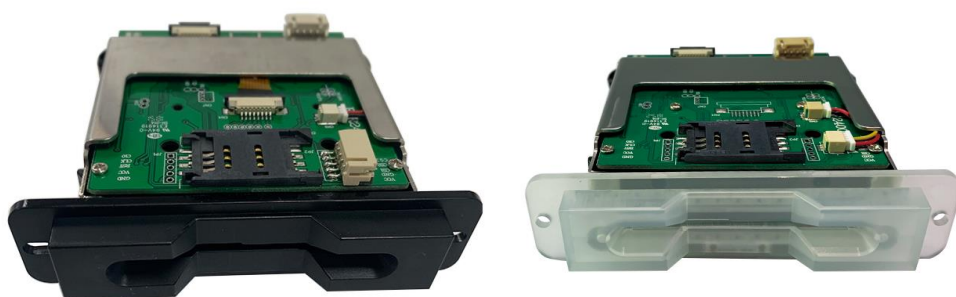

	SPECIFICATION	Series No	RCR-2400
	Manual insert hybrid RF/IC Card Reader	Date	2019/8/17
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RCR-2400 series

Product specification



Video link : <https://youtu.be/7k48Mhn1p9I>

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Please carefully read the specification before using

1、 Overview

RCR-2400 is manual insertion Hybrid card reader & writer which read and write IC contact and contactless card .

Model list as following


Model NO.	Card type	Bezel	Interface
RCR-2	2:IC 3:RF	0:No bezel	0:RS232
	4:IC +RF	1:metal bezel 2:black bezel 3: semi-transparent bezel + LED indicator	2:USB

Hot models in sale :RCR-2330 , RCR-2332 , RCR-2410,RCR-2412 etc .


2.Features :

- 1) IC/RFID card read/write, all kinds of card need to be compliant with related standard, please refer to technical specification.
- 2) RS232 and USB interface for options.
- 3) Compact and reasonable appearance design, easy disassembly and installation,
- 4) Long life time : more than 500,000 parts for all types of components
- 5) Support PSAM card extension, it is compliant with all kinds of applications like financial industry, electric power industry, communication industry, transportation industry and some other related industries.
- 6) Metal bezel ,semi-transparent bezel with LED indicator and electroplated bezel for options
- 7) Dual-color LED functions for semi-transparent bezel type
RED LED: Bright when the card is inserted into machine
Green LED : Bright when No card is inserted into machine or standby status .
- 8) RGB Mode: It can change LED mode and color by command, with three modes.
 - Constant light mode: This mode can change LED color (Red, Green, Blue, Yellow, Purple, Cyan,White)
 - Flashing mode: This mode can set the frequency and time to change the flicker effect.
 - Gradient mode: This mode can be cyclically changed LED color in several colors, waiting for the card

3. Technical Specification

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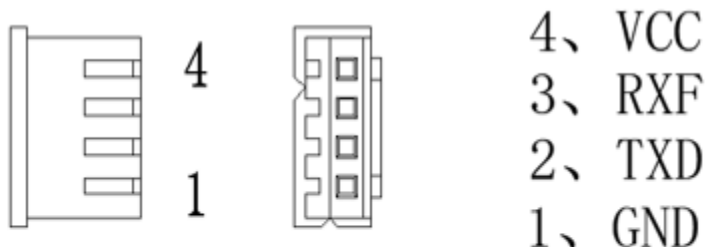
Items	Technical Parameter
Voltage input	DC 5.0±5% V /USBpower supply
Current consumption	Static current: < 50 mA Peak current: < 200 mA
Interface	RS-232 standard serial port/USB 2.0 interface
Card Specification	Width:53.92~54.18 mm, Length: 85.47~85.90 mm Thickness: 0.76~1mm (Ex-work standard 0.76mm)
Life time	Micro Switch:500,000times IC card down force device and IC contact :300,000times
Error rate	IC card: read/write card 1000 times, error rate < 1times(except dirty card causes error)
MTBF	> 100,000hours (only electronic components) Note: 250times/each day,25days/each month,300hours/each month.
Environmental condition	Operation:-20℃~50℃,0~90 % RH (Non-condensing). Storage: -25℃~80℃, 0~95 % RH (Non-condensing).
Reliability	A. Vibration: Frequency range: 5~50Hz; accelerated speed: 2m/s^2 (0.2g) Vibration direction and time: toward to X,Y,Z. each direction for 15 mins. Amplitude: 2mm; all of functions don't be influenced after vibration. B. Shock: 294m/s^2 (30g) 11ms, once for each direction X,Y,Z. all of functions don't be influenced after shock.(without package of card reader).
Online download	Support ISP online download.
Net Weight	Approx: 0.2 Kg (without accessories)
ROHS standard	Comply with ROHS standard.
IC card standard	Comply with ISO7816 standard,Eg:(AT24C01 24C02..... 24C256;SLE4442、SLE4428; CPU T=0/T=1).
RF card standard	Comply with ISO1443-3/-4 standard with frequency of 13.56MHz contactless IC card (TYPE A, TYPE B, CPU card);Mifare 1K series S50/S70/UL card read/write. ISO15693 for option

