



**Advanced Card Systems Ltd.**  
Card & Reader Technologies

# ACR31 Swipe Card Reader



Technical Specifications V1.00



## Table of Contents

<b>1.0.</b>	<b>Introduction .....</b>	<b>3</b>
1.1.	Secure Card Reader.....	3
1.2.	Modern Design .....	3
<b>2.0.</b>	<b>Features .....</b>	<b>4</b>
<b>3.0.</b>	<b>Typical Applications.....</b>	<b>5</b>
<b>4.0.</b>	<b>Technical Specifications.....</b>	<b>6</b>



## 1.0. Introduction

ACR31 Swipe Card Reader is a combination of card reader functionality and mobility, which enables you to access secure applications anytime, anywhere. As dense and stylish as it is, this card reader is capable of supporting demanding applications using magnetic stripe cards. It provides the perfect balance between reliable functionality and design aesthetics to meet your security needs in various application areas.



### 1.1. Secure Card Reader

ACR31 Swipe is a reliable card reader that uses AES-128 encryption algorithm for a secure transaction which makes it an ideal device for a broad range of solutions, such as e-Banking and e-Payment.

### 1.2. Modern Design

The ultra compact ACR31 Swipe is specifically designed to be brought and used anytime, anywhere. With CR2016 battery to stabilize the power supply and the standard 3.5-mm audio jack interface, it further allows the ACR31 Swipe to be integrated seamlessly into any smartphone or tablet available in the market.

Built with a modern design, ACR31 Swipe is a portable and lightweight swipe card reader that is perfect for users who wish to transact securely while on the go.



## 2.0. Features

- 3.5-mm Audio Jack Interface
- Powered by a CR2016 battery
- Reads up to two tracks of card data
- Capable of bi-directional reading
- Supports AES-128 encryption algorithm
- Magnetic Stripe Card Reader:
  - Supports ISO 7810/7811 magnetic cards
  - Supports Hi-coercivity and Low-coercivity magnetic cards
  - Supports JIS1 and JIS2
- Supports Android™ 2.3 and above\*
- Supports iOS 5.0 and above\*
- Compliant with the following standards:
  - CE
  - FCC
  - VCCI
  - RoHS
  - REACH

**\*Note:** Visit [www.acs.com.hk](http://www.acs.com.hk) for the list of supported devices.

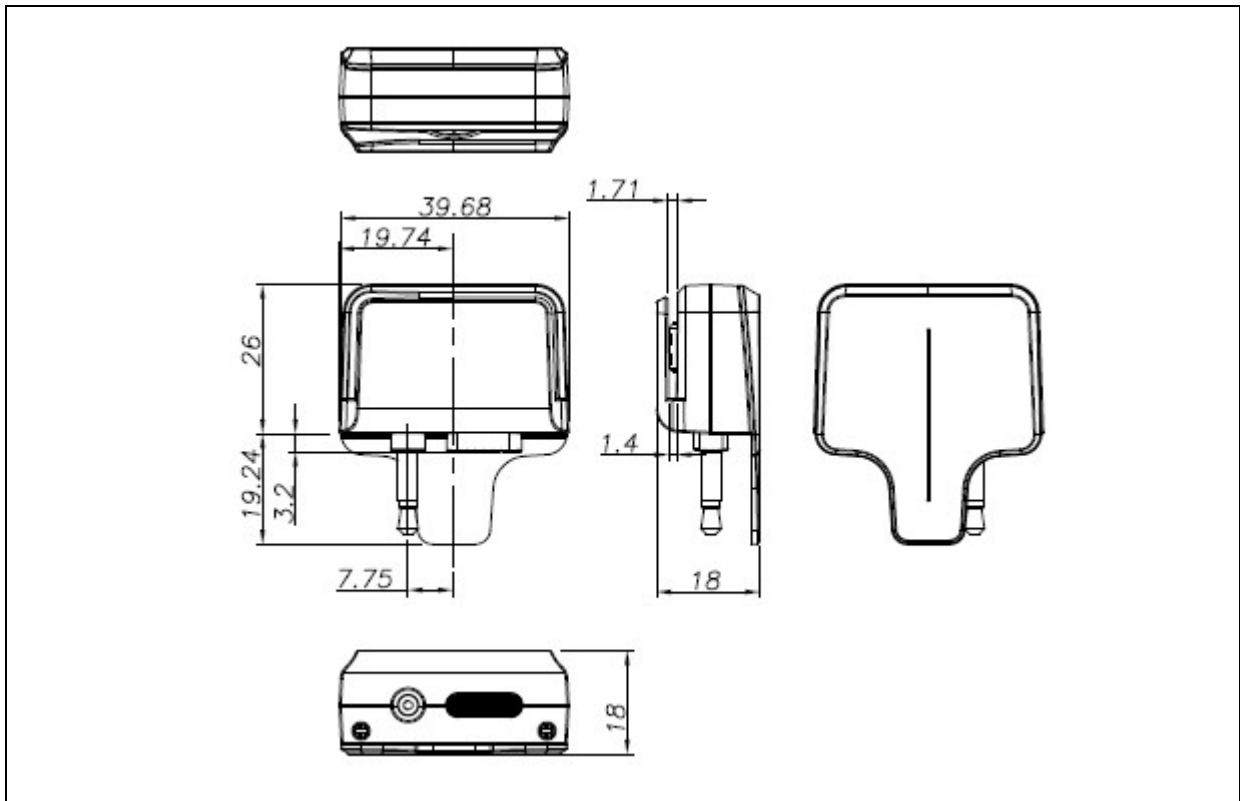


### **3.0. Typical Applications**

- Mobile Banking
- Mobile Payment
- e-Healthcare
- Loyalty Program



## 4.0. Technical Specifications



### Communication Interface

Type..... Bi-directional Audio Jack Interface  
 Connector..... 3.5 mm 4-pole Audio Jack  
 Speed..... Max. 2.6 Kbps

### Power Supply

Power Source..... CR2016 battery  
 Supply Voltage..... 2.3 V – 3 V DC  
 Operating Current ..... 5 mA  
 Sleep Current ..... 0.4  $\mu$ A

### Magnetic Card Interface

Standard ..... ISO 7810/7811 HiCo and LowCo Magnetic Cards  
 ..... JIS 1 and JIS 2  
 Card Swipe Speed ..... Max. 10 in/s  
 Card Swipe Cycles..... Min. 500,000

### Physical Specifications

Dimensions ..... 39.68 mm (L) x 46.00 mm (W) x 18.00 mm (H)  
 Color ..... White  
 Weight..... 20 g (with battery)

### Operating Conditions

Temperature..... 0 °C – 50 °C  
 Humidity ..... 10% – 90%

### Certifications/Compliance

CE, FCC, VCCI, RoHS, REACH

### Device Driver Operating System Support

Android 2.3 and above  
 iOS 5.0 and above

