



MOBILE SMART CARD READER

ACR1555U

ACS Secure Bluetooth® NFC Reader

ACR1555U ACS 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 5.3 (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® 5.3
 - Supports Bluetooth® HID Mode
 - Support Bluetooth AES-128 encryption
 - Supports ACS Proprietary Encryption Mode
 - High speed transmission up to 2Mbps
- ✔ Support various contactless card type
 - ISO 14443 Type A & B Parts 1-4
 - ISO 15693
 - ISO 18092 NFC
 - MIFARE®
 - FeliCa
- ✔ Performance
 - Read/Write ISO 14443 A & B speed of up to 848 kbps
 - Read/Write ISO 15693 speed of up to 26 kbps
- ✔ Support various NFC features
 - Card Reader/Writer Mode
 - Card Emulation Mode
 - Support Keyboard Emulation Mode
- ✔ Security
 - 1 x ISO 7816 Standard SAM slot for improved security
- ✔ Support USB Firmware Upgrade
- ✔ Compatibility
 - 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





TECHNICAL SPECIFICATION

Contactless Smart Card Interface

| | |
|----------------------|--|
| Supported Card Types | ISO 14443 Type A & B Parts 1-4, ISO 15693, ISO 18092 NFC, 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® 5.3 |
| Encryption | ACS Proprietary Encryption Mode Bluetooth AES-128 encryption |
| Power Source | Rechargeable Lithium-ion Battery (charging through USB) |
| 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 |

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) | 31.0 g (Card Reader) 39.0 g (with Card holder) |
| Available Colour | White |
| USB Cable Length | 1 m (detachable) |
| Holder | Transparency |

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, KCC (Korea) |
| Compliances | ISO14443, ISO7816, USB CCID, PC/SC, WEEE |

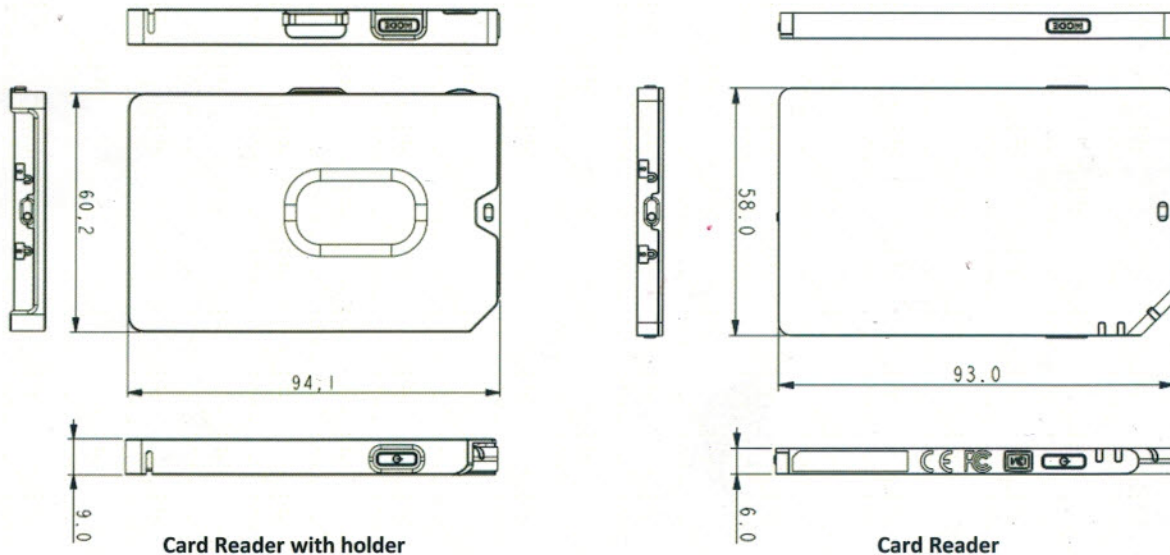
Power Source

| | |
|--------------|---|
| Battery type | Li-ion rechargeable Battery 3.7V 450mAh |
|--------------|---|

Driver support

| | |
|---------------------|--|
| Driver Supported OS | Windows®, Linux®, macOS, IOS, iPadOS, Android™ |
|---------------------|--|

MECHANICAL SPECIFICATION



Unit: mm

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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