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4.Interface

RS232 interface


Pin No.	Signal Name	Function
1	GND	Ground
2	TXD	Transmitting Data
3	RXD	Receiving Data
4	VCC	Power +5VDC



PH-4P孔座（2.0mm间距）

USB interface

Pin No.	Signal Name	Function
1	GND	Ground
2	DATA-	Transmitting Data
3	DATA+	Receiving Data
4	VCC	Power +5VDC

	SPECIFICATION	Model No	RCR-2400
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5、Maintenance

There will be something dirty on IC card contact which will influence IC card reading and writing after using for a while. Therefore, we must make a certain maintenance for card reader. the specific procedure as below:

- 1) Using cleaning card to clean dirty things on IC contact.
- 2) Periodical maintenance: it needs to clean maintenance once when card in and out 20,000 times. (count once when card in and out.)

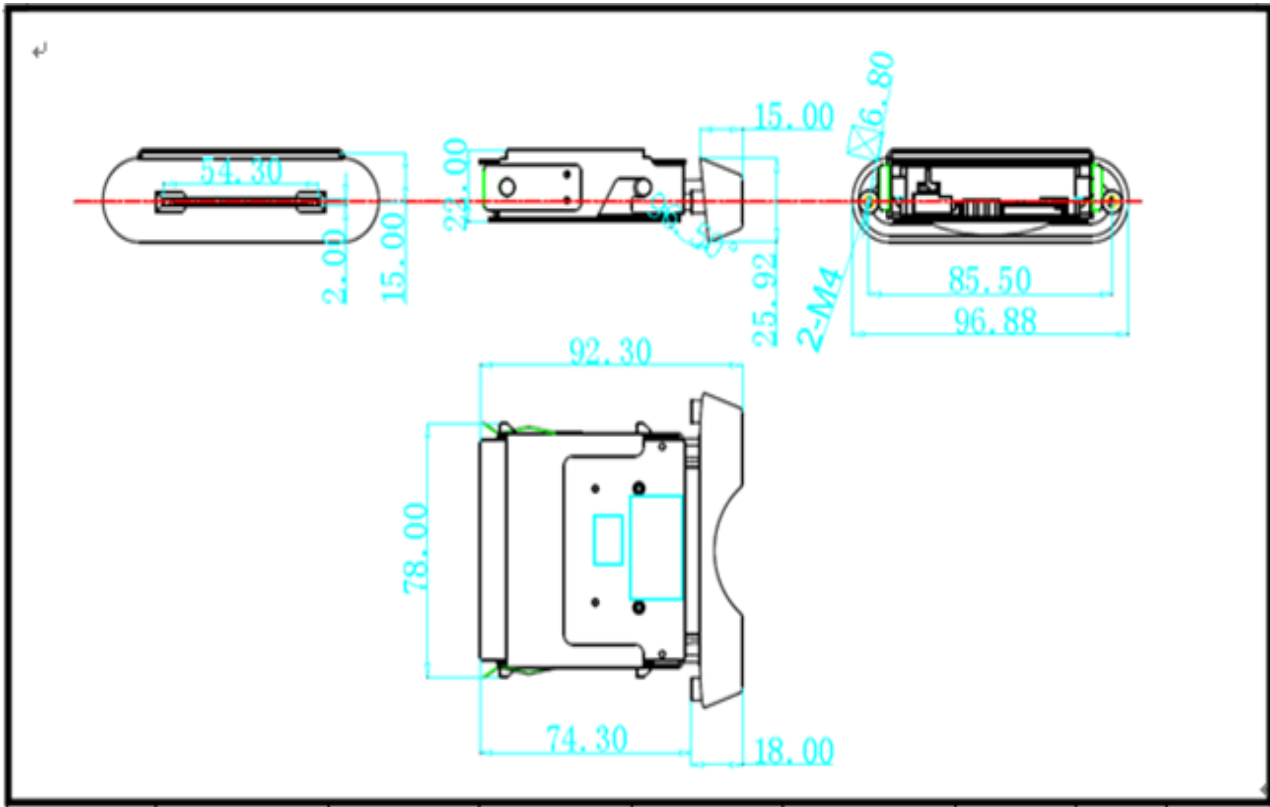
Contact maintenance: it will cause IC card and contact touch error when there is dirty things on contact. It should clean the contact pin, the main method is that we use cleaning card with alcohol to clean card reader, make auto test IC card operation.

