

# SCR916

Secure Card Reader EMV level 1



## Description

The SCR916 is a certified EMV Level 1 reader for contactless media and closed-loop cards, featuring two SAM slots, two serial ports, and a USB 2.0 interface. It supports VSAM and multiple payment processing companies, running payment applications internally for systems with limited resources.

**Built for public transportation:** Easily integrated into various hosts, it has an illuminated logo and 4 EMV indicator LEDs. The USB port defaults to CDC mode for broad OS compatibility (Windows, Linux, Android).

Certified by EMV Level 1 standard 3.1, it offers high-speed SAM communication (4-20MHz). An SDK with documentation and software examples is available.

The SCR916 contactless reader, together with the VSAM and AIPA modules, forms Planeta's integrated EMV solution. By hosting payment kernels within the SAM, this architecture ensures easy replication across any environment. The AIPA framework allows the SCR916 to transition seamlessly between open and closed-loop systems non-intrusively, while its high-speed

interface ensures the VSAM operates at maximum performance. Finally, the solution simplifies maintenance by supporting full remote loading of kernels, configurations, and lists.

The SCR916 is ideal for new and legacy EMV transactions with high-performance SAM cards.

## Partnumbers

- SCR916 (I0262)
- SDK - SCR916 (I0279)
- External TFT display library (I0263)
- SAM socket locker (C10269)
- FSB100 (I0305)
- QSS100 (I0357)

## Applications

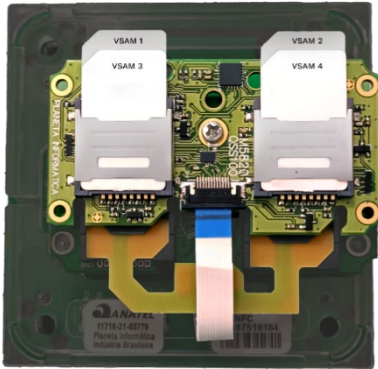
- Contactless EMV payments
- Mobility payment
- Mobility payment upgrade
- Public transportation payment
- Micro-mobility

## Accessories

The following accessories are available for the SCR916:

**4- SAM expansion board QSS100:** The QSS100 is a SAM expansion device that enables the use of 4 SAM devices in the SCR916.

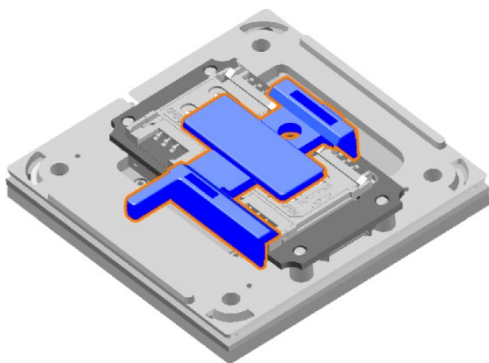
It's assembled over the SCR916 board preserving the form factor and compactness.



#### Mechanical accessory for mounting on FX925



**SAM socket locker:** This accessory adds an extra layer of protection on the SAM locking system for use in challenging environments. It clips over the edges of the board and keeps the cards in position even if the socket lock opens.



**Standalone enclosure:** The SCR916 is compatible with both SSE100 and SSE200 standalone enclosures

#### Technical data

- **Operating frequency:**
  - 13.56MHz
- **Modulation type:**
  - ASK
- **Maximum output power:**
  - 1.3W (on antenna coil)
- **RF field strength:**
  - Limited to EMVCo Level 1 requirements
  - ISO14443 and ISO15693 compliant general purpose NFC device
  - FeliCa™ reader / writer

#### Specifications

- **Power supply:**
  - 5V / 500mA
- **Dimensions:**
  - 70 x 70 x 25 mm
- **Interfaces:**
  - USB2.0
  - Serial TTL
  - Buzzer
  - Indication LEDs (4 EMV + center logo)
  - 2 GPIOs 3.3V
- **Supported media:**
  - ISO 14443A and B including:
    - T=CL
    - Raw communication.
    - Legacy cards.
    - Layer 3 type B cards.
  - 2x ISO 7816 or 4x ISO7816 with optional accessory.
- **Operating temperature:**
  - -30 to 70°C
- **Protection:**
  - Unique serial number.
  - Remote and secure firmware update.
  - "Buffer overflow" attack protection.

- **Further characteristics:**
  - SAM clock from 4 to 20MHz and speeds up to CLK/4.
  - Supports VSAM with L2 kernel
  - “Zero power” card detection enabling battery powered applications.
  - Embedded watchdog to enhance the reliability and recovery.
  - Input controlled power off for energy saving and reset.
  - Accessories and templates for mounting available.

- High performance SAM slot
- Low power card detector

### Contents

- SCR916

### Certifications:

- EMVCo L1
- Visa, MasterCard (TQM), American Express and Discover L2 when paired with VSAM
- Anatel
- CE
- ISO/IEC TS 24192-1:2021 (CNAPC/PCD-00054)

### Key advantages:

- Made for public transportation
- Mechanically designed to fit inside the host device
- Integrated EMV Ecosystem

### Warranty

12 months