微光互联
二维码扫描专家

MET

User manual

- ☑ **Fast recognition**

- ☑ **Scan code & swipe card all in one**

- ☑ **Built in Ethernet module and relay**

Beijing Vguang Internet Technology Co., Ltd

Disclaimer

Before using the product, please read all the contents in this MET 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.

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Edit history

Change date	Version	Description	Responsible
2020.1.3	V1.0	Initial version	Guohua Lau

Catalog

1. Preface

Thank you for using the MET scanning equipment 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.
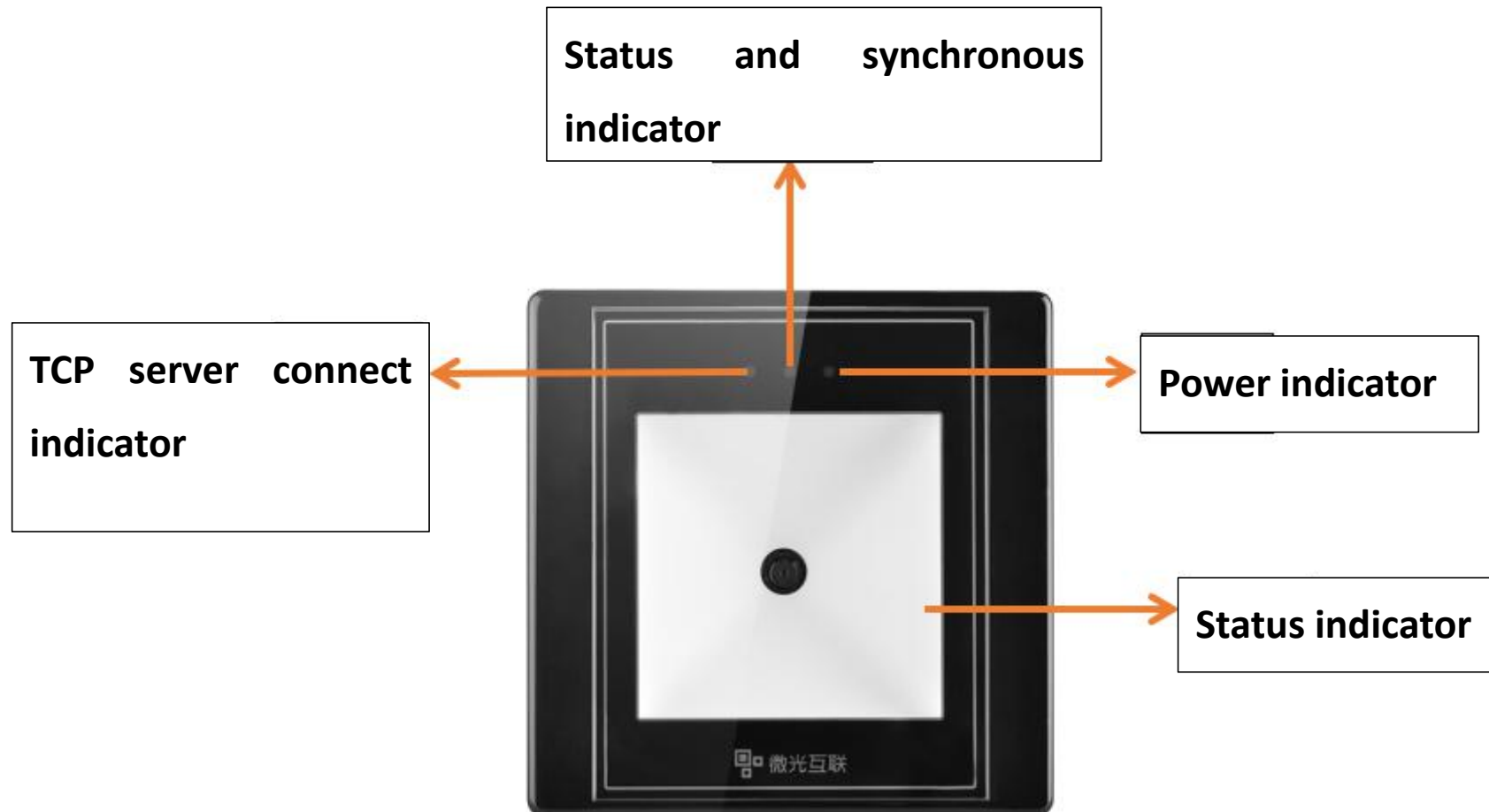
1.1. Product introduction

