



# Advanced Card Systems Limited

Card and Reader Technologies

## Technical Specification

### ACR122U NFC Reader





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## ACR122U NFC Reader

### 1.0 Introduction



The ACR122U NFC Reader 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. It is designed to support not only MiFare and ISO14443 Type A and B Cards but also FeliCa and NFC tags.

By making use of high-speed card access and full USB speed of 12 Mbps, read and write operations are faster and more efficient. The ACR122U NFC Reader is also PCSC Compliant for ISO 14443 tags and Mifare cards. With its compact size and trendy design and with the various features the ACR122U offers, you can experience the convenience in using ACR122U for applications of payment, mass transit, physical access control, time attendance and other applications. ACR122U is truly the smart card peripheral for your contactless application!

### 2.0 Features

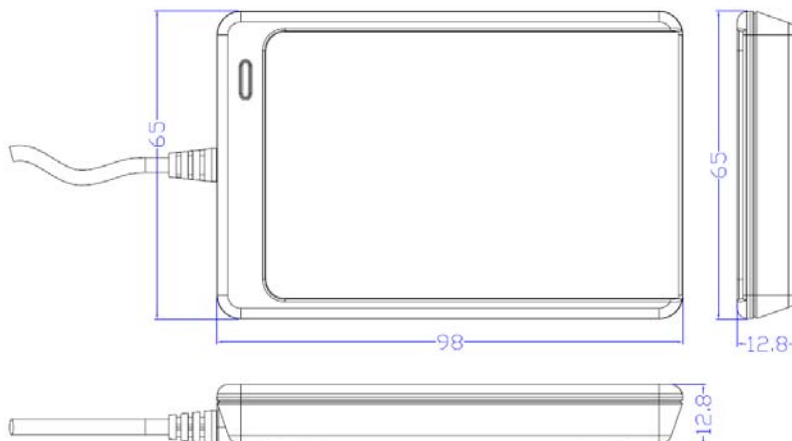
- CCID Standard
- PCSC Compliant
- Read / Write Speed up to 424kbps
- ISO/IEC 18092 (NFC) and FeliCa Tag Support
- ISO14443 Type A and B and MiFare card support
- Bi-Color LED
- Compact size: 98mm (L) x 65mm (W) x 12.8mm (H)
- Light Weight: 70g
- CE, FCC and RoHS compliant
- User Controllable Buzzer (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



### 4.0 Technical Specification



#### Universal Serial Bus Interface

Power source .....From USB  
Speed .....12 Mbps (Full Speed)  
Supply Voltage.....Regulated 5V DC  
Supply Current .....200mA (maximum); 50mA (standby); 100mA (normal)

#### Contactless Smart Card Interface

Standard .....ISO/IEC 18092 ; ISO14443 A and B, FeliCa, MiFare  
Protocol.....FeliCa protocol, T=CL protocol  
Operating Frequency .....13.56 MHz  
Smart card read / write speed.....212 kbps, 424 Kbps

#### Casing

Dimensions .....98 mm (L) x 65 mm (W) x 12.8 mm (H)  
Weight.....70 grams  
Material .....Polycarbonate (PC)  
Color .....Pearl White  
Antenna Size .....50mm x 40mm  
Operating distance.....up to 50 mm

#### Built-in Peripherals

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

#### Cable Connector

Length.....1.0 M (USB)

#### Certifications/Compliance

CE, FCC and ROHS Compliant

#### OS Support

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

#### OEM

OEM-Logo possible, customer-specific colors, casing, and card connector

