



微光互联
二维码扫描专家

C900

User Manual



Fast recognition



Various output interface



IP54 protection class



Beijing Vguang Internet Technology Co., Ltd

Disclaimer

Before using the product, please read all the contents in this C900 Product Manual carefully to ensure the safe and effective use of the product. Do not disassemble the product or tear up the seal on the device by yourself, or Beijing Vguang Internet Technology Co., Ltd. will not be responsible for the warranty or replacement of the product.

The pictures in this manual are for reference only. If any individual pictures do not match the actual product, the actual product shall prevail. For the upgrade and update of this product, Beijing Vguang Internet Technology Co., Ltd. reserves the right to modify the document at any time without notice.

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Edit history

Change date	Version	Description	Responsible
2020.8.17	V1.0	Initial version	Guohua Lau

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1. Preface

Thank you for buying the C900 QR/barcode reader provided by Vguang. Reading this document carefully can help you understand the functions and features of this device, and quickly master the use and installation of the device.

1.1. Product introduction

C900 QR reader was specially designed embedded reader, which has various output interface, including WiFi, wiegand, 485 and 232, suitable for turnstile etc. It can also read IC cards.

1.2. Product feature

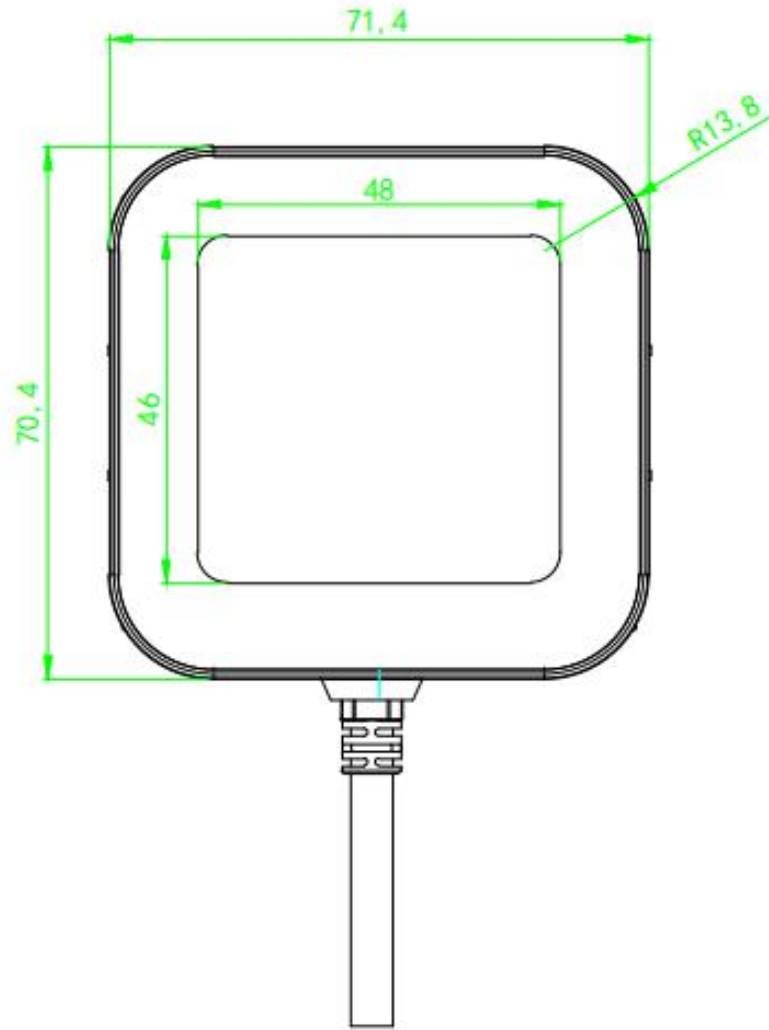
- A. Scan QR/barcode & reading card all in one.
- B. Fast recognition, high accuracy, can reach 0.1s the fastest.
- C. Easy to operate, more easy to debug with the humanize tool.
- D. Protection class: IP54

