

CONTACTLESS READERS

# ACR1552U

USB NFC Reader IV

ACR1552U USB NFC Reader IV is the fourth generation of USB NFC Reader developed based on 13.56 MHz contactless technology. It can access contactless cards and devices following the ISO 14443 Type A and B, ISO 15693, and ISO 18092 standards.

Compliant with both CCID and PC/SC standards, this plug-and-play NFC reader is equipped with a high-speed communication capability of up to 848 kbps. The reader has USB firmware upgradability and extended contactless APDU commands, making it versatile and cost-effective hardware for various industries, such as finance, healthcare, and government.

It also offers intelligent support for three modes of NFC features: reader/writer, card emulation, and keyboard emulation. The flexibility of NFC readers allows for various potential applications, such as e-payment, access control systems and transportation ticketing.



## KEY FEATURES

- ✓ **Support various contactless card type**
  - ISO 14443 Type A & B Parts 1-4
  - ISO 15693
  - ISO 18092 NFC
  - MIFARE® (T=CL), FeliCa, NFC Tags
  - SRI/SRIX, CTS, Innovatron, Picopass, Topaz Card
- ✓ **Performance**
  - Read/Write ISO 14443A & B speed of up to 848 kbps
  - Read/Write ISO 15693 speed of up to 53 kbps
- ✓ **Support various NFC features**
  - Card Reader/Writer Mode
  - Card Emulation Mode
  - Keyboard Emulation Mode
- ✓ **Security**
  - 1 x ISO 7816 Standard SAM slot for improved security
- ✓ **Support USB Firmware Upgrade**
- ✓ **Reliable**
  - Certified for international regulations
  - Mean time between failures (MTBF) up to 500k Hours
  - Short Circuit Protection
- ✓ **Compatibility**
  - Support for all major operating systems
    - Windows®, Linux®, macOS, Android™

## Common Applications

e-Government  
e-Banking and e-Payment  
e-Healthcare  
Transportation  
Network Security  
Access Control  
Loyalty Program  
Smart Poster/URL Marketing

## TECHNICAL SPECIFICATION

### Contactless Smart Card Interface

Supported Card Types	ISO 14443 Type A & B Parts 1-4, ISO 15693, ISO 18092 NFC, MIFARE®, FeliCa, SRI/SRIX, CTS, Innovatron, Picopass, Topaz Card
Operating Frequency	13.56 MHz
Reading Distance	Up to 70 mm (Depending on tag type)
Read/Write Speed	106/212/424/848 kbps (ISO14443) 26/53kbps (ISO15693)
Supported NFC Mode	Card Reader/Writer, Keyboard Emulation, Card Emulation

### SAM Card Interface

Standard	1 x ISO 7816 Class A (5V) Standard SIM size slot
Read/Write Speed	13.4 kbps – 1,250 kbps
Clock Frequency	5 MHz, up to 10MHz (Upon request)
Protocol	T=0, T=1

### Host Interface

Protocol	USB CCID
Connector Type	USB Type-A
Speed	USB 2.0 Full Speed (12 Mbps) compatible with USB 3.0
Supply Voltage	5VDC
Current Consumption	Max. 300mA
USB Firmware Upgrade	Supported

### Physical Characteristics

Dimension (L x W x H)	Main Body: 98.0 x 65.0 x 12.8 mm Antenna size: 50.0 x 40.0 mm
Weight (±5 g)	89 g (USB Type-A)
Available Colour	White
USB Cable Length	1 m (Non-detachable)

### Peripherals

Buzzer	1 x Programmable Buzzer (Mono-tone)
LED	1 x Programmable LED (Blue & Green)

### Operating Condition

Temperature	0 - 60°C
Humidity	90% (Non-condensing)
MTBF	500,000 Hours

### Certifications & Compliances

Certifications	IEC/EN 62368, CE, UKCA, FCC, VCCI, KC, RoHS, REACH, WEEE, J-LIS Microsoft® WHQL
Compliances	USB CCID, PC/SC

### Libraries & Tools

Libraries	CT-API
Tools	Software Development Kit

### Drivers & Support

Driver Supported OS	Windows®, Linux®, macOS, Android™
Warranty	1 Year

### Model/Part Number

USB Type-A	ACR1552U-M1
USB Type-C	ACR1552U-MF

## MECHANICAL SPECIFICATION