6、Notes:

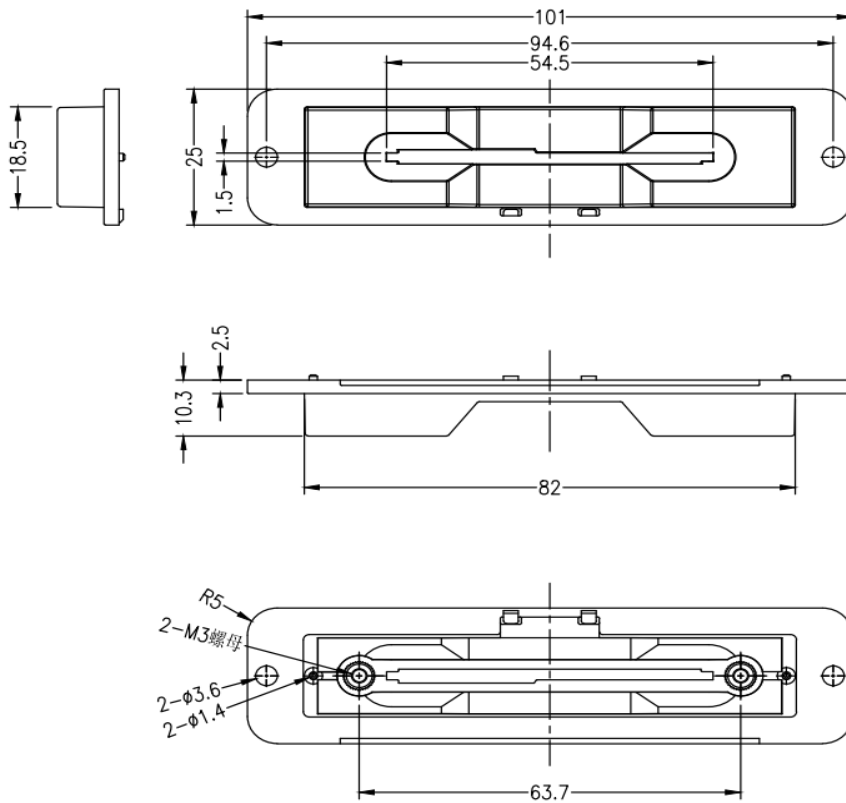
- 1) Make sure power off in order not to damage the card reader when person maintains.
- 2) Keep card reader clean without any oil dirt.
- 3) IC card insertion direction: the chip of IC card upward, and insert card from the front.

7.Installation

Dimension (Metal bezel)



Dimension (semi-transparent bezel)



8. Appendixes:

1. RCR-2400 specification.PDF
2. RCR-2400 DLL.RAR
3. RCR-24=pl00 communication protocol.PDF: