey Plus Secunet SINA Workstation virtual SmartCard from SINA OS 3.5.2.3
	 VS-NfD approval according to BSI-TR-03145 Middleware: cryptovision SCinterface 8.1.x (PKCS#11 module)
	Approval IDs: BSI-VSA-10602, BSI-VSA-10632, BSI-VSA-10687

* For decryption only, supported to ensure compatibility with outdated algorithms ** Not permitted for VS-NfD, EU Restricted and NATO Restricted



