



Advanced Card Systems Ltd.
Card & Reader Technologies

ACR83 PINeasy



Technical Specifications V2.07



Table of Contents

1.0. Introduction	3
2.0. Features	4
3.0. Typical Applications.....	5
4.0. Technical Specifications.....	6

List of Figures

Figure 1 : ACR83U-A1 Features	4
-------------------------------------	---



1.0. Introduction

ACR83 PINeasy is a USB reader featuring a keypad and display, supporting Secure PIN Entry (SPE). The PIN (Personal Identification Number) is securely entered on its keypad and then authenticated within the device. Since the PIN is entered into the secure ACR83 PINeasy rather than the vulnerable PC or workstation, the possibility of a Virus/Trojan or USB Sniffer getting hold of the PIN is eliminated.

ACR83 PINeasy, which fits perfectly on the palm of your hand, is one of the smallest PIN-pad readers in the market. To authenticate yourself, all you have to do is to connect the reader to USB port of the PC, insert the smart card, follow the command on the LCD and enter your PIN.

Additionally, the ACR83 PINeasy is compliant with major computing, banking and safety standards such as Microsoft® WHQL (Windows Hardware Quality Labs), PC/SC, EMVCo Terminal Level 1, CE and FCC, equipping ACR83 to be a device that you can trust.

2.0. Features

- USB Full Speed Interface
- Contact Smart Card Reader:
 - Supports ISO 7816 Class A, B and C (5 V, 3 V and 1.8 V) cards
 - Supports microprocessor cards with T=0 and/or T=1 protocol
- Supports Protocol and Parameters Selection (PPS)
- Supports Secure PIN Entry (SPE)
- Built-in Peripherals:
 - 14-key Keypad
 - 2 rows x 16 characters dot matrix LCD, with 5 dots x 8 dots each character
- Certified and compliant with the following standards:
 - CCID
 - PC/SC
 - CE
 - FCC
 - IEC/EN 60950
 - RoHS2
 - EMVCo Level 1 Certified
 - Microsoft® WHQL