MET was a specifically designed device for access control, and it is an upgrade product of the MX86 Ethernet version. MET solved the shortcomings that MX86 has, for example did not support Https, network card is external, access control needs to connect another relay etc. And MET is fully compatible with MX86.

1.2. Product feature

A. Scan code fast.

B. Scan code& swipe card all in one.

C. Support TCP, HTTP, HTTPS etc network protocol.

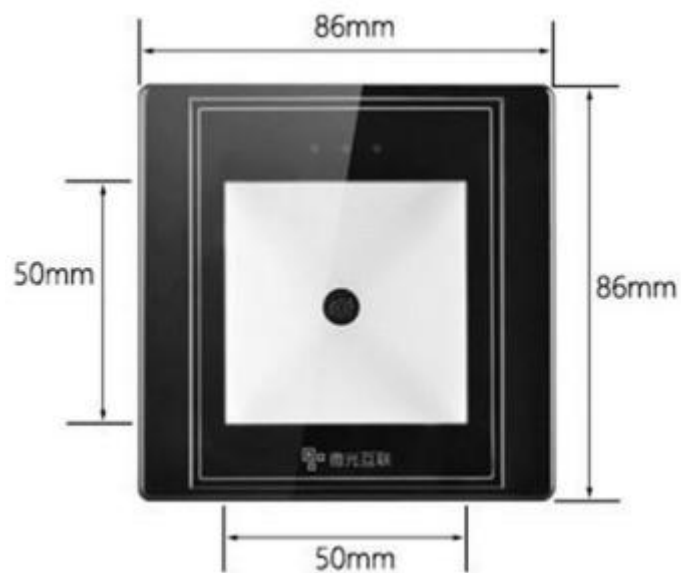D. Built in Ethernet module and relay, connect the wiring more easily.

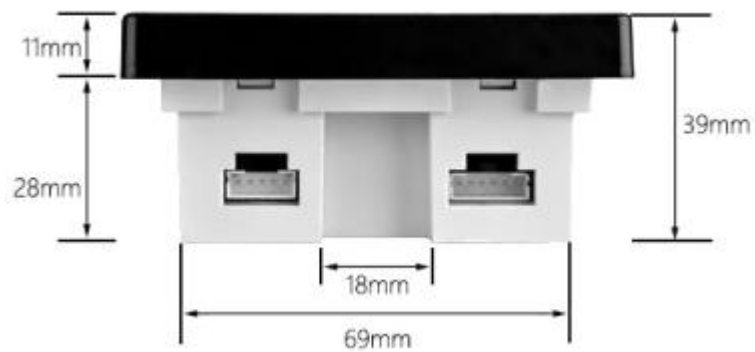# 2. Product appearance

2.1. Overall introduction

Status and synchronous indicator

TCP server connect indicator

Power indicator

Status indicator

2.1 Product introduction

2.2. Product size chart

2.2.1 Front view

2.2.2 Side view

3. Product parameters

3.1. General parameter

General parameter	
Output interface	Ethernet,relay
Indicating method	White,red, green light indicator Beep
Imaging sensor	300,000 pixel CMOS sensor
Max resolution	640*480
OS	Windows（xp.7.8.10）
Installation method	Embedded installation
Product size	86mm*86mm*39mm
Recognition window size	50mm*50mm
Product material	Imported PC & tempered glass

3.2. Recognition parameter

QR code recognition parameter	
Symbologies	QR Code, EAN-8, EAN-13, ISBN-10, ISBN-13, CODE39, CODE93, CODE128, UPC, ITF, Code Bar, etc
Supported decoding	Mobile phone screen/ printed barcodes
DOF	0mm-100mm
Reading accuracy	≥7mil
Reading speed	30ms per time(average),support reading continuously
Reading direction	360 degree
FOV	Horizontal Field: 70degree, Vertical field: 50degree

