



Advanced Card Systems Ltd.
Card & Reader Technologies

ACR122T NFC Reader Token



Technical Specifications



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1.0. Introduction



ACR122U, the world's first NFC card reader compliant with the CCID standard, is developed based on the 13.56 MHz RFID technology and the ISO/IEC 18092 NFC standard. It supports not only ISO 14443 Type A and Mifare® cards but also FeliCa and NFC tag.

ACR122U's token version, ACR122T, broadens the reader's usage because of its compact size and great portability. You can bring the token along in public areas – a coffee shop, for example – or use it at home to securely log on to your notebook, load your e-Purse, check your balance, and pay for a product or service you ordered.

You can view a demonstration of a sample application employing ACR122T at <http://www.youtube.com/advancedcardsystems>.



2.0. Features

- CCID-compliant
- PC/SC-compliant
- Read/write speed up to 424 kbps
- Built-in antenna for contactless tag access, with card reading distance of up to 30 mm (depending on tag type)
- Supports ISO 14443 Type A and B, Mifare®, FeliCa, and all 4 types of NFC (ISO/IEC 18092) tags
- Supports all 3 modes of NFC: reader mode, card emulation and peer-to-peer mode
- Built-in anti-collision feature (at least 1 card is detected when multiple cards are presented)
- Extractable USB plug
- USB PnP
- Bi-color LED
- Compact size: 75 mm (L) x 30 mm (W) x 9.9 mm (H)
- Light Weight: 15 g
- Compliance with CE, FCC, VCCI and RoHS

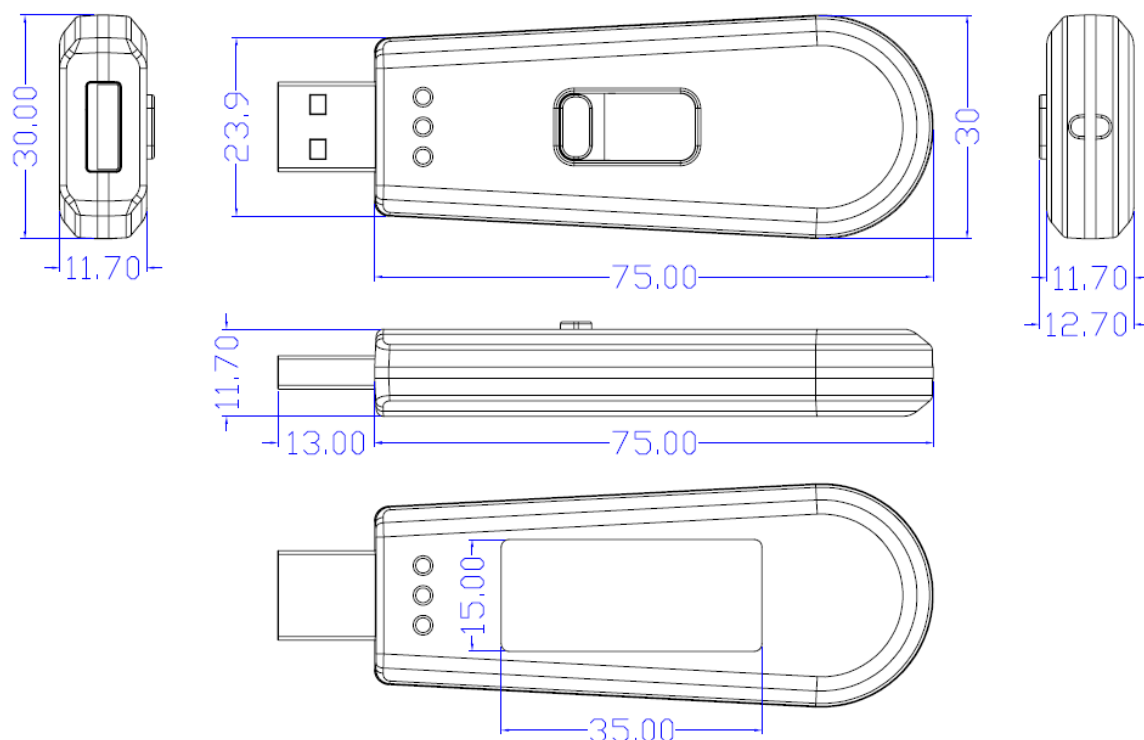


3.0. Typical Applications

- Network access control
- Computer access control
- Micro-payment
- NFC mobile tag
- Online purchase
- Customer loyalty
- Time and attendance



4.0. Technical Specifications



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 Part 1-4 Type A and B, FeliCa, MiFare |
| Protocol..... | FeliCa protocol, T=CL protocol |
| Operating Frequency | 13.56 MHz |
| Smart card read / write speed | 106 kbps, 212 kbps, 424 kbps |

Casing

| | |
|--------------------------|------------------------------------|
| Dimensions | 75 mm (L) x 30 mm (W) x 9.9 mm (H) |
| Weight..... | 15 grams |
| Material | Polycarbonate (PC) |
| Color | Pearl White |
| Operating distance | Up to 30 mm |

Built-In Peripherals

| | |
|--------------------|-----------------------------|
| Bi-Color LED | Bi-color LED, red and green |
|--------------------|-----------------------------|

Operating Conditions

| | |
|-------------------|-----------|
| Temperature | 0 - 50° C |
| Humidity | 10% - 80% |

Certifications/Compliance

PC/SC, CCID, CE, FCC, VCCI, RoHS Compliant
Microsoft WHQL 2000, XP, Vista, 7

Device Driver Operating System Support

Windows © 2000, Server 2003, XP, Vista, Server 2008, 7
Windows © CE 5.0
Linux, Mac OS X

