

WFCRYPTO

Secure Portable system

WF Crypto for secure banking applications.

Walletex is proud to present a high speed portable encrypted hardware for secured authentication and money transactions applications.

A complete solution for Keystroke Logging Protection, Spyware and other online threats which enables secure bank transactions direct from the card to bank's server without external interference.

High Security

A secure wallet computer, credit card size, with internal strong processor, integrated keyboard and screen for entering sensitive transaction information directly to bank servers

- Multilayer protection - two parallel secure sessions (SSL) from card to bank server and from application to server.
- Bidirectional PKI authentication (card & bank server)
- Password and sensitive information entered into the card using the integrated keyboard and then sent encrypted to destination server.
- Protected against any physical tampering, encased in metal casing and epoxy shield, waterproof
- Equipped with self-destruct and remote destruct mechanism

Secured Communication

- Direct SSL line to the bank server
- Session key kept in the card
- History kept on cards (transactions, data and digital signatures)

Easy to Operate

- Run secure portable applications directly from the card's encrypted memory
- Driverless - micro USB to USB connection - no installation necessary

Additional Capabilities

- Internal realtime clock for digital signature
- PKI, AES, Smart card, OTP.



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Secure communication working procedure



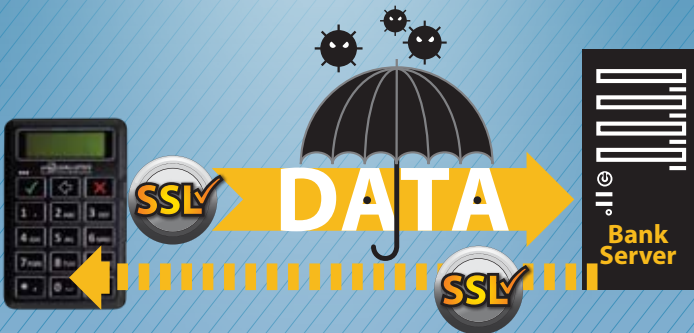
- 1 WF Crypto is plugged into the PC
Pin code is entered directly to the card via the integrated keyboard (isolated from PC)
- 2 Browser application is auto-launched from the encrypted Flash Card



- 1 PC connects to Bank server
 - 2 Bank server authenticates card and a Session Key is produced in the encrypted card (PKI)
- A secured session connection (SSL) is established from card directly to bank server
 - User checks the account via the browser on the PC



- Confidential transaction data is entered, using card's keyboard (safe from any malicious software on the PC)
- Data is signed and encrypted inside the card
- Encrypted data is sent directly to bank server



- Each SSL connection is secured and is given a different session key
- Data is secured and invisible to any malicious software on the host computer

Specifications

Capacity	2GB, 4GB, 8GB, 16GB, 32GB, 64Gb, 128GB
HW Encryption	AES 128/196/256 bit using CBC-mode at data and 128 at HW, ECB (optional), keys AES 256, HW DRNG, PKI 512/1024/2048/4096-bit RSA, DH, Hashing 160/256bit SHA-1/2, FIPS validations 140-2 level 2 186-2 197, true RNG, DES/3DES (All cryptographic functions are executed internally on a highly secured chip, which is common criteria EAL4+ certified)
Interface	PKCS#11 – CSP
PKI Functions	Modulo size: 512 – 4096 bit, Calc. method: No CRT/CRT, RSA Key Generate, Signature, Encrypt, Decrypt
Key Storage	Hardware level, keys are stored inside a crypto chip protected against physical attacks
Password/Secure access	Complex/Independent for each partition; PIN/AES/PKI
Partitions	Up to 10 Independent Customized Partitions; Write enabled, CD, CD Auto-Run, hidden, OTP Protection
Identifications	Unique identification at card level
Connection	Micro USB interface
Read/Write speed	10MBps/8MBps-4MBps (dependent on 'on the fly' encryption)
Dimensions and weight	Credit card format w=53.8mm x h=85mm x d=2.6mm (2.11" x 3.34" x 0.1") 35 grams (1.2 Oz)
Durability	Waterproof [MIL-STD-810F] Heat tolerance -400C – +850C (storage) ; -100C – +700C (operation)