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 9-15V
Working current	80mA(12V typical value)
Power consumption	960mW(12V typical value)
Relay	DC30V/1A

3.4. Work environment

Work environment parameter	
ESD protection	Contact discharge 4KV（interface part）
Working temperature	-20°C-70°C
Storage temperature	-40°C-80°C
Relative humidity	5%-95%（No condensation）（environment temperature 30℃）
Ambient light	0-80000Lux(Non direct sunlight)

4. Interface definition

MET has two interfaces, 5pin interface and 6pin interface
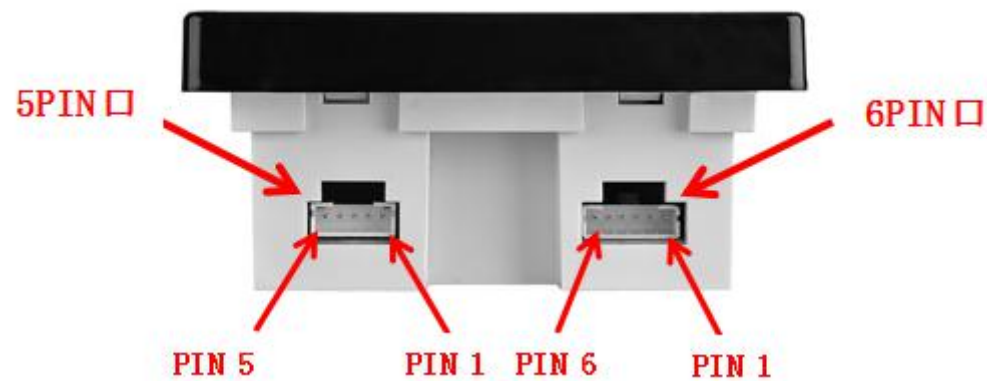
MET interface definition indicator diagram

MET 5pin output interface definition:

Pin color	Red(5)	white(4)	Blue(3)	Black(2)	Black(1)
Definition	VCC	DATA-	DATA+	GND	NC

MX86 6pin output interface definition:

MET 6pin wiring color	Blue(6)	Brown(5)	Red(4)	Black(3)	Yellow(2)	Purple(1)
Definition	TX-	TX+	RX-	RX+	COM	NO

MX86 6pin output interface and network cable connection instruction:

MET 6pin wiring color	Blue	Brown	Red	Black
Network cable color	Orange	Orange white	Green	Green white

Note: The MET Ethernet model directly leads four network cable pins, and can be connected to four of the standard eight-core network cables according to the color. The network cable uses the 568B type connection method. Refer to the table above and connect the cables according to color.

