



## ACR120-Contactless Smart Card Reader Software Development Kit



### Product Information ➤

The ACR120 contactless smart card reader is a compact and cost-effective contactless reader. It is developed on the 13.56MHz contactless smart card (RFID) technology, supporting Mifare® and ISO 14443 A and B cards. Its proximity operating distance is up to 5cm, depending on the type of contactless tag in use. The versatile reader is available in both USB and Serial interface, which can be easily integrated into PC environment as well as other systems in a snap. It is ideal for a board range of applications, including public transport terminal, physical and logical access control, and even vending machines. The ACR120 Contactless Smart Card Development Kit (ACR120 SDK) enables effective development of customized applications and systems by using Mifare® cards, contactless readers, and PCs. Software development companies can use the kit to develop systems specific to their requirements to meet customers' demanding needs or to incorporate various contactless smart card technologies into their current applications.

### SDK Contents ➤

#### ACR120 Contacless Smart Card Reader

- USB PnP or serial interface (RS232)
- Read and write functionality
- Built-in Antenna
- Fully tested and compliant with major contactless smart cards that conform to ISO14443 A/B in the market.
- RoHS Compliant
- CE and FCC Compliant
- Operation LED
- Buzzer
- High-speed transactions
- Flexible configurations
- Compact size: 120 X 73 X 20mm
- Wall mountable



## ACR38DT DualKey Smart Card Reader

- Full speed interface to PC with simple command structure
- Support Plug-in SIM-sized card
- Read and write all microprocessor cards with T= or T=1 protocols
- Support most of the popular memory card types in the market:
  - Cards following the I2C bus protocol (free memory cards) such as:  
**Atmel:** AT24C01 / 02 / 04 / 08 / 16 / 32 / 64 / 128 / 256 / 512 / 1024  
**SGS-Thomson:** ST14C02C, ST14C04C  
**Gemplus:** GFM1K, GFM2K, GFM4K, GFM8K
  - SLE4432/4442 intelligent 256 bytes EEPROM with write protect function: SLE4432, SLE4442
  - SLE4418/4428 intelligent 1K bytes EEPROM with write-protect function: SLE4418, SLE4428
  - Secure memory cards such as: AT88SC153, AT88SC1608
- Support GSM 11.11 specification
- Requires no additional cable
- Short Circuit Protection
- RoHS Compliant
- Support ISO-7816 Class A, B and C ( 5V, 3V, 1.8V ) cards
- Embedded antenna coil
- Full functionality with SIM-sized Comi card in contact and contactless interface
- Support PPS (Protocol and Parameters Selection) with 1,743-250,000 bps in reading and writing smart cards
- A patented technology combines physical and logical access

## Test Cards

- 5 x Mifare 1K ontactless Cards
- 1 x Combi Card

## CD-ROM

- **Software drivers**
  - supports Windows 98, ME, 2000, XP32, XP64, VISTA32, and VISTA64
- **Demo programs**
  - ACR120 Multi-Application demo - shows how the card is used as stored-value for Parking Card, Train Ticket Card, Vending Machine, Weighing Machine and Loyalty Application.
  - ACR120 Time and Attendance demo - shows how the card is used for time-in and time-out for office attendance records.
- **Utility Tools**
  - ACR120 Tool - helps to analyze the reader settings, change the communication speed, protocol configuration and manipulate data on your MIFARE?card
  - QuickView - checks for proper driver installation of ACR38DT DualKey
- **Sample Codes**
  - demonstrates basic commands used to communicate with the ACR120 reader and the smart cards
  - Visual Basic, Visual C++, Borland Delphi , VB.NET, C#
- **Reference Manuals**
- **Technical Specifications**