



Technical Data Sheet

GreenShield File

04/2021

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, GreenShield is easy to use. Encrypted files can be sent by e-mail and are recognized as encrypted mails by all common mail clients.

Functionality	<p>Functions for protecting files:</p> <ul style="list-style-type: none"> • Signing and verifying files • Encryption and decryption of files • Key- and certificate management
Features	<ul style="list-style-type: none"> • Key storage from smart card / USB token / softkey** • Generation of certificate requests and self-signed certificates* • Symmetric encryption (password) • PIN caching* • Generation of RSA and EC keys • Centralized configuration and management • Several certificate authorities can be used in parallel • LDAP / OCSP / HTTP(S) support • HTTP proxy support • Verification of certificates • X.509 certificates and X.509 revocation lists
Scope of supply	<ul style="list-style-type: none"> • GreenShield for Microsoft Windows • GreenShield Core System • PKCS#11 module
Supported standards	<ul style="list-style-type: none"> • S/MIME version 3.2 / 4 including ECC • PKCS#11 • Random from Smartcard / TR2101-1 pseudo random number generator • LDAP / OCSP / HTTP(S)
Evaluation and approval	<ul style="list-style-type: none"> • Verschlusssache – Nur für den Dienstgebrauch (VS-NfD) • NATO Restricted • EU Restricted <p>Zulassungsnummer: BSI-VSA-10552</p>
Supported operating systems	<ul style="list-style-type: none"> • Microsoft Outlook Windows 7 SP1*** • Microsoft Windows 10 (from 1809)

* Not permitted for VS-NfD, EU Restricted and NATO Restricted

** In coordination with the BSI

*** Microsoft support discontinued as of 14 January 2020

Technical Data Sheet - GreenShield File

Supported algorithms	<p>Asymmetric crypto algorithms:</p> <ul style="list-style-type: none">• 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 <p>Symmetric crypto algorithms:</p> <ul style="list-style-type: none">• DES (56 bit)**• Triple-DES (168 bit)**• RC2 (40 bit, 64 bit, 128 bit)**• AES (128 bit, 196 bit, 256 bit) <p>Hash algorithms:</p> <ul style="list-style-type: none">• SHA-1*, SHA-224*, SHA-256, SHA-384, SHA-512• RIPEMD-128, RIPEMD-140, RIPEMD-160**• MD2, MD4, MD5**
Usage requirements: VS-NfD, NATO Restricted EU Restricted	<p>Smartcards:</p> <ul style="list-style-type: none">• ePasslet Suite v3.0 on NXP JCOP 3• ePasslet Suite v2.1 on NXP JCOP 2.4.2• Electronic service and army identity card, based on CardOS-5 smart card (v4.2,v4.3)• PKIBw card (PKI-8Wv1.7, PKI-BWvL.8), based on CardOS-5-smart card• CardOS V5.0 with QES V1.1 <p>PKI:</p> <ul style="list-style-type: none">• VS-NfD approval according to BSI-TR-03145 <p>Certificates and revocation lists:</p> <ul style="list-style-type: none">• CRL or OCSP <p>Middleware:</p> <ul style="list-style-type: none">• cryptovision SCinterface 8.0.x (PKCS#11 module)

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** For decryption only, supported to ensure compatibility with outdated algorithms



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