



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 Mifare and ISO 14443 Type A and B cards but also FeliCa and NFC tags.

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 new Mifare Ultralight C (via pseudo APDUs) and Mifare Plus SL1 (4 Byte UID, via pseudo APDUs) and SL3
- Supports all 3 modes of NFC: reader, card emulation and peer-to-peer modes
- 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



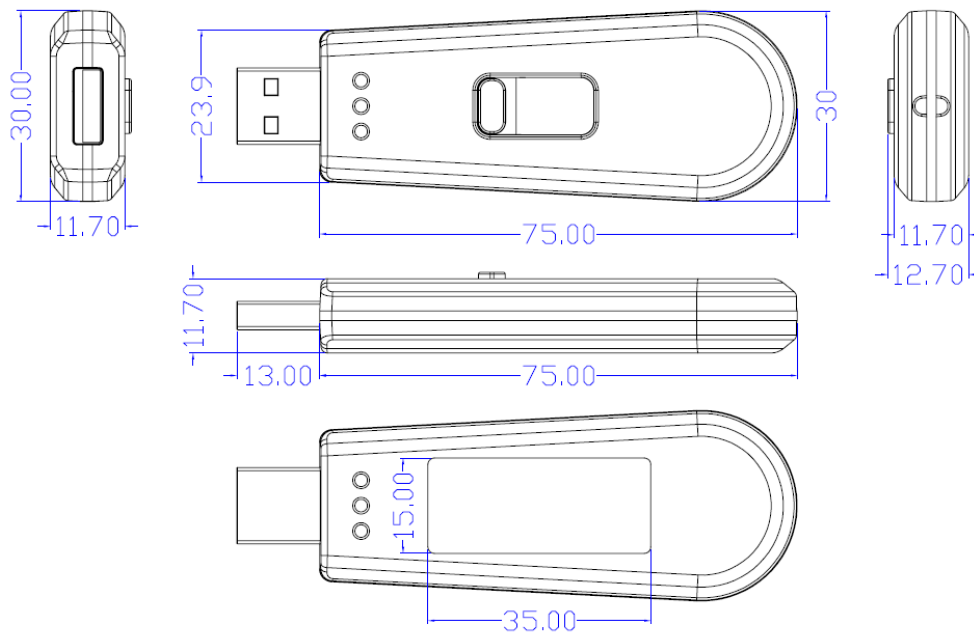
3.0. Typical Applications

- 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 200 mA (maximum); 50 mA (standby); 100 mA (normal)

Contactless Smart Card Interface

Standard ISO/IEC 18092 NFC, ISO 14443 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 (depending on tag type)

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, USB Full Speed
 Microsoft® WHQL 2000, Server 2003, XP, Vista, Server 2008, Server 2008 R2, 7

Device Driver Operating System Support

Windows® 98, ME, 2000, Server 2003, XP, Vista, Server 2008, Server 2008 R2, 7
 Windows® CE 5.0
 Linux, Mac

