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ETS ACR1255U-J1 Bluetooth NFC Reader Owner's Manual

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ETS ACR1255U-J1 Bluetooth NFC Reader

Introduction

The ACR1255U-J1 ACS Secure Bluetooth® NFC Reader combines the latest 13.56 MHz contactless technology with Bluetooth® connectivity for on-the-go smart card and NFC applications.

Smart Card Reader

The ACR1255U-J1 supports ISO 14443 Type A and B smart cards, MIFARE®, FeliCa, and most NFC tags and devices compliant with ISO 18092 standard. This makes it the ideal device for a broad range of solutions, such as hands-free verification for physical and logical access control, and inventory tracking. The ACR1255U-J1 has both Bluetooth 4.0 interface for pairing with mobile devices and USB Full Speed for PC-linked operation. Additionally, it can read/write at speeds of up to 424 Kbps for contactless smart card and NFC device access.

Compact Design

With a compact design and a rechargeable Lithiumion battery for power, the ACR1255U-J1 is extremely portable and convenient for use anytime, anywhere with most Bluetooth-enabled smartphones and tablets in the market.

Firmware Upgradeable Feature

To save valuable cost and time, the firmware of the ACR1255U-J1 could conveniently be upgraded infield to let users cope with the fast-changing technology for their applications to suit different scenarios.

Secure Bluetooth Connectivity

With Bluetooth technology and AES-128 encryption (CBC ciphering mode), the ACR1255U-J1 can connect securely and wirelessly with ease to any device running on Android™ version 4.3 and later, iOS 5.0 and later, Windows® 7 and later, and Mac OS® 10.7 and later.

Ease of Integration

The ACR1255U-J1 can easily be installed for use with any personal computer running on Windows® operating

system because it is PC/SC and CCID-compliant. Its drivers are also compatible with Linux® and Mac OS®. With its numerous features, the ACR1255U-J1 is the perfect reader for your smart card solution.

Key Features

- USB Full Speed Interface
- Bluetooth Interface
- Plug and Play – CCID support brings utmost mobility
- Smart Card Reader:
    - Contactless Interface:
    - Read/Write speed of up to 424 Kbps
    - Built-in antenna for contactless tag access, with reading distance of up to 50 mm (depending on tag type)
    - Supports ISO 14443 Part 4 Type A and B cards, MIFARE, FeliCa, and all 4 types of NFC (ISO/IEC 18092) tags
    - Built-in anti-collision feature (only one tag is accessed at any time)
    - Supports AES-128 encryption algorithm (CBC ciphering mode)
    - NFC Mode Supported:

        Card reader/
- Application Programming
    - Supports PC/SC
    - Supports CT-API (through wrapper on top of PC/SC)
- Built-in Peripherals
    - Two user-controllable bi-color LEDs
    - User-controllable buzzer
- USB Firmware Upgradeabilityl
- Supports android 4.3 and later2
- Supports iOS 8.0 and later3
- Compliant with the following standards:

EN 60950/IEC 60950, ISO 14443, ISO 18092, Bluetooth,PC/SC,CCID, CE,FCC, RoHS 3, REACH,VCCI (Japan) TELEC (Japan), Micr

Specification

Physical Characteristics	
Dimensions	85 mm (L)　　54 mm (W)　　10 mm (H)
Weight	37.5 g (74.1 g with cable ± 5 g tolerance)
Color	White
Bluetooth Interface	
Protocol	Bluetooth (Bluetooth Low Energy/Bluetooth 4.0)
Power Source	Rechargeable Lithium-ion Battery (charging through USB)
Speed	1 Mbps

USB Host Interface	
Protocol	USB CCID
Connector Type	USB Mini-B
Power Source	From USB port
Speed	USB Full Speed (12 Mbps)
Supply Voltage	5 V
Supply Current	Max. 500 mA
Cable Length	1 m, Detachable
Contactless Smart Card Interface	
Standard	ISO/IEC 18092 NFC, ISO 14443 Type A & B, MIFARE, FeliCa
Protocol	ISO 14443 T=CL for ISO 14443-4–compliant cards
	T=CL Emulation for MIFARE Classic, ISO 18092, FeliCa and NFC tags
Operating Frequency	13.56 MHz
Operating Distance	Up to 50 mm (depending on tag type)
Smart Card Read/Write Speed	106 Kbps, 212 Kbps, 424 Kbps
Antenna Size	45.60 mm 42.00 mm
Built-in Peripherals	
LED	2 bi-color: Red and Blue, Red and Green
Buzzer	Monotone
Other Features	
Encryption	In-device AES-128 Encryption Algorithm (CBC Ciphering Mode)
Firmware Upgrade	Supported (upgradeable through USB Interface)
Application Programming Interface	
PC-linked Mode	PC/SC CT-API (through wrapper on top of PC/SC)
Operating Conditions	
Temperature	0 °C – 60 °C4
Humidity	Max. 85% (non-condensing)
MTBF	400,000 hrs

