



Advanced Card Systems Limited

Card and Reader Technologies

A background image showing a person's hands interacting with a card reader device. The image is semi-transparent and serves as a backdrop for the title.

Technical Specifications

ACR122 NFC Contactless Smart Card Reader





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1.0 Introduction



The ACR122 is a PC-linked Contactless Smart Card Reader/Writer developed on the 13.56MHz Contactless Technology. It is the world's first CCID Compliant Contactless Card Reader/Writer that follows both ISO14443 and ISO18092. This device is designed to support not only MiFare and ISO14443 Type A and B Cards but also FeliCa and NFC tags.

By making use of up to 424 Kbps for NFC Tags access and full USB speed of up to 12 Mbps, ACR122 can read and write faster and more efficiently. Furthermore, ACR122 is also PC/SC compliant which allows interoperability for different applications development. With its compact size and trendy design and with the various features the ACR122 offers, you can experience the convenience in using ACR122 for applications of payment, mass transit, access control, time attendance, etc.

2.0 Features

- CCID Standard
- PC/SC compliant
- Read / Write Speed up to 424kbps
- ISO/IEC18092 (NFC) compliant
- ISO14443 Type A and B card support
- Support Mifare® card
- Support FeliCa card
- USB PnP
- Bi-Color LED
- Compact size: 98mm (L) x 65mm (W) x 12.8mm (H)
- Light Weight: 70g
- CE, FCC and RoHS compliant
- User Controllable Buzzer (optional)

3.0 Typical Applications

- Network access control
- Micro-payment
- NFC mobile tag
- Public Transportation Terminals
- Automatic Fare Collection
- Physical access control
- Customer Loyalty
- Time attendance
- Contactless public phones
- Vending machines

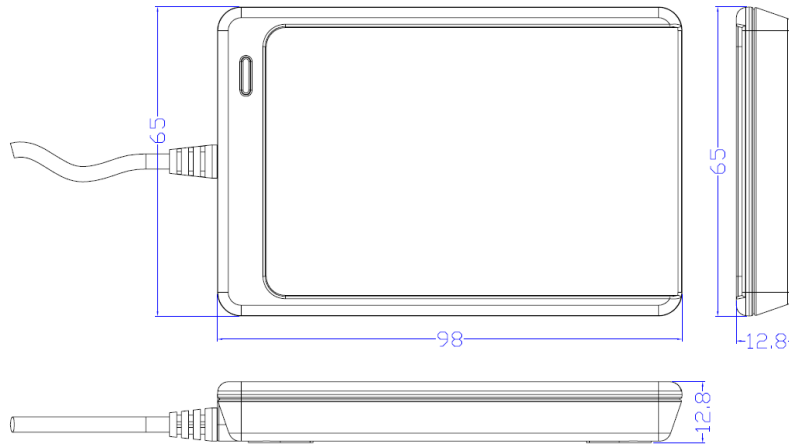




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4.0 Technical Specification



Universal Serial Bus Interface

Power source.....From USB
 Speed12 Mbps (Full Speed)
 Supply Voltage.....Regulated 5V DC
 Supply Current200mA (maximum); 50mA (standby); 100mA (normal)

Contactless Smart Card Interface

StandardISO/IEC 18092 ; ISO14443 A and B, FeliCa, MiFare Classics
 Protocol.....FeliCa protocol, T=CL protocol
 Operating Frequency13.56 MHz
 Smart card read / write speed.....106 kbps, 212 kbps, 424 Kbps

Casing

Dimensions98 mm (L) x 65 mm (W) x 12.8 mm (H)
 Weight.....70 grams
 MaterialPolycarbonate (PC)
 ColorPearl White
 Antenna Size50mm x 40mm
 Operating distance.....up to 50 mm

Built-in Peripherals

Bi-Color LED.....Bi-Color LED, Red and Green
 Buzzer.....Monotone (optional)

Operating Conditions

Temperature0 - 50° C
 Humidity.....10% - 80%

Cable Connector

Length.....1.0 M (USB)

Compliance/Certifications

USB Full Speed, ISO14443 1-4, PC/SC, CCID, CE, FCC, RoHS, Microsoft WHQL 2000, XP, Vista

OS Support

Windows 2K, 2K3, XP32, XP64, VISTA32, VISTA64 and Linux

OEM

customer-specific colors, casing, and card connector

