

Versatility

As an intelligent device, the CCR-230 contactless smartcard reader with antenna is designed for both stand-alone operation or third-party system integration. The combined reader and antenna utilises an advanced micro-controller technology developed by Motorola®. The CCR-230 reader has the scalability for other intelligent devices and future expansions.

To complement this versatility, the CCR-230 reader comes with a powerful and industry-standard multi-tasking operating system, along with a dynamic set of development tools. Since the CCR-230 reader is able to access all Philips/Mifare® compatible cards, and complies to ISO/IEC 14443 type A and type B standards, the CCR-230 reader is adaptable in a wide range of applications. The CCR-230 reader has also been installed with two SIM card sockets which are compliant to ISO7816-3 standard.

Please contact us for any customised solutions.



Applications

Because the CCR-230 reader is end-user software programmable with the capability to handle specific customer requirements, it can be applied across a wide range of industries, including:

- Electronic purse to purchase goods and services
- Health card systems
- Customer loyalty programs
- Parking payment systems
- Toll payments
- Security and access control
- As a key component of a card recharge system

Ordering

CCR-230	Series 200 Contactless Card Reader, including integrated antenna (plastic casing)
CCR-231	Series 200 Contactless Card Reader, including metal enclosure and external antenna

Field Installable Options:

ACC-105	Power cable (include ACC-103 power bracket for PC)
SPC-100-3	12V Power supply

Technical Specification

General Parameters

■ Power input:	12VDC, maximum 0.5A
■ Protection:	reverse polarity and over-voltage protection (fuse)
■ Operational temperature range:	0°C to +70°C
■ Storage temperature range:	-20°C to +85°C
■ Humidity range:	10 % to 90 %
■ Dimensions:	190 x 110 x 35 mm (CCR-230) 205 x 125 x 30 mm (CCR-231) Ø100 mm x 22 mm (AAF-100 Antenna)
■ Weight:	650 grams (CCR-230) 1,600 grams (CCR-231 with antenna)

General Features

- Motorola 68376 micro-controller running at 18.432 MHz
- Voltage monitor and reset circuitry
- 512Kb segmented flash EEPROM for system and application code and data storage
- 1 Mb static RAM for system and application code and work area
- Integrated antenna for the Mifare contactless cards
- Integrated antenna with ferrite isolation (for CCR-230) or detached antenna configuration (for CCR-231)
- Up to 70mm card read/write operation range (with selected cards)
- RS232 interface, operating speed is up to 38400 baud
- 2 SIM -00 sockets, compliant to ISO7816-3 standard
- 32 bit long unique hardware serial number for device identification purposes
- Interface for up to four indicators (eg. Red, yellow, green, buzzer) with on, off, and blink control

Software

- Industry standard multi-tasking real-time kernel
- High level contactless card access, integrated networking & communication protocols, standard Unix-like file system interface for all device drivers (API libraries), RS232 command interface (slave mode)
- Linux-based development system with GCC cross-compiler and debugger
- User programmable application or customer specific operation
- Technical support and training (optional)