



Advanced Card Systems Limited

Card and Reader Technologies

A background image showing a person's hands interacting with a card reader device. The person is wearing a yellow wristband. The card reader is a white, rectangular device with a slot for cards. The text 'Technical Specifications' is overlaid on this image in a white box with a red border.

Technical Specifications



ACR92 PCMCIA Type II Smart Card Reader



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1.0 Introduction



ACR92, a specially designed smart card peripheral for notebook and portable computers, has completed all major standards including PC/SC, FCC and ISO 7816. It is also EMV Level 1 Certified which makes it suitable for applications related to banking services and credit card payments.

The ACR92 is easy to install and use. It establishes a uniform interface between the computer and the smart card for a wide variety of cards. By taking care of the card

specific particulars, the software engineers need not to understand the full technical details of the smart card/computer interface to carry out the implementation of a smart card system. It also allows future firmware and application upgrade.

2.0 Features

- Read and write all microprocessor cards (MCU) with T=0 and T=1 protocols
- Support 5V and 3V smart cards
- Certificate of conformance: PC/SC, FCC, EMV 2000 Level1
- ISO7816-Class A and AB
- On-board flash provides firmware upgrades
- Transmission speed (with PC: 16Mbit/sec)
- Transmission speed (with Card: up to 344Kbit/sec)
- Win 98/ME/NT4/2000/XP/Server 2003/Vista/Linux, MacOS X
- 8MHz CLK frequency
- Sliding connectors (8 contacts)
- Min 100,000 card insertion cycles
- Microsoft PC/SC compliant application programming interface
- Stainless steel case material
- 30g weight
- Compliant to PCMCIA mechanical specifications

3.0 Typical Application

- Home Banking and Home Shopping
- Electronic Commerce
- Network access control
- Digital signature
- Physical access control
- Identification
- Online gaming
- Business trip



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4.0 Technical Specification



Electrical Specification

Host Interface PCMCIA Type II
Supply voltage 5V

API

Type PC/SC, CT-API

Interface

Type PCMCIA, Plug and Play support

Smart Card Interface

Standard ISO 7816 Class A and AB
Protocol T=0, T=1
Smart card read / write speed 344,105 bps
CLK frequency 8MHz
Card connector sliding contacts (8 contacts)
Card insertion cycles 100,000 insertions

Mechanical specification

Type PCMCIA Type II card
Dimensions 85.6 x 54 x 5 mm
Case material Stainless steel
Weight 30g

Environmental Conditions

Operating temperature 0 - 50° C

Standard/Certifications

ISO7816-Class A and AB, PC/SC
FCC, EMV 2000 Level 1, RoHS, cULus, VCCI
Microsoft WHQL 2000, XP, Server2003

OS

Windows 98, ME, NT4.0, 2000, XP, Server2003, Vista
Linux and MacOS X

OEM

OEM-Logo possible

