

## Introduction

Along with the rapid growth of technology comes the increasing prevalence of electronic data theft. This emphasizes the need to secure electronic data, thus necessitating the integration of smart card technology into current IT infrastructures. Following this trend, the [ACR39 Smart Card Reader Series](#) combines sophisticated technology and modern design to meet stringent requirements in smart card-based applications, such as payment systems and electronic identification, where a high level of security has increasingly been deemed essential.

Being compliant with the CCID specification, the ACR39 Series offers a plug-and-play solution that eliminates the need for driver installation and driver-system compatibility assessment. Its USB interface facilitates communication between a computer and a smart card very easily, allowing for a seamless implementation of smart-card based applications in a PC environment.

**ACR39 Smart Card Reader** is compliant with ISO 7816 and EMV Level 1 specifications. It supports ISO 7816 Class A, B and C ( 5V, 3 V and 1.8 V) cards, including all microprocessor cards with T=0, and T=1 protocols, as well as most of the popular memory cards in the market.

ACR39 also offers an optional built-in Security Access Module (SAM) slot - [ACR39U-SAM](#) that supports various high security applications. It is also available in different casing designs, including the new ACR39U-I1 which is now FIPS 201 certified and TAA compliant. In addition, ACR39 also has an alternative reader module form (ACM39).

## Feature

- Supports ISO 7816 Class A, B and C ( 5 V, 3 V, 1.8 V) card
- Supports CAC (Common Access Card) \*
- Supports microprocessor cards with T=0 or T=1 protocol
- Supports memory cards:
  - Cards following the I2C bus protocol (free memory cards), including:
    - Atmel: AT24C01 / 02 / 04 / 08 / 16 / 32 / 64 / 128 / 256 / 512 / 1024
    - SGS-Thomson: ST14C02C, ST14C04C
    - Gemplus: GFM1K, GFM2K, GFM4K, GFM8K
  - Cards with intelligent 256 bytes EEPROM and write protect function, including: SLE4432, SLE4442, SLE5532, SLE5542
  - Cards with intelligent 1K bytes EEPROM and write-protect function, including: SLE4418, SLE4428, SLE5518, SLE5528
  - Cards with '104' type of EEPROM non-reloadable token counter cards, including: SLE4406, SLE4436, SLE5536, SLE6636
  - Cards with secure memory IC with password and authentication, including: AT88SC153, AT88SC1608
  - Cards with Intelligent 416-Bit EEPROM with internal PIN check, including: SLE4404
  - Cards with Security Logic with Application Zone, including: AT88SC101, AT88SC102, AT88SC1003
- Supports PPS (Protocol and Parameters Selection)
- Features Short Circuit Protection
- Application Programming Interface:
  - Supports PC/SC
  - Supports CT-API (through wrapper on top of PC/SC)

## Application

- e-Government
- e-Banking & e-Payment
- e-Healthcare
- Public Key Infrastructure
- Access Control
- Network Security
- e-Purse & Loyalty

## Technical Specification

Dimensions	ACR39: 72.2mm (L) x 69.0mm (W) x 14.5mm (H)  ACR39: 71.5mm (L) x 80.0mm (W) x 80.0mm (H)  ACR39: 65.5mm (L) x 68.2mm (W) x 13.7mm (H)
Interface	USB 2.0 Full Speed
Supply Voltage	Regulated 5V DC
Supply Current	Max. 50mA
Operating Temperature	0-50°C
CLK Frequency	4 MHz
Smart Card Interface Support	ISO- 7816 Class A, B and C ( 5V, 3V, 1.8V )
Compliance / Certifications	EN60950/IEC 60950, ISO 7816, FIPS 201*, TAA*, CE, FCC, UL, KC*, VCCI, PC/SC, CCID, EMV 2000 Level 1, RoHS, REACH, USB Full Speed Microsoft WHQL: 2000, XP, Vista, 7, 8, Server 2003, Server 2008, Server 2008 R2, Server 2012
Operating System Support	Win98, Win ME, Win NT 4.0, Win 2000, Win 2003, Win 2003 R2, Win XP, Win Vista, Win 2008, Win 7, Win 8 Win 2003 x64, Win 2003 R2 x64, Win XP x64, Win Vista x64, Win 2008 x64, Win 2008 R2 x64, Win 7 x64, Win 8 x64, Win 2012 x64 Mac Linux Android™ 3.1 and above

