

ACR91 PCMCIA Type II Smart Card Reader/Writer



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1.0 Introduction



The ACS Smart Card Reader/Writer ACR91 provides an ideal PCMCIA host interface for the communication between a portable computer and a smart card.

ACR91 has already fulfilled all major standards such as PC/SC, ISO 7816, GSM 11.11, Home Banking Computer Interface (HBCI), the PC-2001 Specification. The PCMCIA reader is designed for the use in notebook computer.

The ACR91 Reader/Writer 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 implementation of a smart card system.

2.0 Features

- Read and write all microprocessor cards (MCU) with T=0 and T=1 protocols
- Support 1.8V, 3V and 5V smart cards
- Certificate of conformance: ISO 7816-1/2/3, PC/SC, CE, HBCI
- ISO7816-1/2/3 compatible smart card interface
- Transmission speed (with PC: 16Mbit/sec)
- Transmission speed (with Card: up to 420Kbit/sec)
- Win 98/ME/NT4/2000/XP/CE3.0/CE.NET
- 4 MHz/8MHz CLK frequency
- Sliding connectors (8 contacts)
- Min 30,000 card insertion cycles
- Microsoft PC/SC compliant application programming interface
- Stainless steel case material
- 43g weight
- Compliant to PCMCIA mechanical specifications, ISO 7816-1

3.0 Technical Specification



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Electrical Specification

Host Interface From PCMCIA bus
 Supply voltage 5V
 Supply current 5 mA (without smart card); 30mA - 90mA max (depending on smart card)

Reliability

Mean time to failure 500,000 h

Interface

Type PCMCIA, Plug and Play support

Smart Card Interface

Standard ISO 7816 1/2/3
 Supply current max. 50mA
 Smart card read / write speed 16 Mbit/sec
 CLK frequency 4 MHz/8MHz
 Card connector sliding contacts (8 contacts)
 Card insertion cycles min. 30,000

Mechanical specification

Type PCMCIA Type II card
 Dimensions 86.67 x 54 x 5
 Case material Stainless steel
 Weight 43g
 Compliance PCMCIA mechanical specifications, ISO 7816-1

Environmental Conditions

Storage temperature -25 - 90° C
 Operating temperature 10 - 55° C
 Store humidity 10% - 90% (non-condensing)
 Operation humidity 10% - 90% (non-condensing)
 Electrostatic discharge 8kV

Standard/Certifications

ISO7816-1/2/3, PC/SC, CE, HBCI

OS

Windows 98, ME, 2000, XP, NT4.0, and CE3.0/CE.NET

OEM

OEM-Logo possible



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