

# MR7801 Series User's Manual

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(Revision 3.31)

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2014/6/25



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



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# 1 Overview

MR7801 series desktop contactless IC card reader/writer is based on NXP series RF chip with high performance MCU. The reader fully supports the IC smart card according to ISO14443 and ISO15693 standard, especially completely support ISO14443-4 contactless CPU card.

The reader builds in 4 SAM slots, and fully supports SAM according to ISO7816(T=0,1).



## 2 Technical parameters

- PCD: MF RC500; MF RC531; CL RC632; SL RC400
- Working frequency: 13.56MHz
- RF protocol: ISO14443A, ISO14443B, ISO15693
- Operating distance: 100mm (Mifare One, typical)
- SAM slots: 4 slots, support ISO7816 (T=0 & T=1, support PPS, Max. 115200bps)
- Display: Four LED (Red, Yellow, Blue, Green)
- Buzzer: Build in
- Interface: USB (build-in CP2102 USB to UART converter) or USB PC/SC
- Baud rate: 9600~115200bps
- Power supply: DC5V  $\pm$  10%
- Power consumption: 0.9W
- Dimension: 135mm $\times$ 100mm $\times$ 45mm
- Weight: About 200g
- Operating temperature: -25 ~ +85  $^{\circ}$ C
- Storage temperature: -40 ~ +125  $^{\circ}$ C
- SDK: Base on Windows, free
- Sample code: VC, VB, C++ Builder, DELPHI, Power Builder
- ISP: Support
- RoHS: Compliant



## 3 Cards supported

### 3.1 ISO14443A

- Mifare One S50
- Mifare One S70
- Mifare One Mini
- Mifare Ultra Light
- Desfire
- Mifare Plus
- ISO14443-4 (T=CL) TYPE A dual interface CPU Card

### 3.2 ISO14443B

- AT88RF020
- AT88RF080
- SR176
- SRI512
- SRI1K
- SRI2K
- SRI4K
- SRIX4K
- ISO14443-4 (T=CL) TYPE B dual interface CPU Card

### 3.3 ISO15693

- I.CODE SLI
- Tag-it HF-I
- Other tags compliant with ISO15693

### 3.4 ISO7816

- Any type of contact smart cards according to ISO7816, support any baud rate reset and any baud rate operation (by PPS)



## 4 Model of the reader

### 4.1 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;

### 4.2 Model description

#### 4.2.1 Product code

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

#### 4.2.2 Device class

600: Desktop reader/writer with LED digital display  
701: Desktop reader/writer  
730: Ethernet desktop reader/writer  
760: HID keyboard simulator interface desktop reader, support ISO15693 only  
761: HID keyboard simulator interface desktop reader, support ISO14443A and ISO14443B  
780: High performance desktop reader/writer, support ISO7816 fully  
7801: New Housing, High performance desktop reader/writer, support ISO7816 fully  
790: USB PC/SC interface desktop reader/writer  
800: High performance USB PC/SC interface desktop reader/writer with LCD display  
810: High performance USB PC/SC interface desktop reader/writer

#### 4.2.3 Communication port

U: USB (build-in CP2102 USB to UART converter) or USB PC/SC

#### 4.2.4 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

### 4.2.5 ODM code

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

## 4.3 Model available

The models below are available for supply:

- MR7801UA (ISO14443A, Mifare classic and ISO7816)
- MR7801UC (ISO14443A, ISO14443B, Mifare classic and ISO7816)
- MR7801UG (ISO15693 and ISO7816)
- MR7801UH (ISO14443A, ISO14443B, ISO15693, Mifare classic and ISO7816)

## 5 Driver installation

The driver installation of MR7801 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: \English\RFID Desktop Readers\PCSC Interface\CCID Driver  
Plug the USB header to PC and point the driver path to Windows.

## 6 About PC Software and API

The PC software for MR7801 is PTransWin(only for USB PC/SC) or TransWin. This is software based on API of the reader. 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 [service@jinmuyu.com](mailto:service@jinmuyu.com).