Mobile Card Reader

ACR1555U

Secure Bluetooth® NFC Reader

ACR1555U Secure Bluetooth® NFC Reader is designed to facilitate on-the-go smart card and NFC applications. It combines the latest 13.56 MHz contactless technology with Bluetooth® connectivity.

ACR1555U supports ISO 14443 Type A and B smart cards, MIFARE®, FeliCa®, and most NFC tags and devices compliant with ISO 18092 standard. This makes ACR1555U ideal for a broad range of solutions, such as hands-free verification for physical and logical access control, and inventory tracking. ACR1555U has two interfaces: Bluetooth 5.2 (also known as Bluetooth Low Energy or BLE) for pairing with mobile devices, and USB Full Speed for PC-linked operation. Additionally, it can read/write at a speed of up to 848 kbps for contactless smart card and NFC device access.

With a compact design and a rechargeable Lithium-ion battery for power, ACR1555U is extremely portable and convenient for use anytime, anywhere with most Bluetooth-enabled smartphones and tablets.

KEY FEATURES

- ☑ **Support Bluetooth® 5.2**
  - o Supports Bluetooth® HID mode
  - o Support Bluetooth® AES-128 encryption
  - o High speed transmission up to 2Mbps
- ☑ **Support various contactless card type**
  - o ISO 14443 Type A & B Parts 1-4
  - o ISO 15693
  - o ISO 18092 NFC 5 Types of NFC tags
  - o MIFARE®, FeliCa
- ☑ **Performance**
  - o Read/Write ISO 14443 A & B speed of up to 848 kbps
  - o Read/Write ISO 15693 speed of up to 26 kbps
- ☑ **Support various NFC features**
  - o Card Reader/Writer Mode
  - o Card Emulation Mode
  - o Support Keyboard Emulation mode
- ☑ **Security**
  - o 1 x ISO 7816 Standard SAM slot for improved security
- ☑ **Support USB Firmware Upgrade**
- ☑ **Compatibility**
  - o Support for all major operating systems
    - ▪ Windows®, Linux®, macOS, iOS, iPadOS, Android™

Common Applications

e-Government
e-Healthcare
e-Purse and Loyalty
Mobile Banking and Payment
Network Security
Access Control
Public Key Infrastructure

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TECHNICAL SPECIFICATION

Contactless Smart Card Interface	
Supported Card Types	ISO 14443 Type A & B Parts 1-4, ISO 15693, ISO 18092, NFC 5 Types of NFC tags, MIFARE® & FeliCa
Operating Frequency	13.56 MHz
Reading Distance	Up to 50 mm (Depending on tag type)
Read/Write Speed	106/212/424/848 kbps (ISO14443) 26kbps (ISO15693)
Supported NFC Mode	Card Reader/Writer, Card Emulation & Keyboard Emulation

SAM Card Interface	
Standard	1 x ISO 7816 Class A, B and C (5V, 3V, 1.8V) Standard SIM size slot
Read/Write Speed	Max. 143kbps
Clock Frequency	4.57MHz
Protocol	T=0, T=1

Bluetooth Interface	
Protocol	Bluetooth® 5.2
Encryption	Bluetooth AES-128 encryption
Transmission Speed	1Mbps and 2Mbps

USB Interface	
Protocol	USB CCID
Connector Type	USB Type-C
Transmission Speed	USB 2.0 Full Speed (12 Mbps) compatible with USB 3.0
Power Supply	5VDC (500mA Max)
USB Firmware Upgrade	Supported

Power Source	
Battery type	Li-ion rechargeable Battery 3.7V 450m

Physical Characteristics	
Dimension (L x W x H)	93.0 x 58.0 x 6.0 mm 94.1 x 60.2 x 9.0 mm (with card holder)
Weight (±5 g)	31.5 g ± 1.0 g (Card Reader) 39.7 g ± 1.0 g (with Card holder) 23.9 g ± 5.0 g (USB cable)
Available Colour	White
USB Cable Length	1 m (detachable)
Holder	Transparent

Peripherals	
Buzzer	1 x Buzzer
LED	1 x LED bi-Color Red and Green 1 x LED Blue 1 x LED Orange
Button	Power on/off Mode selection

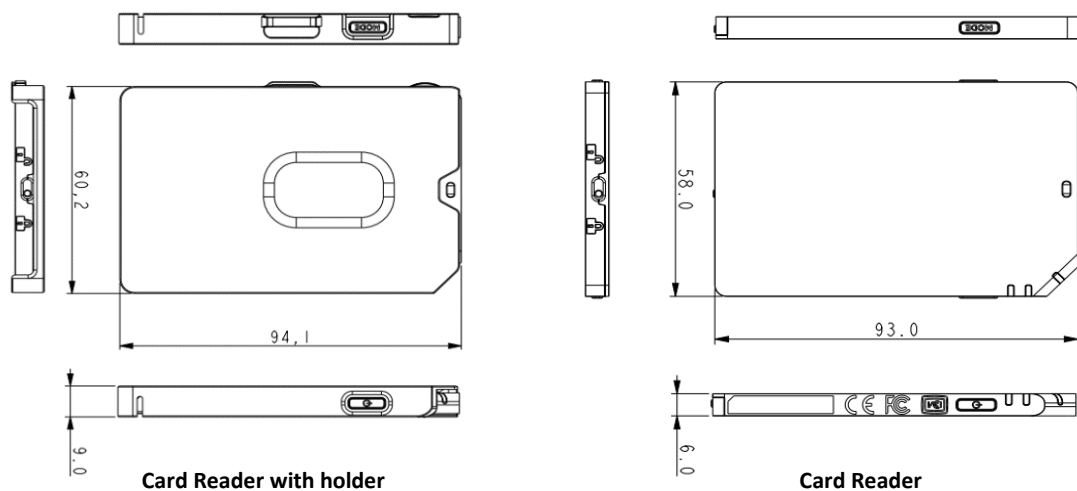| Operating Condition	
Temperature	0 - 60°C
Humidity	90% (non-condensing)
MTBF	400,000 Hours

Certifications & Compliances	
Certifications	IEC/EN 62368, CE, UKCA, FCC, VCCI, RoHS, REACH, Bluetooth® BQB, TELEC (Japan), Microsoft® WHQL
Compliances	ISO14443, ISO7816, ISO 15693, USB CCID, PC/SC, WEEE

Supported OS	
USB Mode (Lightning not supported)	Windows®, Linux®, macOS, iOS, iPadOS, Android™
Bluetooth HID mode	Windows®, Linux®, macOS, iOS, iPadOS, Android™
Bluetooth	iOS, iPadOS, Android™

MECHANICAL SPECIFICAITON

Unit: mm

Card Reader with holder

Card Reader

About ACS

Advanced Card Systems Ltd. (ACS), founded in 1995, is Asia Pacific's top supplier and one of the world's top 3 suppliers of PC-linked smart card readers. ACS is the winner of the Product Quality Leadership Award for Smart Card Readers from Frost & Sullivan. ACS was listed in Forbes Asia's "Best Under a Billion" list for several years, an inter-industry list comprised of 200 top-performing publicly listed companies in the Asia-Pacific, with sales between US$5 million and US$1 billion. ACS develops a wide range of high-quality smart card reading/writing devices, smart cards and related products and distributes them to over 100 countries worldwide.

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