2. Product appearance

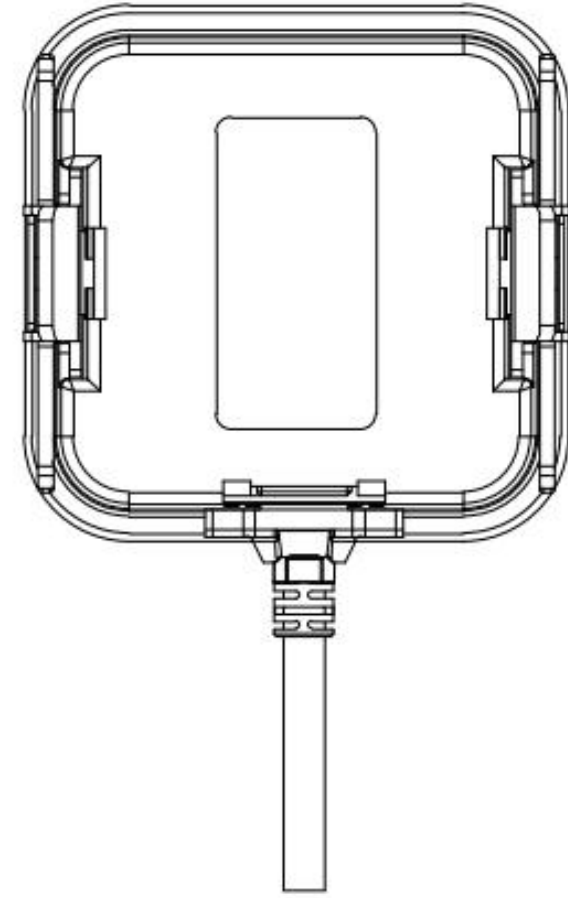
2.1.1. OVERALL INTRODUCTION



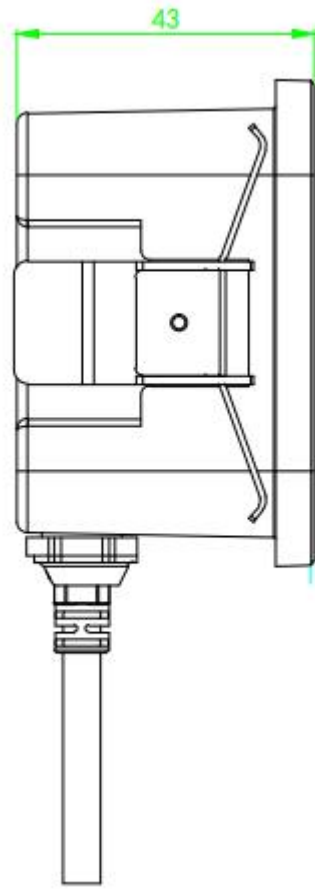
2.1.2. PRODUCT SIZE CHART



2.1 front view



2.2 back view



2.3 side view



2.4 side view

3. Product parameters

3.1. General parameter

General parameter	
Output interface	485\232, Wiegand, wifi
Indicating method	Red, green, blue, white indication light Beep
Imaging sensor	300,000 pixel CMOS sensor
Max resolution	640*480
Installation method	Embedded type
Product size	71.3*70.2*43.3mm
Recognition window size	48*46mm
Product material	Imported PC, ABS, tempered glass

3.2. Recognition parameter

QR code recognition parameter	
Symbologies	QR、PDF417、CODE39、CODE93、CODE128、ISBN10、ITF、EAN13、DATABAR、codebar、aztec etc
Supported decoding	Mobile phone screen/ printed barcodes
DOF	0~53.92mm (QR CODE 15MIL)
Reading accuracy	≥10mil
Reading speed	100ms per time(average), support reading continuously
Reading direction	Tilt±48° rotation±360° deflection±49°
FOV	Horizontal 72° vertical 58°
RFID parameter	
Type	ISO 14443A, ISO 14443B protocol
Operation method	read UID, read the sector of M1 card
RF	13.56mhz
Distance	<5cm

3.3. Electric parameter

The power input can be provided only when the device is connected properly. If the device is plugged in or unplugged while the cable is live (hot plugging), its electronic components will be damaged. Make sure that the power is turned off when plugging and unplugging the cable.

