

# HW-1820C QR code RFID reader user's manual



## Overview

HW-1820C QR code + RFID access control reader is a new generation of multifunctional reader developed by our company. The appearance of this product adopts the standard 86 box industry standard. It has fast scanning speed, high recognition rate, strong compatibility, and can be connected to any Wiegand input. The controller is suitable for various application scenarios. At present, it is widely used in business office building visitor entry management, scenic tourist staff management, community visitor entry and exit management, administrative hall access control management, supporting gates, access control, visitor machines, smart homes, etc.; it is a perfect upgrade for traditional credit card systems in various industries.

## technical parameter

project	parameter	project	parameter
Card reader type	EM card or Mifare card	Barcode type	QR, one/two-dimensional code
communication method	Wiegand 26/34/RS232/RS485/TTL	Decoding mode	Image decoding
Reading direction (bar code)	Angle 45° with the lens as the center point	Scan code characteristics	Automatic induction, buzzer prompt
Operating Voltage	8-12V	Working current	800mA
Card reading distance (card)	3~6CM	Reading speed	<200ms
Reading distance (QR code)	0-20cm	Material quality	Zinc alloy frame + acrylic panel
Working humidity	10%~90%	Operating temperature	-20℃~70℃
operating system	WindowsXP/7/8/10), Linux	Size	86mm×86mm×18mm
Indicator light	Blue work light, green feedback light	Weight	150G




## Card reader prompt



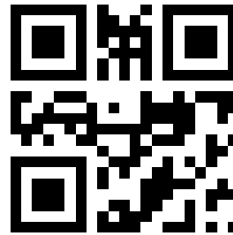


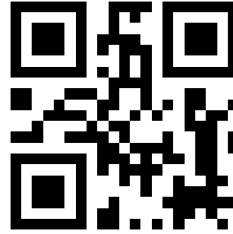

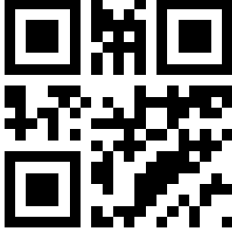




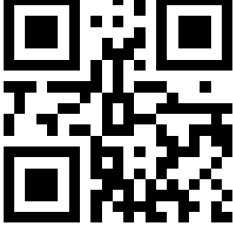
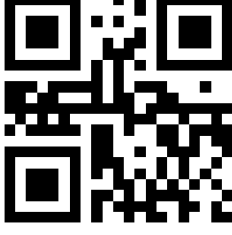

The blue light is always on after wiring, the green light flashes and a buzzer prompts after the card reading or scanning is successful

## Wiring definition

Wiegand 26/34	RS485	RS232
Red line: 12v	Red line: 12v	Red line: 12v
Black wire: GND	Black wire: GND	Black wire: GND
Green line: D0	Brown wire: 485A	Blue line: RX
White line: D1	Orange: 485B	Yellow line: TX

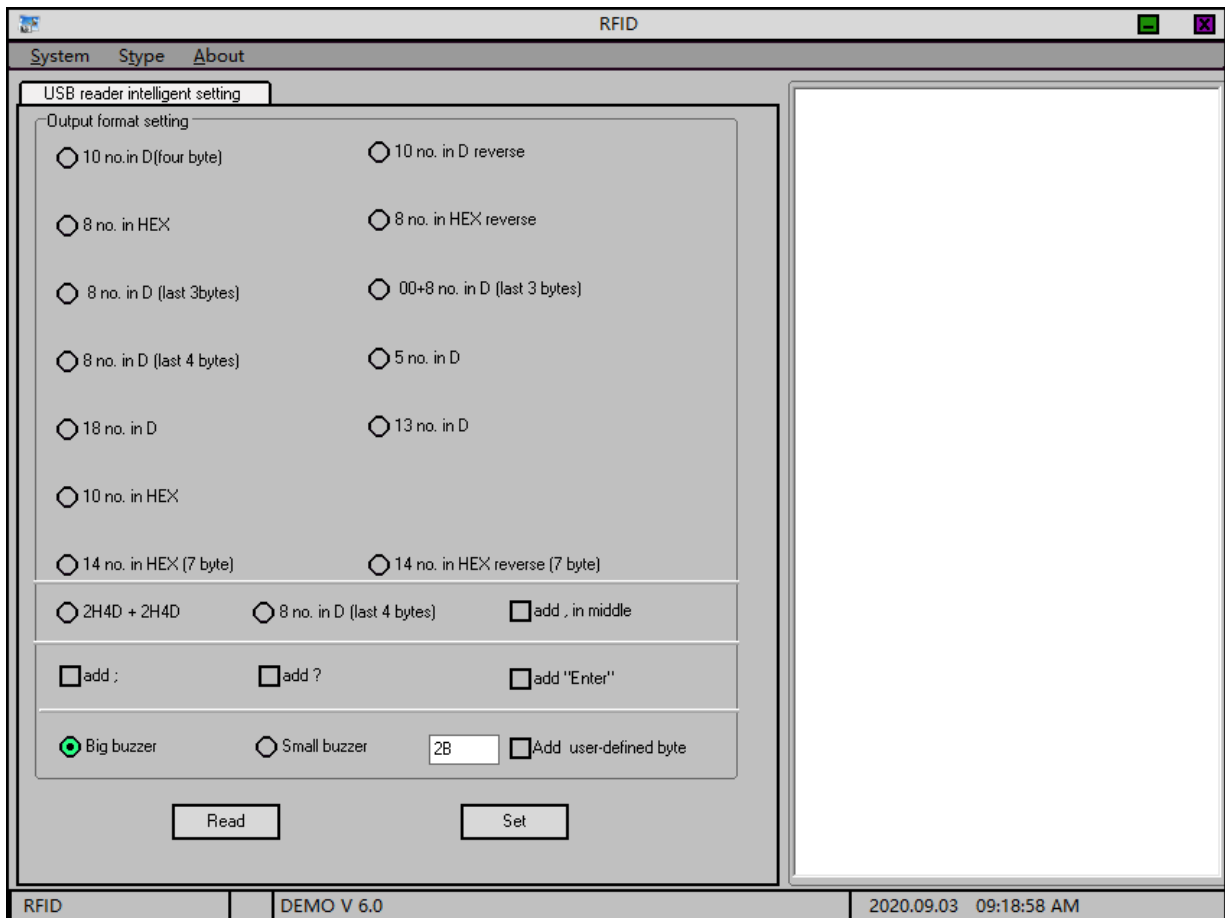
## Setting code description

Set the serial port/232/485 output baud rate to 9600  \$BAUD#3	Set the serial port/232/485 output baud rate to 19200  \$BAUD#4	Set the serial port/232/485 output baud rate to 115200  \$BAUD#7
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<p>Turn off card reading</p>  <p>\$IC#MOD0</p>	<p>Set as a read-only IC card</p>  <p>\$IC#MOD1</p>	<p>Set to read IC card + ID card</p>  <p>\$IC#MOD3</p>
<p>Turn off the backlight</p>  <p>\$LED#0</p>	<p>Backlight auto sensing mode</p>  <p>\$LED#1</p>	<p>Backlight always on mode</p>  <p>\$LED#2</p>
<p>Show software version number</p>  <p>\$SW#VER</p>	<p>Set scan code output WG26</p>  <p>\$WG#2D*0</p>	<p>Set scan code output WG34</p>  <p>\$WG#2D*1</p>
<p>Set scan code output WG26</p>  <p>\$WG#2D*3</p>	<p>Set the card output to WG26</p>  <p>\$WG#IC*0</p>	<p>Set credit card output as WG34</p>  <p>\$WG#IC*1</p>
<p>USB HID keyboard</p>  <p>\$USB#HID</p>	<p>USB virtual serial port</p>  <p>\$USB#COM</p>	<p>Restore default settings</p>  <p>\$SW#RST</p>

## Card reading parameter settings

## 1. Set the outputformat



## 2. Output format description

Take ID card number 00 11 22 AA BB as an example:

- 1) 10-digit decimal (4 bytes after id conversion): 0287484603
- 2) 10-digit decimal reverse output (4 bytes after id conversion): 3148489233
- 3) 8-digit hexadecimal: 1122AABB
- 4) 8-digit hexadecimal reverse output: BBAA2211
- 5) 8-digit decimal (3 bytes after id conversion): 02271931
- 6) 00+8-digit decimal (3 bytes after id conversion): 0002271931
- 7) 8-digit decimal (4 bytes after id conversion): 87484603
- 8) 5-digit decimal (the last 5 digits on the card): 43707
- 9) 18-digit decimal (all numbers on the card): 028748460303443707
- 10) 13-digit decimal (id5 byte to decimal): 0000287484603
- 11) 10-digit hexadecimal: 001122AABB
- 12) 2H4D+2H4D: 0438643707
- 13) 8-digit decimal (the last 8 digits on the card): 03443707

## 3. Other setting instructions

[Add before data; sign]: Add before data in output format;

[Add after data? Number]: Add? After the data in the output format

[Add a comma in the middle]: Format 9), 12), 13) add a comma in the middle

4. Output format settings

Check the corresponding setting and click the setting button.

5. Read current settings

Click the read button to get the current settings.

6. Data Format

USB part output 8H10DUSB card number

Serial port -485 output card number For example, 10-digit card number 1234567890, the card reader will output 31 32 33 34 35 36 37 38 39 30 0D 0A The first 10 bytes are the physical card number 0D Enter 0A Line feed