5. Device configuration

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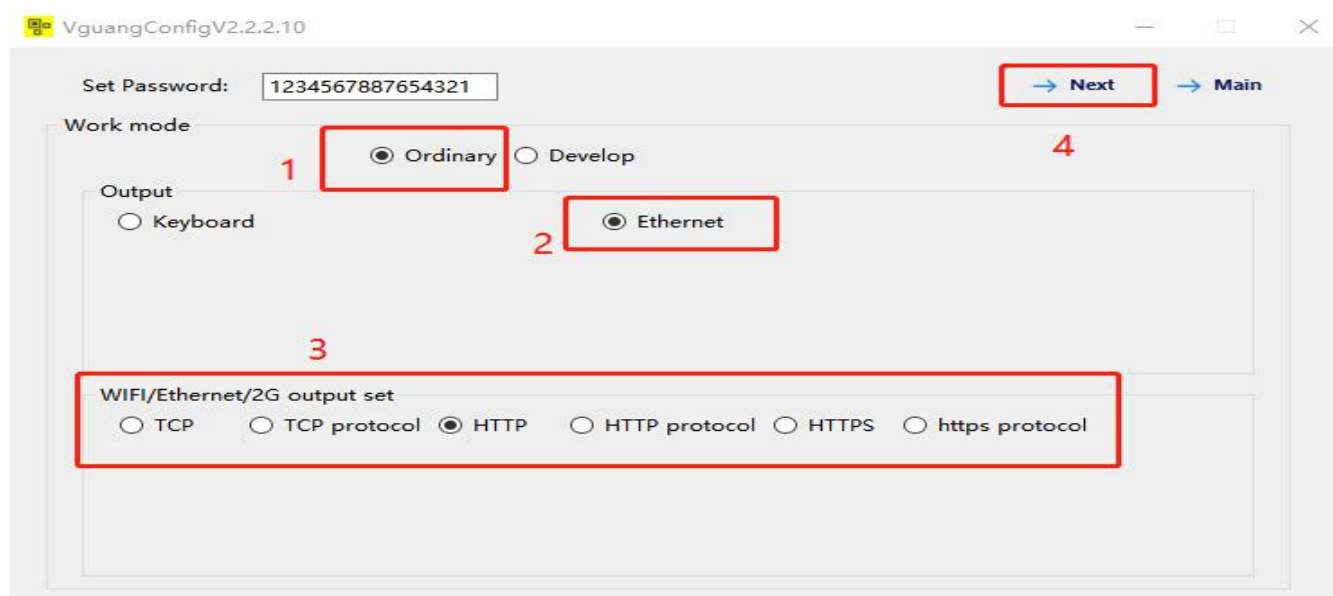

5.1 VguangConfig tool

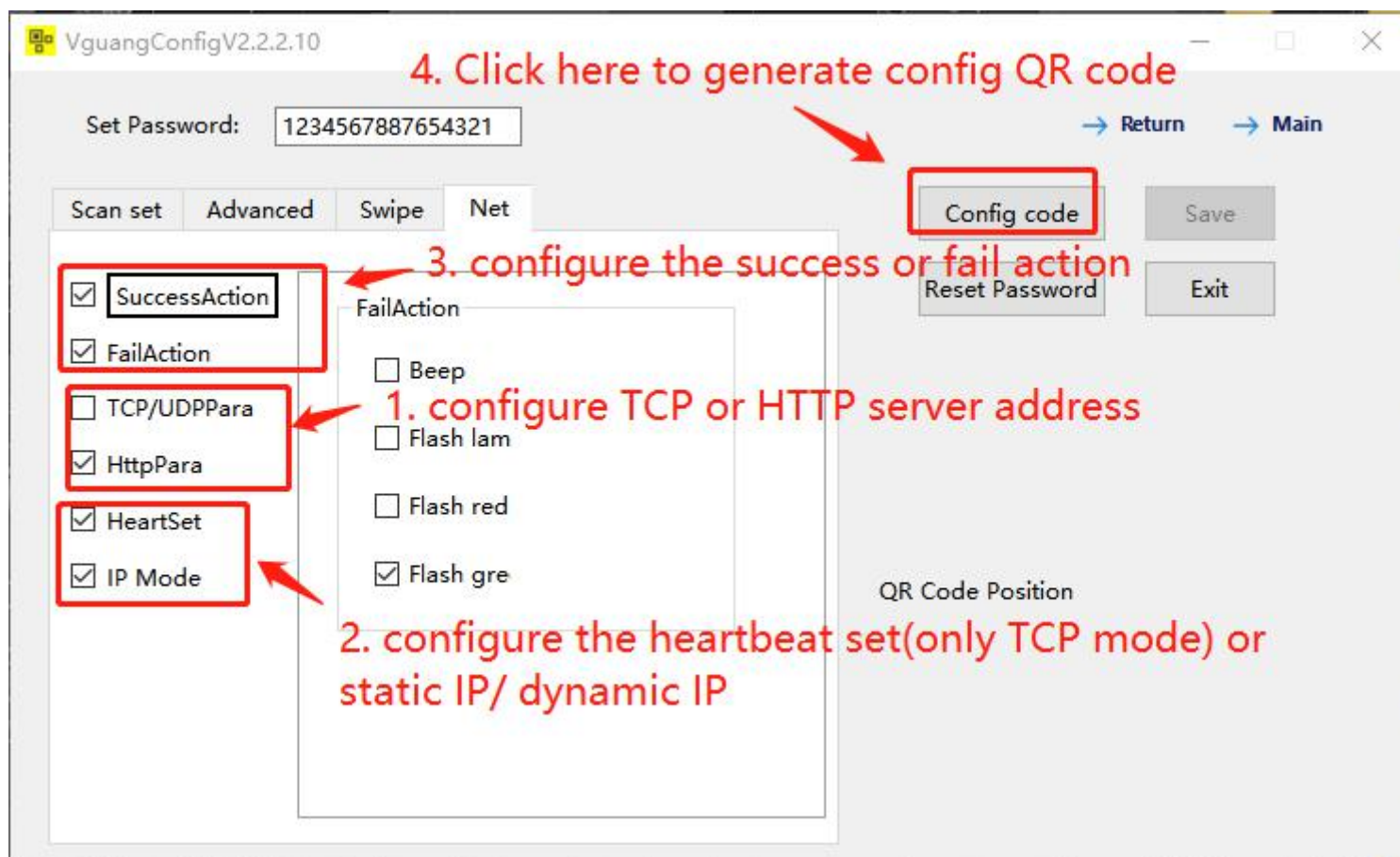Configure the server address as the step shows:
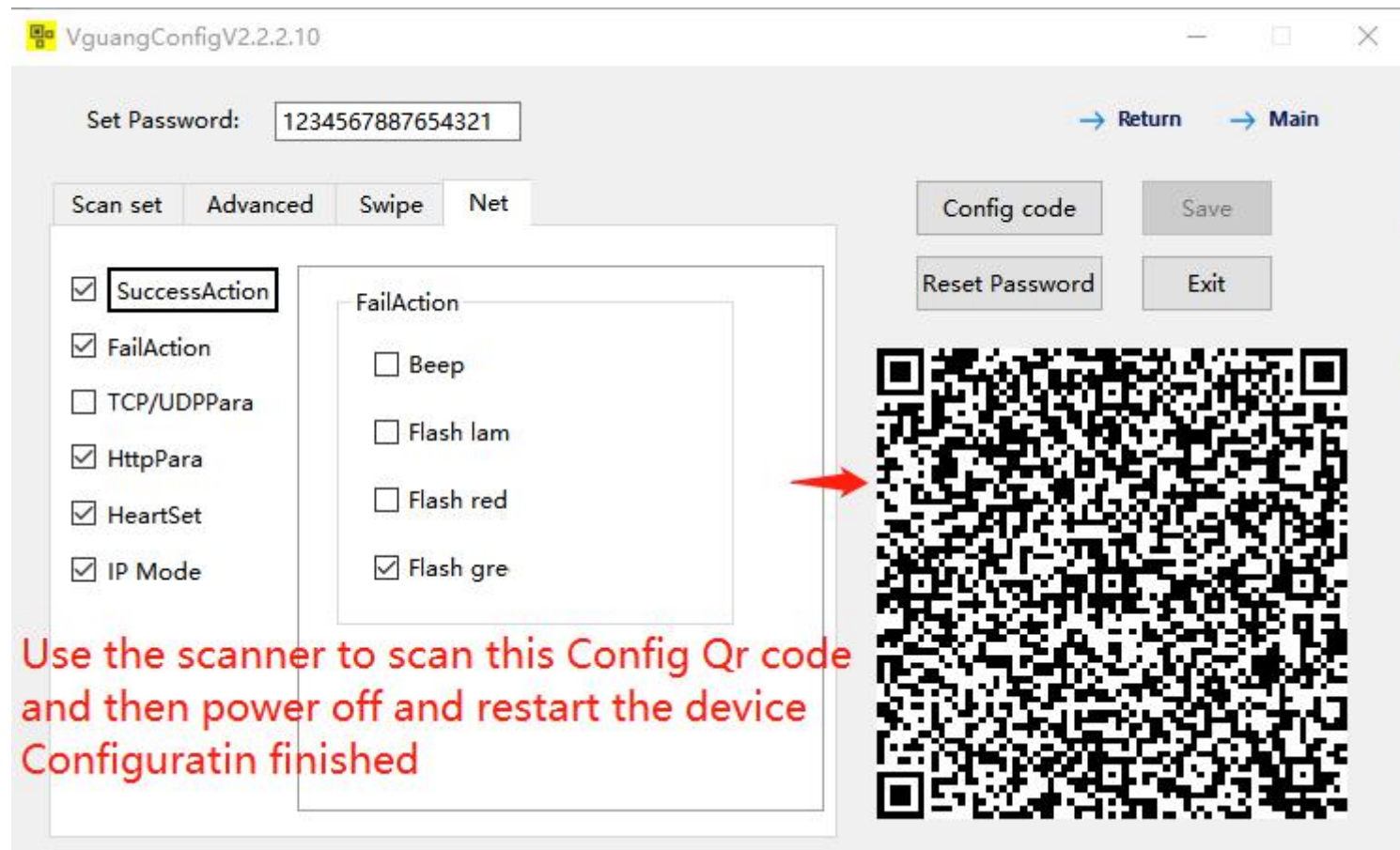
Step 1: select device