Poor power supply, too short interval power off and on operation may cause the device cannot work in a stable and normal status. It is necessary to keep the power input stable. After turning off the power input, it need to takes more than 2 seconds to turn on the power input again.

Electric parameter	
Working voltage	DC 12V-24V
Working current	150mA(12V typical value)
Power consumption	1800mW(12V typical value)

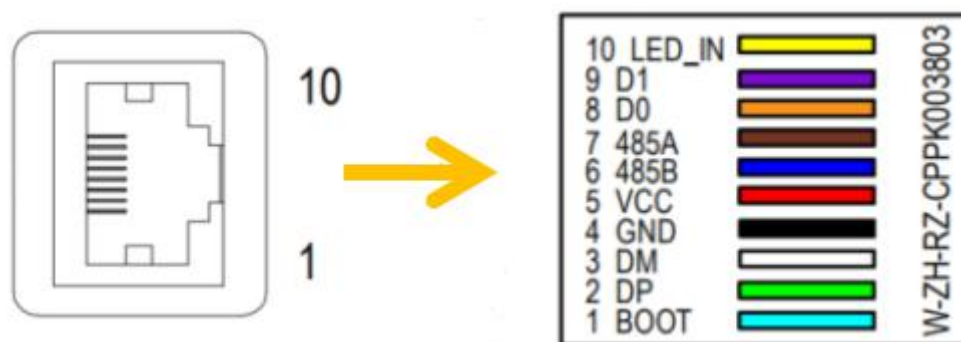
3.4. Work environment

Work environment parameter	
ESD protection	$\pm 8\text{kV}$ (air discharge) , $\pm 4\text{kV}$ (direct discharge)
Working temperature	-20°C - 70°C
Storage temperature	-40°C - 80°C
Relative humidity	5%-95% (no condensation) (under normal temperature)
Ambient light	0-80000Lux(Non direct sunlight)

4. Interface definition

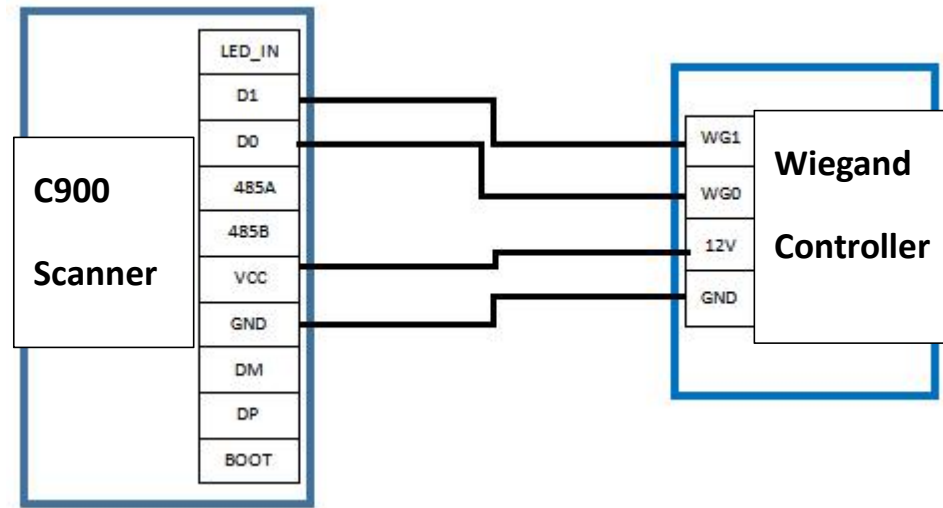
4.1. Interface definition

The C900 reader use RJ48 female seat, the interface definition are as follow:

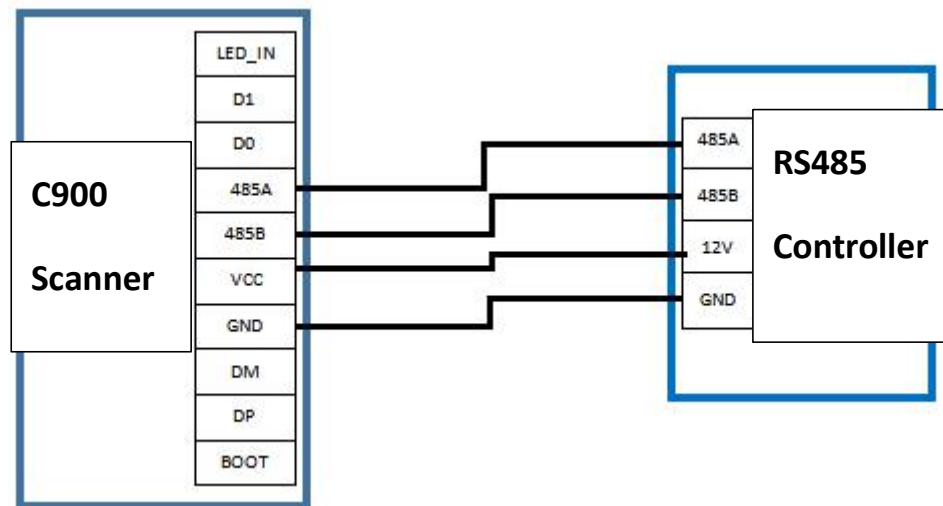


Pin#	Definition	Description
Pin 1	BOOT	Reserve
Pin 2	DP	Reserve
Pin 3	DM	Reserve
Pin 4	GND	Power ground
Pin 5	VCC	Power
Pin 6	485B/232_RX	485B PIN\232 receiver
Pin 7	485A/232_TX	485A PIN\232 sender
Pin 8	D0	Wiegand D0
Pin 9	D1	Wiegand D1
Pin 10	LED_IN	Reserve

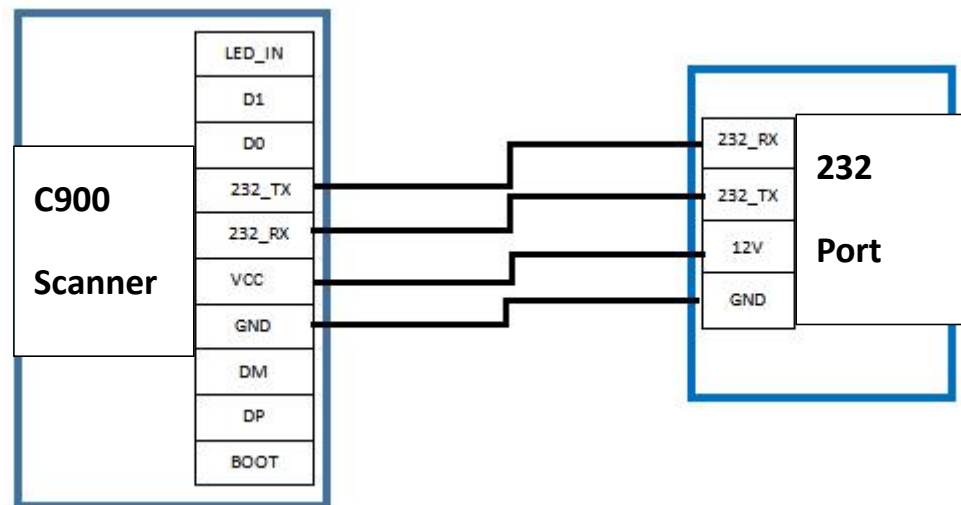
wiegand wiring diagram:



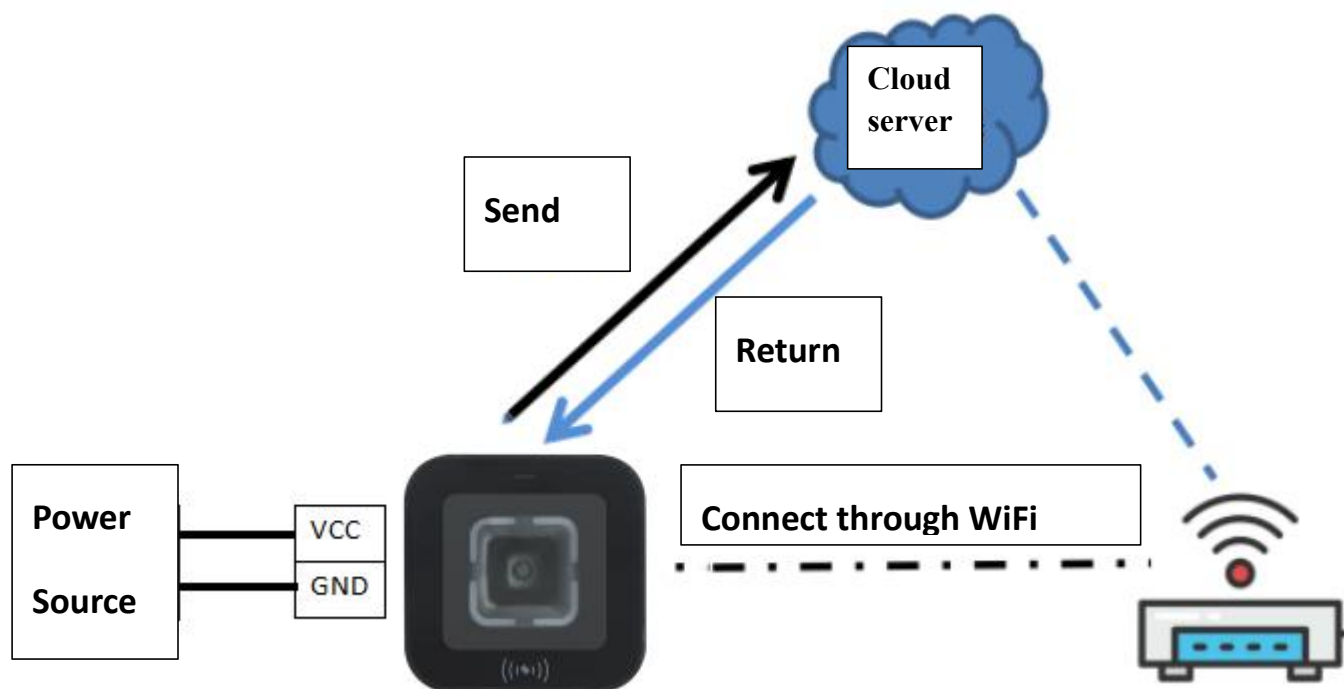
RS485 wiring diagram:



232 wiring diagram:



WiFi connection diagram:



5. Device configuration

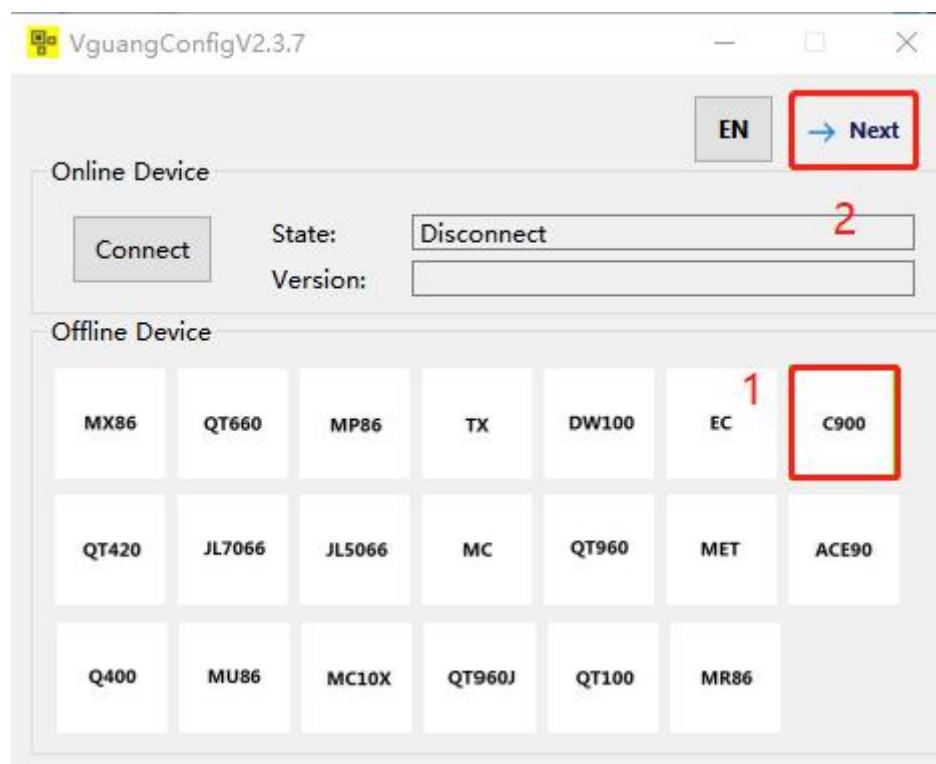
Use the VguangConfig tool to configure the device, which can be download from our official website.



