



Advanced Card Systems Ltd.
Card & Reader Technologies



ACR89U-A1

CARD & READER TECHNOLOGIES

Handheld Smart Card Reader (Standard Version)

Product Presentation





Rundown

1. Product Overview
2. Product Feature
3. Product Value
4. Product Application



Product Overview





Product Overview



The ACR89 PIN-pad Reader is the second generation of ACR88. It is a versatile handheld smart card reader within ACS's Smart Card Reader with PIN-Pad Product Family.

Its main distinctions with respect to ACR88 are:

- Rechargeable Li-ion battery
- Long battery life
- USB firmware upgradeable
- Larger programmable memory
- High performance 32-bit RISC processor





Product Features





What are the Key Features of ACR89U-A1?

High resolution backlit graphical LCD (128x 64 pixels)

Durable 20-button keypad + Secure PIN Entry (SPE) support

4 LED Status Indicators

Memory
512 KB SDRAM – firmware
384 KB Serial Flash + 32 KB EEPROM – Data Storage / User Programmable

Supported Card Types
➤ Full sized MCU cards with T=0, T=1 protocols
➤ ISO 7816 Class A, B and C
➤ Memory Cards (SLE 4432/5524, 4418/5528)

Optional : Thermal Printer

Standalone : Rechargeable Lithium Ion Battery

Supported OS

- Windows 2000, 2003, XP, Vista & 7
- Mac, Linux , Android

PC Linked: USB Connectivity

2 Full-sized slots (Landing / Contact) + 3 SAM slots

Firmware upgradeable

Tamper detection switch

PC-Linked / Standalone Operation Modes





ACR89 Series



ACR89U-A1
Standard
(ISO7816 Class A,B,C,
Memory cards)



ACR89U-A2
Standard + ISO14443A,
Felica,
NFC tags



ACR89 vs ACR88

	ACR88 	ACR89 
Processor	8bit , 24Mhz	32bit , 48Mhz
Operating System	Proprietary Scripts	FreeRTOS
Battery	3 x AAA (NiMH, or Alkaline)	Rechargeable Li-Ion
Thermal Printer	--	Optional
LCD	1.9"	2.3"
LED	3	4
Firmware Upgrade	Serial	USB
Fingerprint Sensor	Area	Swipe and / or Area
Contact cards	ISO7816 Class A,B, MCU T=0,T=1, Memory cards	ISO7816 Class A,B,C MCU T=0,T=1, Memory cards
Contactless (Optional)	ISO 14443 Type A & B, Mifare	ISO 14443 Type A&B, Mifare , Felica , NFC tags
Host Interface	USB	USB and Serial



Product Value





Product Benefits

Cost-Effective

All in one design with powerful add-ons at the price of one

(PIN-Pad + LED + LCD + Contact Support + Printer + Rechargeable Battery)

Customer Convenience

Easy to read and use
Highly durable and color coded keypad
Firmware Upgradeable
Thermal Printer Availability

High Security

Multiple SAM Slots
Dual Smart Card Interface
Secure PIN Entry
Mutual Authentication

Innovative

Ergonomically designed
Long Battery Life (handles up to 200 transactions)
CCID and PC/SC Compliance
Faster processing time at low cost



Product Application





In what areas can we apply ACR89?



e-Government



e-Payment



e-Healthcare



Customer Loyalty



Transportation



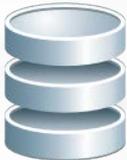


ACR89 Sample Application

**Register & Issue
Doctors' Cards**



Backup



Database



Backup

**Register & Issue
Patients' Cards**

Each doctor carries his/her own ACR89, with his/her own doctor's card stored in one of the SAM slots.



Patient's medical information are stored in the card. The card is inserted into one of ACR89's card slots.



When mutually authenticated, patient's info can be viewed on the LCD of the device, or can be shown on the monitor when ACR89 is connected to the PC.





Thank You!!!

More information on:

<http://acr89.com>