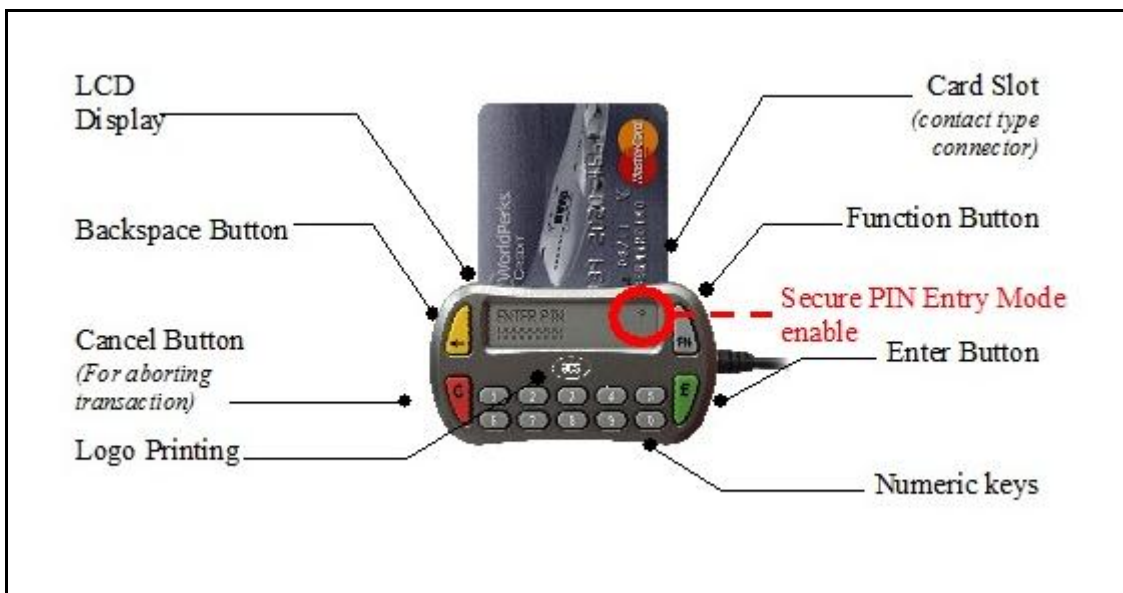


Figure 1: ACR83U-A1 Features



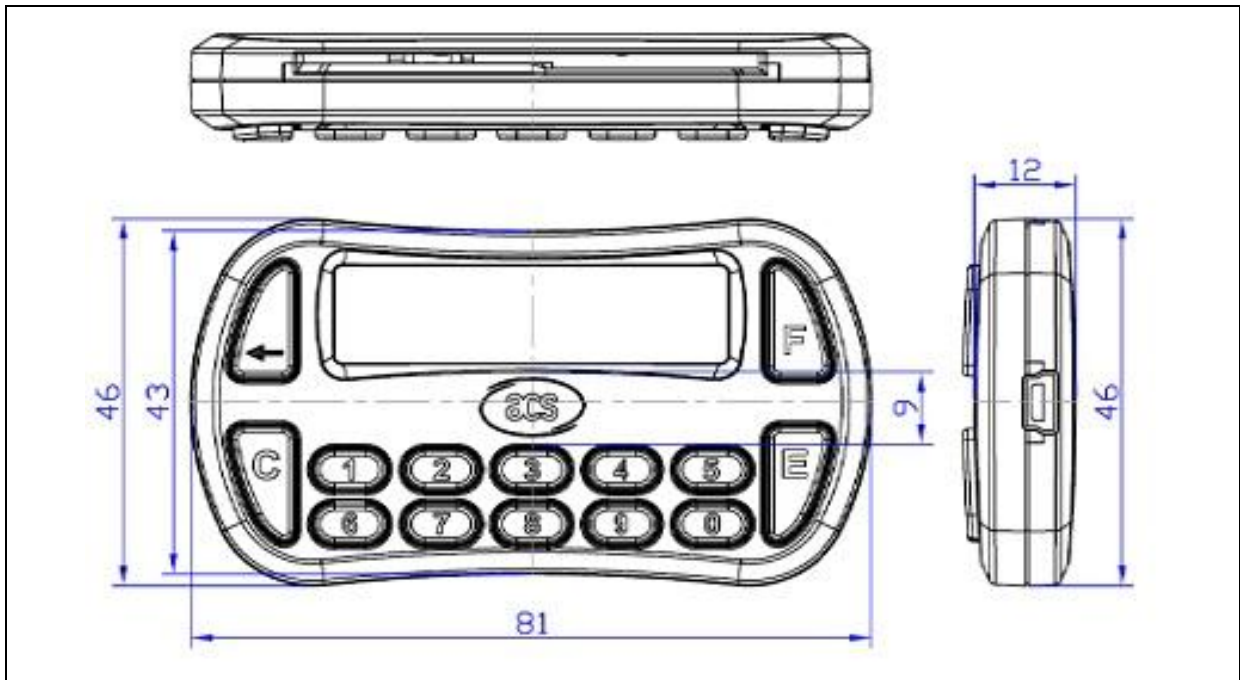
3.0. Typical Applications

- e-Government
- e-Banking and e-Payment
- e-Healthcare
- Transportation
- Loyalty Program





4.0. Technical Specifications



Power

Supply Voltage +5 V
Supply Source < 100 mA (without smart card)

Universal Serial Bus Interface

Type USB Full Speed, Four Lines: +5 V, GND, D+ and D-
Power Source From USB
Speed 12 Mbps
Supply Current Max. 50 mA

Contact Smart Card Interface

Standard ISO 7816 Class A, B and C (1.8 V, 3 V or 5 V), T=0 and T=1
Smart Card Read/ Write Speed 1,743 bps – 250,000 bps
Short Circuit Protection +5 V/GND on all pins
CLK Frequency 4 MHz
Card Connector Sliding Contact (8 contacts)
Card Insertion Cycles Min. 100,000

Built-in Peripherals

Keypad 14 keys (10 numeric key and 4 function keys)
LCD Display 2 rows x 16 characters, each character 5 x 8 dots

Physical Specifications

Dimensions 81 mm (L) x 46 mm (W) x 12 mm (H)
Color Metallic Grey
Weight 65 g

Operating Conditions

Temperature 0 °C – 50 °C
Humidity Max. 90% (non-condensing)
MTBF 500,000 hrs

Certifications/Compliance

CE, FCC, IEC/EN 60950, RoHS 2, ISO 7816, PC/SC, CCID, EMVCo Level 1, Microsoft® WHQL for Windows® 2000, Windows® XP, Windows Vista®, Windows® 7, Windows® 8, Windows® 8.1, Windows® Server 2003, Windows® Server 2008, Windows® Server 2008 R2, Windows® Server 2012, Windows® Server 2012 R2



Device Driver Operating System Support

Windows® 2000, Windows® XP, Windows Vista®, Windows® 7, Windows® 8, Windows® 8.1, Windows® Server 2003, Windows® Server 2008, Windows® Server 2008 R2, Windows® Server 2012, Windows® Server 2012 R2, Linux®, Mac OS®, Android 3.1 and above



Microsoft, Windows and Windows Vista are registered trademarks of Microsoft Corporation in the United States and/or other countries.