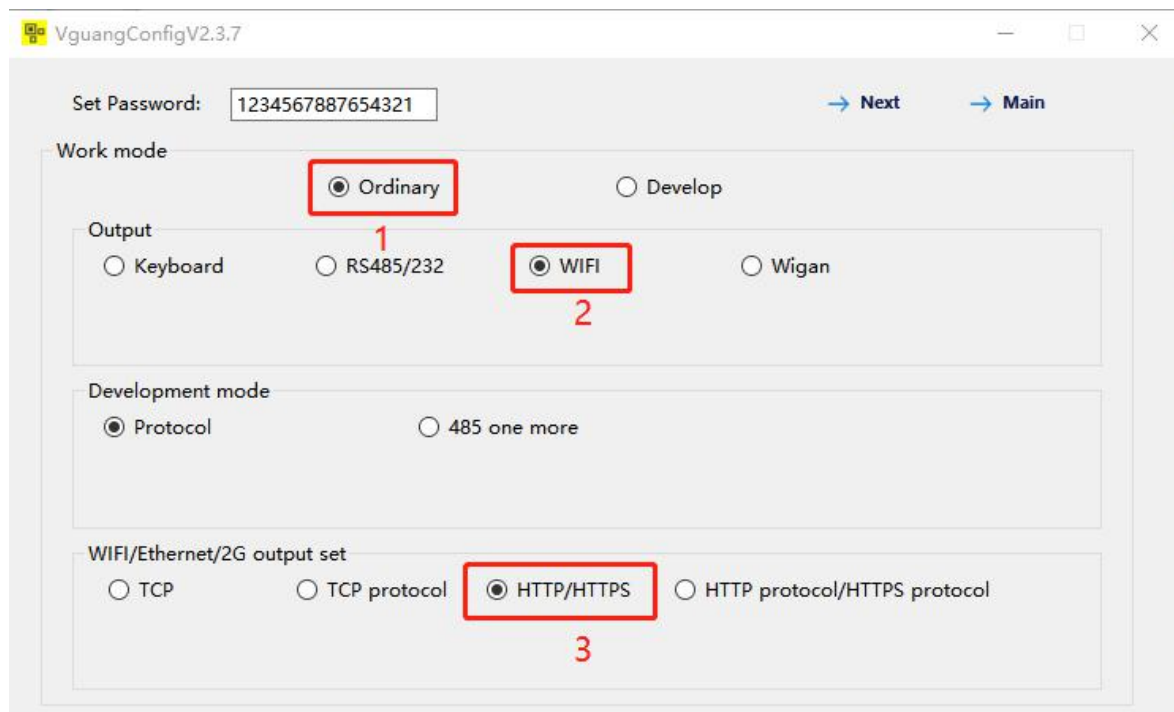
5.1 VguangConfig tool

Configure the server address as the step shows:

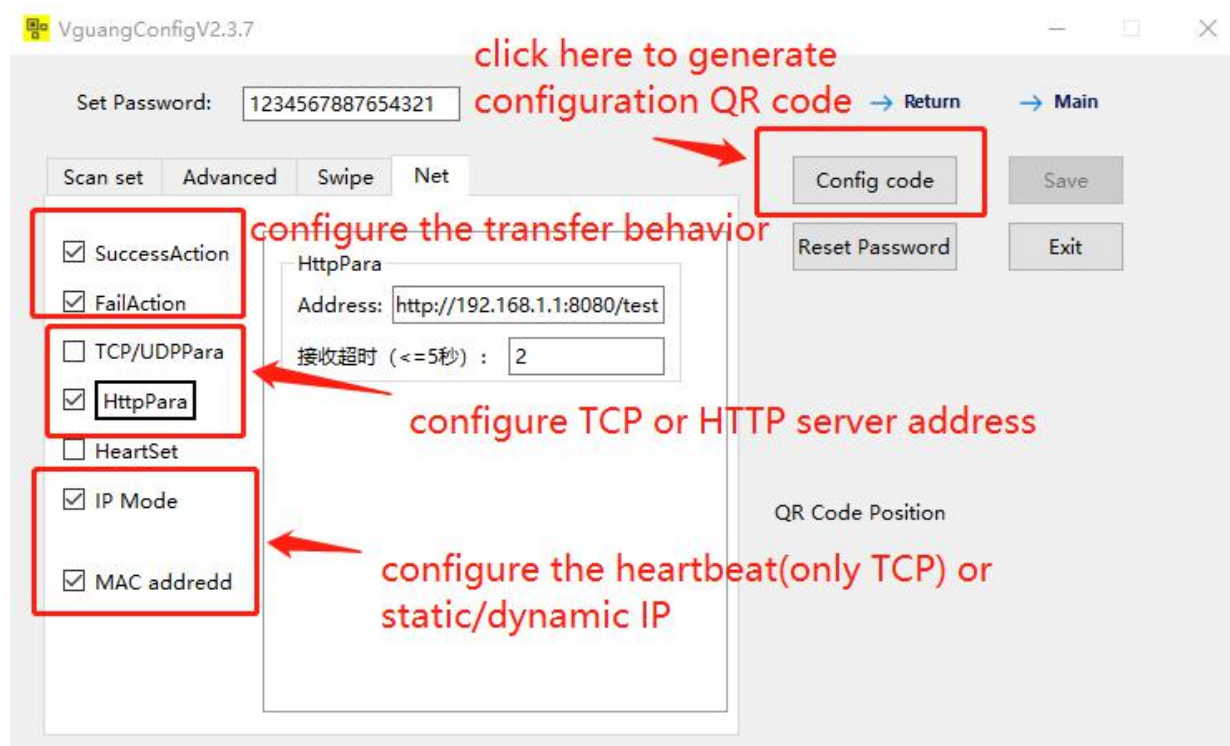
Step 1: select device



Step 2: select output method



Step 3: configure the server address and the transfer action.



