ACR123U
Intelligent Contactless Reader

Product Presentation

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Rundown

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Product Overview
Product Overview

ACR123U Intelligent Contactless Reader

The ACR123 Series is designed to revolutionize payment transactions and with the ACR123U (USB Version) there are more options in integrating contactless technology with existing POS (Point-of-Sale) terminals for a more convenient cashless payment experience.

The ACR123U is compliant and certified with major payment and safety standards such as MasterCard®, Visa®, American Express®, EMVCo Level 1 and EMVCo Level 2 making it compatible with EMV-based contactless payment applications such as MasterCard® PayPass™, Visa payWave®, and American Express® ExpressPay. In addition, the ACR123U Intelligent Contactless Reader is also Apple Pay ready.
Product Features
What are the Key Features of ACR123U?

**USB Full Speed (12 Mbps) for data transmission and power**

**Smart Card Interfaces**
- PICC (Contactless)
- Three ISO 7816 SAM slots

**ARM® Cortex®-M3 32-bit Processor**

**PICC Access Speed**
- Maximum of 848 Kbps

**Anti-collision Support**

**Supported Card Types**
- MasterCard® PayPass™
- Visa payWave®
- American Express® ExpressPay
- ISO 14443 Part 4 Types A & B
- MIFARE® cards
- Apple Pay Ready

**User Controllable Peripherals**
- Graphical LCD (128 x 64 pixels)
- Tapping Region Backlight in three Colors
- Four LEDs
- Speaker

**Other Features**
- USB Firmware Upgradability
- Removable and adjustable Base Stand

**Operating System Support**
- Windows® XP and above
- Linux®

**Certifications/Compliance**
- ISO 14443, CE, FCC, RoHS 2, REACH, VCCI, KC, EMVCo Level 1, EMVCo Level 2, MasterCard® PayPass™, Visa payWave®, Microsoft® WHQL
What are the Key Features of ACR123U?

- EMVCo Level 1
- EMVCo Level 2 PayPass™
- EMVCo Level 2 payWave®
- EMVCo Level 2 American Express®
- Apple Pay Ready
ACR123U Architecture

ACR123U PCSC
SAM (1-3) Interface
ACR123U PCSC
PICC Interface

PCSC Layer

ISO 7816
Part 1-3 SAM
T=CL & T=1
Emulation
ISO 14443
Part 1-4

SAM 1-3
(Socket)
PICC
(Built-in Antenna)

USB Interface
(CCID)

ACR123U

Physical
Interface
Product
Value
What are the Key Benefits of ACR123U?

**Multi-protocol Support**
ACR123U supports MasterCard® PayPass™, Visa payWave®, and American Express ExpressPay compliant cards. It is also Apple Pay Ready. The ACR123U also supports ISO 14443 Type A and B cards and ISO 7816 Compliant SAM Cards with T=0 and T=1 protocol.

**Great Convenience to Consumers**
Users can complete their payment by simply tapping their cards and not rifle through their wallets for cash. ACR123U supports anti-collision and direct polling.

**Rich User Interaction**
The large tapping region with backlight provides end-users a simple and user-friendly experience when tapping their MasterCard® PayPass™, Visa payWave®, or American Express ExpressPay cards on the ACR123U.

**High-speed Transaction**
ACR123U has a high communication speed of up to 848 Kbps.

**High Security**
ACR123U has three built-in SAM slots to add a security layer for contactless operations.

**Ease of Integration**
The ACR123U uses USB Protocol and is also PC/SC Compliant. This allows interoperability with different applications and platforms.

**Ease of Upgrade**
ACR123U has quick and easy firmware upgradeability through its USB 2.0 Full Speed Interface.
Product Application
In what areas can we apply ACR123U?

- Banking and Payment
- Contactless Mobile Payment
- Transportation
- e-Purse and Loyalty
Thank you!

For more information, visit:
www.acr123u.com