Step 2: select output method

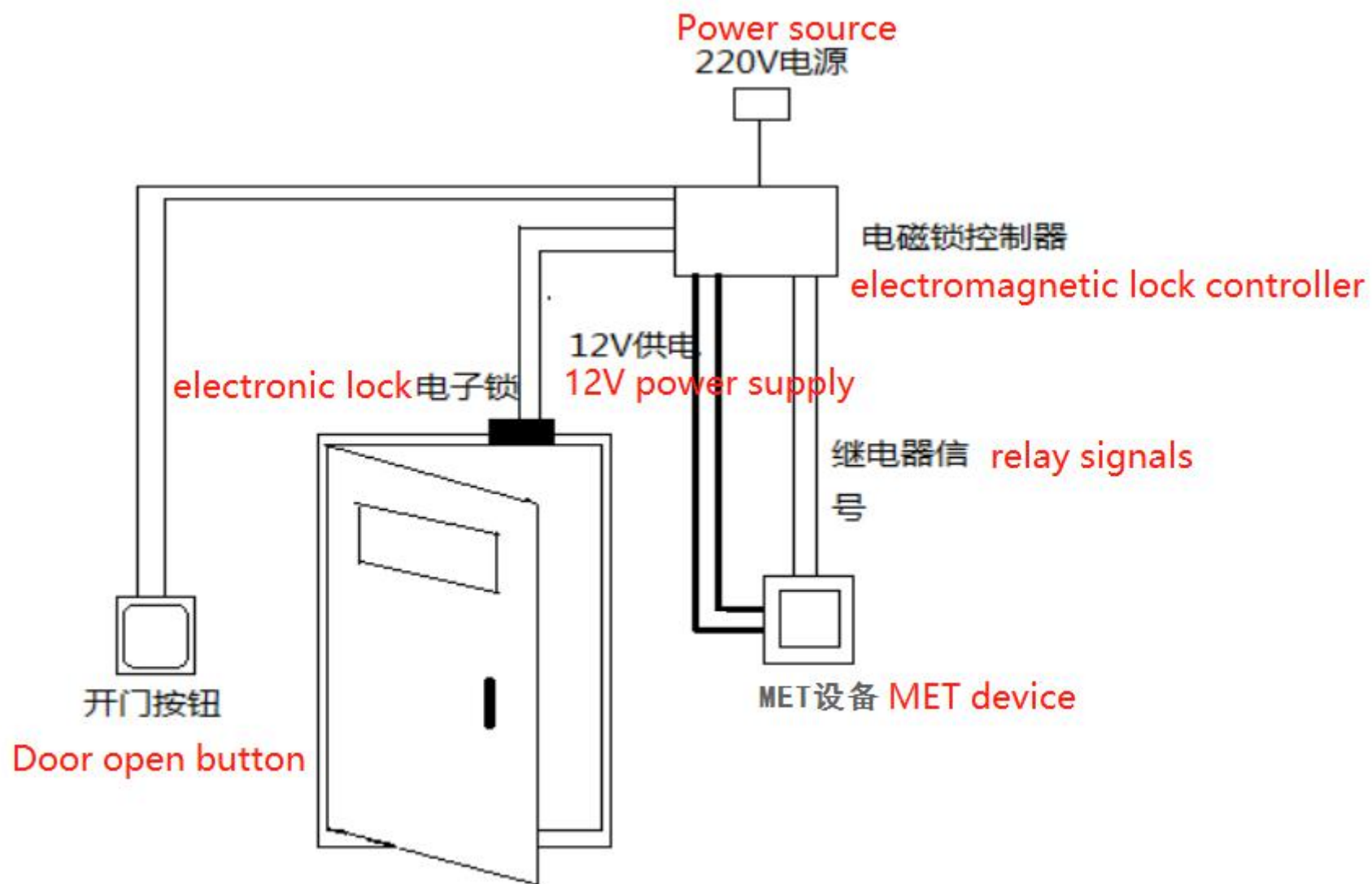Step 3: configure the server address and the transfer action.

