



# eKrypto™ Secure Transaction Keyboard



## eKrypto™ Secure

- Chip & PIN Verification
- PIN Code Entry
- Password Entry
- Access Control
- Communications
- Biometric Verification (Optional)

## eKrypto™ Security Benefits

- Chip & PIN Hybrid Chip & Magnetic Card Reader
- Secure PC/SC Smart Card Reader for Secure Log-On
- Web Enabled
- Remotely Programmable

### Options:

- Biometric Fingerprint Scanner
- USB High Speed Downstream Port
- J/XFS & XFS Middleware Drivers Available on Request

The eKrypto™ Secure Transaction Keyboard (STKB) is an Intelligent Cryptographic Keyboard for applications requiring the combination of Online / Offline Client PIN Verification, Secure Logon and Digital Signing. The eKrypto™ Secure Transaction Keyboard Hybrid Chip & Magnetic Card Reader is designed to meet the PCI Standard for Offline and Online Client PIN verification. Whether for financial applications or access control this security device ensures integrity of communication between device and host. The Operator identity is verified by Secret PIN (or Fingerprint optional), requiring the Operator to be in possession of a physical card and knowledge of the secret PIN number. Operator Log-On PIN as with all other secret data transmitted from the device is encrypted by the eKrypto™ Engine in the device controller ensuring data leaves the Keyboard encrypted.

The Secure Remote Programmable eKrypto™ Secure Transaction Keyboard provides the ideal solution for Retail Outlets, Secure Access, Bank and Post Office Teller Applications offering 3 Factor Biometric and Smart Card Operator Log-On together with providing a secure Chip & PIN payment solution when combined with one of the eKrypto™ family of Chip & PIN Pads. Features include integrated PCI Compliant Hybrid Chip & Magnetic Payment Card Reader, separate ISO PC/SC compliant Smart Card Reader for Operator Log-On, Fingerprint Scanner for more secure Biometric Operator Log-On, backlit 2 x 16 LCD for secure messaging and operator PIN entry confirmation, a secure dedicated port for connecting a PCI PIN Pad directly and also a high speed USB (480Mbps) downstream port for connecting additional devices such as receipt printer or mouse.

Furthermore the eKrypto™ Secure Transaction Keyboard has XFS and J/XFS Middleware drivers and EMV2000 Level 2 Kernel available on request. This device is further complimented by the eKrypto™ family of Chip & PIN Pads that it is designed to securely integrate with in compliance with industry standards.

## Technical Specification

### DIMENSIONS

215 (D) x 475 (L) mm  
Weight: 1.4 Kg

### KEYBOARD

WIN Office Keyboard  
10 million operations  
Full travel, soft touch tactile

### CHIP & MAG CARD READER

Hybrid MCR/SCR  
8 contacts, 500,000 insertions  
ISO 7816 Chip Card Interface  
1v8, 3v3 & 5v Chip Card Support  
EMV2000 Approved  
3 Track MSR  
1,000,000 passes dual track MSR

### SMART CARD READER

8 contacts, 500,000 insertions  
ISO 7816 Chip Card Interface  
1v8, 3v3 & 5v Chip Card Support

### DISPLAY

2 x 16 Character Backlit LCD

### OPERATING TEMP

0°C to 50°C

### PC INTERFACE

USB 2.0 High Speed (480 Mbps)

### HOST CABLE

Single straight 2m long type for Bus powered USB port.

### OPERATING SYSTEM

eKrypto™ OS

### OPTIONS:

#### FINGERPRINT SCANNER

Optical Fingerprint Scanner

#### USB DOWNSTREAM PORT

USB 2.0 High Speed (480Mbps)  
Dedicated Secure Port for PIN Pad

### STANDARDS

ISO 7816 SCR / ISO 7811  
EMV2000 Level 1 & 2  
ISO 7811 MCR  
EN60950/IEC950/  
UL 1950 Safety  
ISO 9995 Ergonomics  
ISO 9241 part 4 Ergonomics  
FCC part 15 EMI Emissions  
EN55022 B RF Emissions  
EN55024 RF Immunity  
CE / CB

Doc Rev 1.3

## Product Applications

The eKrypto™ Web-Enabled Secure Transaction Keyboard intended for use as:

- A Chip & PIN Transaction Keyboard for Secure Chip & PIN Transactions. The Keyboard can perform both Secure Offline and Online Client PIN Verification. Integrated PCI Compliant Chip & Magnetic Card Reader for ease of migration.
- An Intelligent Cryptographic Keyboard for applications requiring the combination of Client ID with Smart Card Reader & PIN Code where access and usage require knowledge and the possession of both PIN / Password and Smart Card. Fingerprint Swipe Reader option available for enhanced Biometric Security.

The eKrypto™ Web-Enabled Secure Transaction Keyboard has a PCI Compliant Chip & Magnetic Card Reader, an integrated ISO 7816 Smart Card Reader and a 2 x 16 character backlit LCD. The LCD will serve to prompt the user to enter PIN or perform other actions. Options include Biometric Fingerprint Scanner, 2<sup>nd</sup> PC/SC EMV Smart Card Reader and an external USB 2.0 High Speed (480Mbps) Downstream Port for connecting additional USB device such as Receipt Printer or Mouse. XFS and J/XFS Middleware drivers and EMV2000 Level 2 Kernel available on request.

## Technology Benefits

### Security

- Chip & PIN Reader
- Fingerprint Scanner
- Smart Card Log-On Reader
- Dedicated PIN Pad Port
- PKI & 3DES Enabled
- 2048, 1024, 512 bits

eKrypto™ Web Enabled Technology enables the Keyboard to securely use the existing network capability of the connected PC / Workstation; therefore there is no need for costly dedicated phone lines and for costly dedicated external communication devices.

### Features

- USB2.0 Bus powered high speed end-point Chip & PIN Keyboard
- Downwards compatible with standard USB PC keyboard.
- PIN Entry / Offline PIN Verification with inserted Smart Card
- Web Enabled
- PC/SC compliant Smart Card Reader (500,000 card inserts)
- Smart Card Reader application Modules for PC/SC EMV
- Magnetic Card Reader (3 Track)
- Downstream USB 2.0 High Speed Port for additional USB device
- Full Win XP & Office XP Keyboard
- 16 x 2 LCD Display with Backlight
- Keystroke life 10 million cycles
- Windows 2000 / XP OS supported



### Optional Features

- Windows Logon Software + User Cards
- Keyboard preloaded operator "PKI Key + Certificate"
- Fingerprint Scanner for Biometric Verification

## eKrypto™ STKB Features



Chip & PIN Hybrid Reader

Fingerprint Scanner

2 x 16 LCD

Log-On Smart Card Reader

USB 2.0 High Speed Downstream Port

## Future Proof

The eKrypto™ STKB meets the latest hardware security standards and includes fully remote programmable firmware. The Keyboard supports remote key loading and every device in the field can be updated by issuing a revised applet.

**Electronic Trade Solutions the Designer and Supplier of Innovative Secure Data Entry Technology**