



eKrypto™ Technology For:

- EMV Transactions
- Web-Enabled Devices
- Secure
 - Chip & PIN Verification
 - PIN Code Entry
 - Password Entry
 - Access Control
 - Communications
- Banking, eCommerce & Healthcare Applications
- Windows RS232 & USB Serial Plug & Play Compliant (for easy installation)

The eKrypto™ Web-Enabled Smart Card PIN Pad is the optimum EMV PIN Entry Device for both Offline and Online Chip & PIN transactions. Whether for financial applications or access control this security device ensures integrity of communication between device and host. The user identity is verified by Secret PIN rather than traditional signature, requiring the user to be in possession of a physical card and knowledge of the secret PIN number. The PIN as with all other secret data transmitted from the device can be encrypted by the eKrypto™ Engine in the device controller. Therefore the data travels through the host PC/ Workstation encrypted. The eKrypto™ Engine also negates the requirement for costly cryptographic smart cards as all encryption is performed in the engine.

For each secure transaction to be performed with the PIN Pad a signed applet is downloaded to the Smart Card PIN Pad via the connected Host. Once the signature on the applet has been validated by the eKrypto™ Controller a secure session is initiated depending on the applet instruction and the resultant security status will be indicated by the LED. In secure mode all data from device to host travels encrypted, the security level determined by the applet.

The eKrypto™ Controller contains three encryption engines, 3DES, SHA-1 and PKI and supports secure remote key loading.

Technical Specification

DIMENSIONS

174(L) x 88(W) x 54(H) mm
Weight: 850g

KEYPAD

16 Keys (4 x 4 key matrix)
10 million operations
Full travel, soft touch tactile
Audio Feedback

SCR READER

8 contacts, 500,000 insertions
Standard ISO 7816 Chip Card Interface
3v3 and 5v Chip Card Support
EMV2000 Approved

MSR READER (OPTIONAL)

1,000,000 passes dual track

DISPLAY

2 x 16 Character Backlit LCD
Secure Mode LED Indicator

OPERATING TEMP

0°C to 50°C

KEYTOPS

Key top Legends and colours as per APACS40 recommendations

PC INTERFACE

RS232 or USB
Windows PnP compatible

HOST CABLE & POWER SUPPLY (Different Options)

Single straight 2 metre long type with 'Y' splitter for:
(a) DB9 and PS/2 PT-Connector for Power Supply, or;
(b) DB9 and external 5Vdc Power plug (option), or;
Single straight 2 meter long type for Bus powered USB port.

OPERATING SYSTEM

eKrypto™ OS

STANDARDS

ISO 7816 SCR
EMV 2000 Level 1 & 2 Approved
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 1.6

The eKrypto™ Web-Enabled Smart Card PIN Pad is intended for use as:

- An EMV Smart Card PIN Pad for Secure Chip & PIN Transactions. The PIN Pad can perform secure Offline and Online PIN Verification.
- An Intelligent Cryptographic PIN Pad for applications requiring the combination of Client ID with Smart Card Reader (SCR) / PIN Code where access and usage require knowledge and the possession of both password and smartcard.

The eKrypto™ Web-Enabled Smart Card PIN Pad has an integrated ISO 7816 & EMV2000 Level 1 Approved (Approval No. 11680 1003 400 20 CET) Smart Card Reader (SCR), a 2 x 16 character LCD, a privacy shield and a LED to indicate secure mode. The LCD will serve to prompt the user to enter PIN or perform other actions. J/XFS & XFS Middleware drivers and EMV2000 Level 2 Kernel available on request.

Technology Benefits

Security

- 3 x Crypto Engines
- PKI Enabled to 2048 bits
- 3DES Enabled
- Secure Remote Key Loading
- Tamper Evident Housing
- Secure Mode Indicator
- Privacy Shield
- EMV2000 Level 1 Approved
- EMV2000 Level 2 Approved Kernel Optional

Features

- RS232 or USB Serial Host Interface
- PIN Entry / PIN Verification with inserted Smart Card
- Web Enabled
- Smart Card Reader (500,000 reader inserts)
- Smart Card Reader application Modules for EMV - PC/SC
- 16 Key Keypad
- Size: 174 (L) x 88 (W) x 54 (H) mm
- 16 x 2 LCD Display with Backlight
- Single Colour Charcoal Black Housing

Options

- EMV2000 Level 2 Approved Kernel
- Secure Desk Mounting Bracket (**)
- MSR available in single or dual track version (*)
- 5 volt dc external power supply if PC power is not available on serial host connector (**)
- Coloured Housing (*)
- Client Logo Printing (*)
- Alternative keypad technology can be discussed where vandal proofing is a requirement (*)

* Factory Installed Option

** Client Enabled Option

EMV PIN Pad



Future Proof

The eKrypto™ EMV Smart Card PIN Pad is future proof as the firmware is remote programmable, the PIN Pad supports remote key loading, can support up to 18 different applications and an application can be updated on every device in the field by loading a revised applet on the central host server.

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Solutions the
Designer and
Supplier of
Innovative Secure
Data Entry
Solutions for the
Financial Services
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