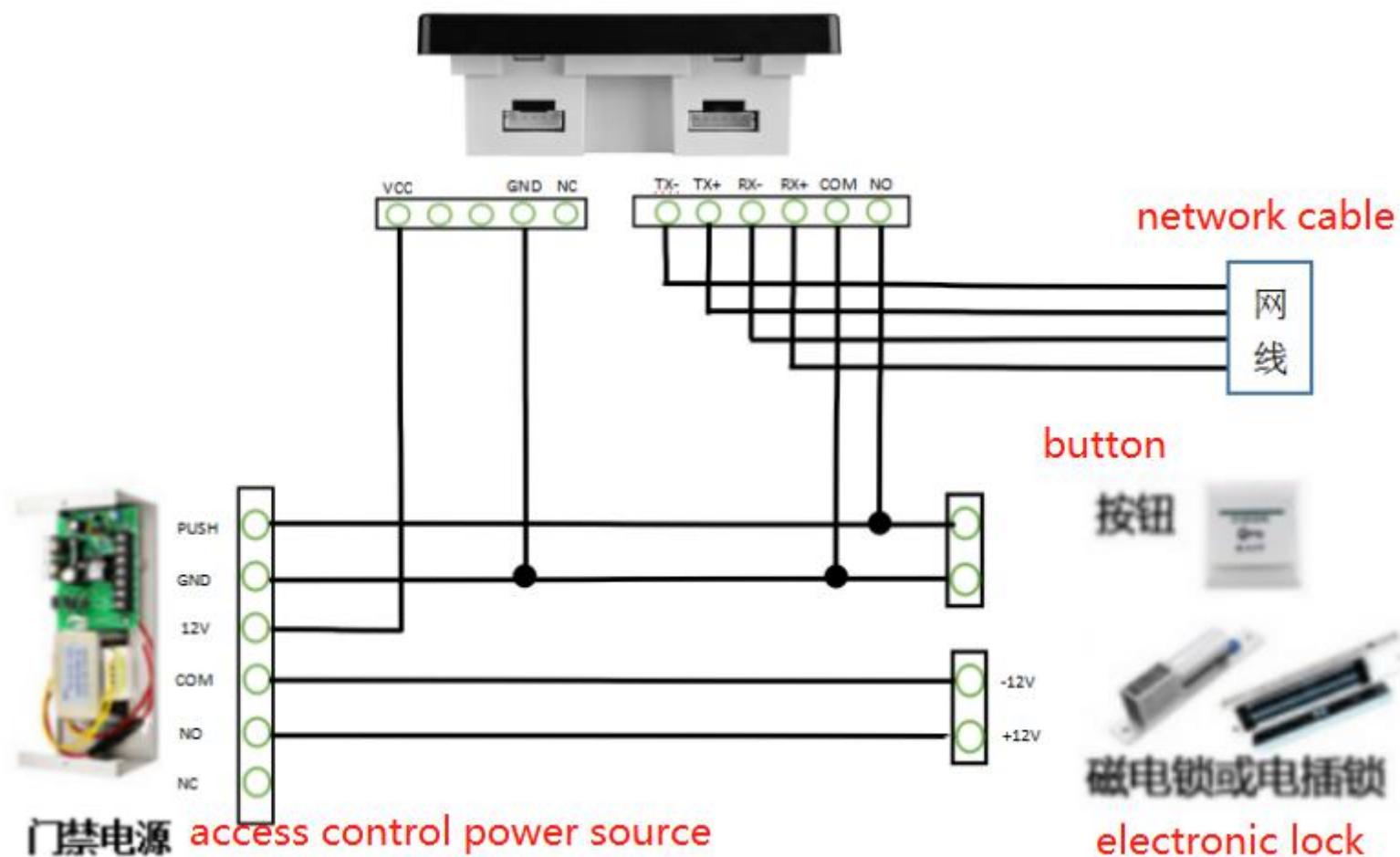Step 4: use the MET device to scan the config QR code