Step 4: use the device to scan the config QR code



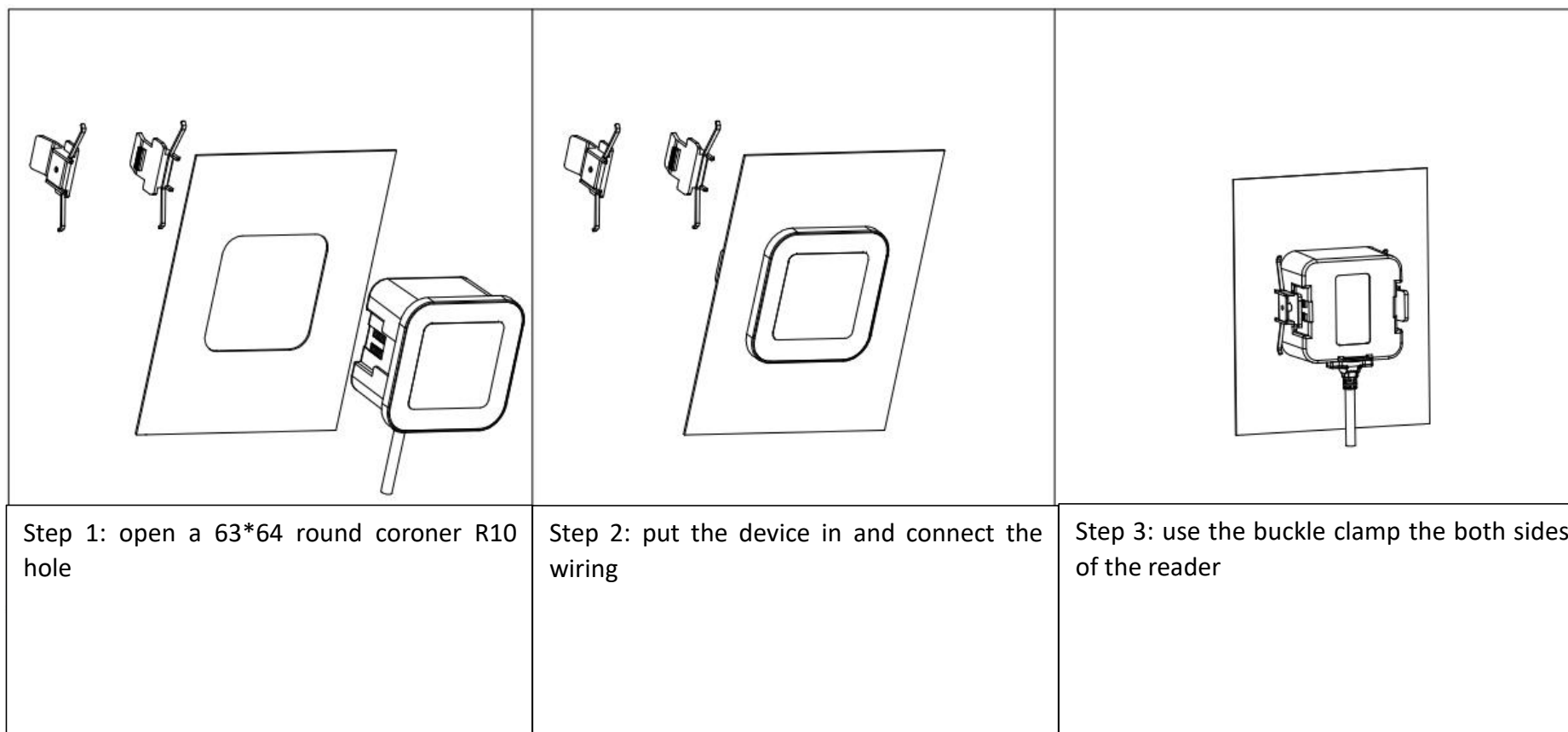
For more information about the configuration tool, please refer to the VguangConfig user manual.

6. Installation method

The product using CMOS image sensor, the recognition window should avoid direct sun or other strong light source when install the scanner. The strong light source will cause the contrast in the image too big to decoding, the long term exposure will damage the sensor and cause the device failure.

The recognition window are using tempered glass, which has good transmission of the light, it also a pressure resistance, but still need to avoid scratching the glass by some hard object, it will affect the QR code recognition performance.

The RFID antenna was in the underside of the recognition window, there should have no metal or magnetic material within 10cm when installing the scanner, or it will affect the card reading performance.



7. Attention

1. The power supply standard of the device is 12-24V, it can get power from the access control power or power it separately. Excessive voltage may cause the device fail to work normally or even damage the device.
2. Do not disassemble the scanner without permission, otherwise the device may be damaged.
3. For WiFi scanner, it is necessary to ensure a good network environment, otherwise it may be unable to communicate with the server.
- 4.
5. The wiring of the scanner must be firm. In addition, ensure the insulation between the lines to prevent the equipment from being damaged by a short circuit.

8. Contact info

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