

# MR790 Series User's Manual

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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

MR790 series desktop contactless IC card reader/writer is based on NXP series RF chip with high performance MCU. The communication is according to USB PC/SC standard. The reader fully supports the IC card according to ISO14443 and ISO15693 standard, especially completely support ISO14443-4 contactless CPU card.

The reader builds in 3 SAM slots, and fully supports SAM according to ISO7816.



# 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: 3 slots, support ISO7816 (T=0 & T=1, support PPS, Max. 115200bps)
- Display: 1 tricolor LED
- Buzzer: Build in
- Interface: USB PC/SC
- Baud rate: 9600~115200bps
- Power supply: DC5V  $\pm$  10%
- Power consumption: 0.9W
- Dimension: 123mm \* 88mm \* 25mm
- Weight: About 100g
- Operating temperature: -25 ~ +85  $^{\circ}$ C
- Storage temperature: -40 ~ +125  $^{\circ}$ C
- PC software: PTransWin, download from <http://www.jinmyu.com>
- 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

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

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



#### **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 Color of enclosure**

W: white (if blank, default white)

B: black

#### **4.2.6 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:

- MR790UA
- MR790UC
- MR790UG
- MR790UH

## **5 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: \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 MR790 is PTransWin. 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).