

# e20

## Secure Off-line Authentication



### 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.

The pocket-sized, e20 reader authorizes users to manage their banking accounts at home or abroad, and provides non-repudiation for transactions. It can also display the balance of an electronic purse or loyalty scheme.

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. Every e20 reader is identical, without the need for personalization as the security lies in the smart card, making it a cost efficient and easy to distribute solution.

### e20 Benefits

- Strong two-factor authentication
- Mobile functionality anywhere and at 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, color, and company logo

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## Technical Data

Communication	<ul style="list-style-type: none"> <li>• Off-line, portable device</li> </ul>
Smart Card Interface	<ul style="list-style-type: none"> <li>• ISO 7816-3 Class A (T=1) smart card management</li> <li>• ISO 7816 T=0, T=1</li> <li>• 8 contacts (friction embossed smart card support)</li> <li>• Compatible with ISO 7816-1</li> <li>• Communication speed 9,600 bps</li> </ul>
Functionality	<ul style="list-style-type: none"> <li>• Generates Transaction Authentication Numbers</li> <li>• Generates One-Time-Passwords</li> <li>• Challenge / response</li> <li>• PIN entry</li> <li>• Value checker optional</li> </ul>
Smart Card Connector	<ul style="list-style-type: none"> <li>• 8 contacts (ISO position)</li> <li>• 10,000 insertions</li> <li>• Sliding contact</li> <li>• Supports embossed cards</li> </ul>
Ergonomics	<ul style="list-style-type: none"> <li>• Robust, compact reader</li> </ul>
Processor with Memory	<ul style="list-style-type: none"> <li>• OTP</li> </ul>
Compatibility	<ul style="list-style-type: none"> <li>• Mastercard CAP program tested</li> <li>• EMV Level 1 and 2 compatible</li> </ul>
Display	<ul style="list-style-type: none"> <li>• 2 lines, 12 characters full graphic LCD with icons</li> </ul>
Keypad	<ul style="list-style-type: none"> <li>• Full keypad 0-9 + 5 function keys</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>• LWH 80 x 65 x 12 mm, weight approx. 45 grams</li> </ul>
Lifetime	<ul style="list-style-type: none"> <li>• 3 - 5 years depending on usage</li> </ul>
Power	<ul style="list-style-type: none"> <li>• 2 x 2032 Button cell batteries</li> </ul>
Operating Temperature	<ul style="list-style-type: none"> <li>• Operating temperature: 0° to +40° Celsius</li> <li>• Storage temperature: -15° to +50° Celsius</li> </ul>
Approvals	<ul style="list-style-type: none"> <li>• CE, FCC</li> </ul>

Technical data are subject to change without notice.

## The SCM Microsystems' Advantage

SCM Microsystems brings over a decade of experience in ASIC and smart card reader development to this unique product. With its dedicated Research and Development team, and a true global presence, SCM Microsystems delivers high quality products catering to the various requirements in the security field. SCM offers customization of products to suit application needs.

Typical advantages of an SCM Microsystems product include:

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

