e20 (myEMV)

Secure Off-line Authentication

Technical Data

Communication	• Off-line, portable device
Smart Card Interface	• ISO7816-3 Class A (T=1) smart card management • ISO7816 T=0, T=1 for dedicated cards only • 8 contacts (Friction Embossed smart card support) • Compatible with ISO 7816-1 • Communication speed 9,600 bps
Functionality	• Generates Transaction Authentication Numbers (TAN application) • Generates One Time Passwords • Challenge/response procedures • PIN entry • Value checker
Smart Card Connector	• 8 contacts (ISO position) • 10,000 insertions • Sliding contact • Supports embossed cards
Ergonomics	• Robust, compact, cost-effective reader
Processor with Memory	• RAM • Flash ROM (optional) • Mask ROM
Compatibility	• ZKA Planned • Mastercard CAP program planned
Display	• 2 lines, 12 characters full graphic LCD with icons
Keypad	• Full keypad 0-9 + function keys
Dimensions	• LWH 80 x 65 x 12 mm (weight approx. 45 grams)
Lifetime	• 2 - 4 years depending on usage
Power	• 2 x 2430 replaceable button cell batteries
Operating Temperature	• Operating temperature: 0° to +40° Celsius • Storage temperature: -15° to +50° Celsius
Approvals	• CE

Overview

SCM Microsystems' e20 off-line authentication device offers the ideal combination of security, simplicity, and functionality for determining and confirming a user's identity in a virtual world. Using the security of a smart card, the e20 provides two-factor authentication for on-line banking applications, electronic transactions, and secure logical access to networks.

The coupling of a smart card ("something I have") and a Personal Identification Number ("something I know") creates a strong authentication tool for any application where secure identification is required.

For financial applications, the e20 is marketed as myEMV. The pocket-sized, portable myEMV reader authorizes users to manage their banking accounts at home, or abroad, and provides non-repudiation for transactions. myEMV can also display the balance of an electronic purse or loyalty scheme. The easy-to-use 13 button design is robust and can be customized with logos and color schemes to support your corporate profile.

The e20 authentication device is completely platform independent and requires no connection to a PC or additional power supply. This makes it possible to work with any form of communication (Mac, PC, Telephone, GSM), at any time and anywhere. It utilizes the security inherent to the smart card that makes it a cost-effective solution to deploy.

e20 Benefits

- Strong two-factor authentication
- Mobile functionality anywhere and any time - no need to connect to a PC
- Platform independent
- Cost efficient
- Requires no additional power supply
- Easy to use
- Quick adaptation to various smart card schemes
- Customizing options: case colour and company logo

The SCM Microsystems' Advantage

SCM Microsystems brings over a decade of experience in ASIC and smart card reader development to this unique product, including:

- More than 80 patents
- Support for all current and emerging international standards
- Customer base of global, top tier PC OEMs, systems integrators and smart card industry leaders
- Industry endorsed SmartOS™ middleware
- Direct significant long-term relationships with all leading smart card manufacturers and application providers
- High quality mass production capability