Certifications/Compliance

EN 60950/IEC 60950, ISO 14443, ISO 18092, USB Full Speed, Bluetooth, PC/SC, CCID, CE, FCC RoHS 3, REACH VCCI (Japan), TELEC (Japan), Microsoft® WHQL

Device Driver Operating System Support

Windows® XP, Windows® Vista™, Windows® 7, Windows® 8, Windows® 8.1, Windows® 10 Windows® Server 2003, Windows® Server 2008, Windows® Server 2008 R2, Windows® Server 2012, Windows® Server 2012 R2, Windows® Server 2016 5 6 Linux®, Mac OS®, Android™ , iOS

APPLICATION AREAS

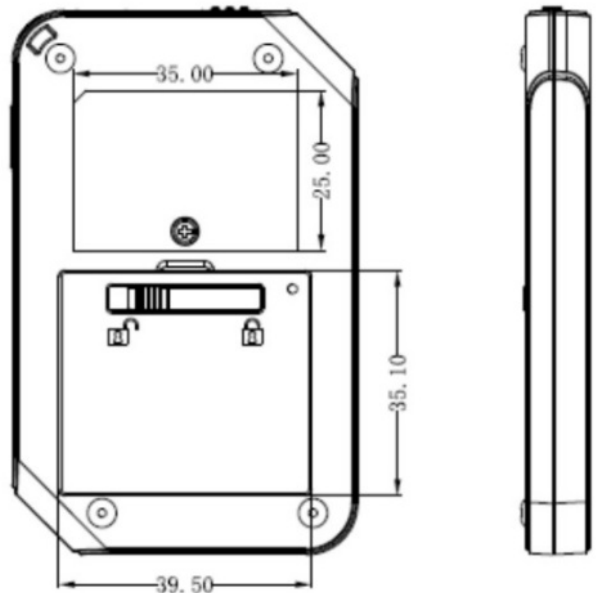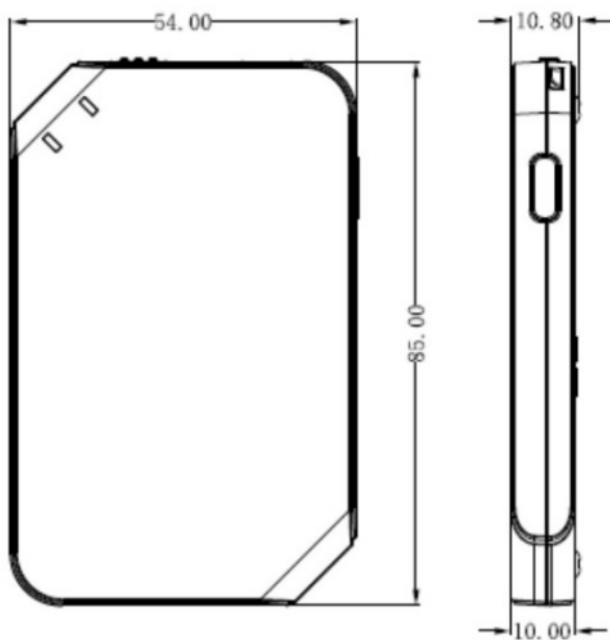E-Government | E-Healthcare | E-Purse and Loyalty | Mobile Banking and Payment | Public Key Infrastructure | Network Security | Access Control

DIMENSION

Notice: Product specifications are subject to change without prior notice. / Model: ACR1255U-J1 / Update Date : 05/05/2022

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Documents / Resources

ETS ACR1255U-J1 Bluetooth NFC Reader [pdf] Owner's Manual
ACR1255U-J1, Bluetooth NFC Reader, ACR1255U-J1 Bluetooth NFC Reader, NFC Reader, Reader

References

- 🌐 **RFID Companies in Delhi NCR | Best Company for RFID in India – Eco Track System**