MR801 Series Desktop IC Card Reader

User's Manual

(Revision 4.01)

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Please read this manual carefully before using. If any problem, please mail to: jinmuyu@vip.sina.com

Contents

1   Overview

MR801 series desktop contactless IC card reader is based on NXP series RF chip with high performance ARM7 MCU. The communication is according to USB PC/SC standard. The reader fully supports the IC card according to ISO14443 standard, especially completely supports ISO14443-4 contactless CPU card.

The reader builds in 2 SAM slots, and fully supports SAM according to ISO7816.

2   Main Characteristics

- **128 * 64 pixel LCD displayer**
- **True USB PC/SC interface, compatible with many PC/SC readers in the market**
- **High speed MCU and advantage firmware provide very high card process speed**
- **RF protocol process with EMV2010 LEVEL 1 certification ability**

3   Technical parameters

- PCD: MF RC531
- Working frequency: 13.56MHz
- RF protocol: ISO14443A, ISO14443B
- Operating distance: 100mm (MIFARE One, typical)
- SAM slots: 2 slots, support ISO7816 (T=0 & T=1, support PPS, Max. 230400bps)
- Display: 4 LED + LCD (128 * 64 pixel white back light)
- Buzzer: Build in
- RTC: Build in
- Data FLASH: 4 Mbytes (include font)
- Interface: USB PC/SC standard
- Power supply: DC5V ± 10%
- Power consumption: 0.9W
- Dimension: 142mm * 86mm * 22mm
- Weight: About 100g
- Operating temperature: -25 ~ +85°C
- Storage temperature: -40 ~ +125°C
- PC software: PCSC Communication Tool, download from http://www.jinmuyu.com
- SDK: Base on Windows, free
- Sample code: VC, VB, C++ Builder, DELPHI, Power Builder

- ISP:　　　　　　　Support
- RoHS:　　　　　　Compliant

4　Cards supported

	MR801UC
PCD	MF RC531
MIFARE 1K	●
MIFARE 4K	●
MIFARE Mini	●
MIFARE Ultra Light	●
MIFARE Ultra Light EV1	●
MIFARE Ultra Light C	●
MIFARE DES fire	●
MIFARE DES fire EV1	●
MIFARE Plus all Levels	●
T=CL TYPE A	●
T=CL TYPE B	●

5 Model of the reader

5.1 Model format

This is the model format of Master Reader series contactless card reader/writer:

1	2	3	4	5	6
MR	XXX	X	X	X	-XXX

1: Product code; 2: Device class; 3: Communication port; 4: Supported card type;
5: Color of enclosure; 6: ODM code;

5.2 Model description

5.2.1 Product code

The code of Master Reader series contactless card reader is: MR

5.2.2 Device class

600: Desktop readers with 8 digits LED displayer, support 1 SAM slot.

701: Desktop readers, support 2 SAM slots.

730: Desktop readers, Ethernet interface, support 1 SAM slot.

731: Desktop readers, Ethernet interface, support 2 SAM slots. MR730 Enhanced with more advance.

762x: Desktop read only programmable reader. Keyboard simulator. Support ISO14443A/B, ISO15693.

763x: Desktop read only programmable reader. Keyboard simulator. Support ISO14443A, ISO14443B.

780: Desktop reader, MR701 enhanced model. Support 3 SAM slots.

7801: Desktop reader, MR780 in new style case. Support 4 SAM slots.

790: Desktop reader with compatible PC/SC interface. Support 3 SAM slots.

7901: Desktop reader with compatible PC/SC interface. MR790 in new style case. Support 4 SAM slots.

791: Desktop reader with standard PC/SC interface. Support 3 SAM slots.

7911: Desktop reader with standard PC/SC interface. MR791 in new style case. Support 4 SAM slots.

800: Desktop reader with 128*64 dots LCD displayer. Compatible PC/SC interface, support 2 SAM slots.

801: Desktop reader with 128*64 dots LCD displayer. Standard PC/SC interface, support 2 SAM slots.

810: Desktop reader with compatible PC/SC interface. Support 2 SAM slots. Based on ARM7 processor.

811: Desktop reader with standard PC/SC interface. Support 2 SAM slots. Based on ARM7 processor.

5.2.3 Communication port

S: RS232C interface, power supply from USB

R: RS485 interface, power supply by wire connection

U: USB interface

E: Ethernet interface, power supply by AC adaptor

5.2.4 Supported card type

A: ISO14443A, MIFARE classic and ISO7816

C: ISO14443A, ISO14443B, MIFARE classic and ISO7816

G: ISO15693 and ISO7816

H: ISO14443A, ISO14443B, ISO15693, MIFARE classic and ISO7816

5.2.5 Color of enclosure

W: white (if blank, default white)

B: black

5.2.6 ODM code

This part is for ODM customer only. It is 3 digital codes like 001, 002...

5.3   Model available

The models below are available for supply:

- MR801UCN
- MR801UCV

6 USB Driver installation

The driver installation of MR790 is simple. There are 2 ways:

1. Plug the USB header to PC and let Windows find the driver online.
2. The CCID driver is locate on:

    CD-ROM:\USB Driver\CCID Driver

    Plug the USB header to PC and point the driver path to Windows.

7　About PC Software and API

The PC software is PCSC Communication Tool. This is software based on PC/SC API. The software supports most function of IC cards. Please download the operation manual and API manual from our website: http://www.jinmuyu.com, or contact us with jinmuyu@vip.sina.com.