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

6. Scenario application

6.1. Using scenario

Power source
220V电源

电磁锁控制器
electromagnetic lock controller

12V供电
12V power supply

继电器信号
relay signals

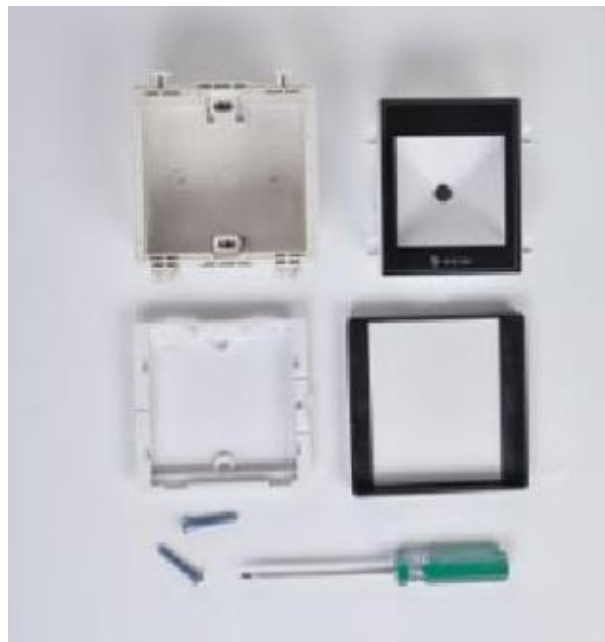electronic lock电子锁

MET设备 MET device

开门按钮
Door open button

6.2. Access control system wiring diagram

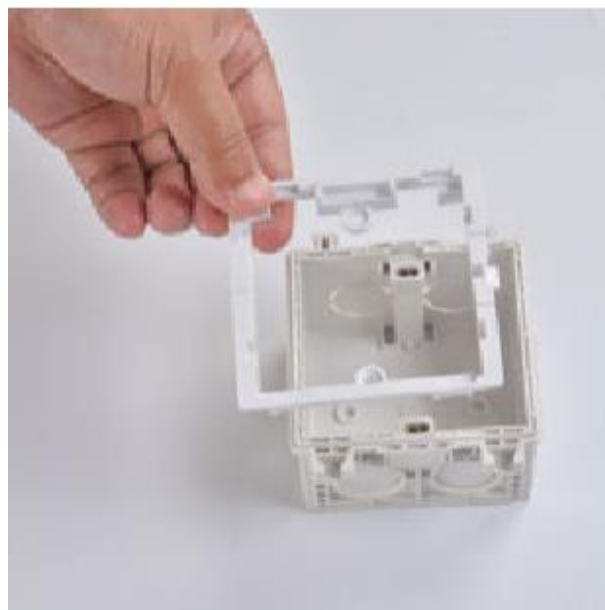# 7. Assembly and disassembly

7.1. Assembly

1. Preparation before installation:86box or relative opening,screw,screwdriver,Separate the MET

2. Place the MET mounting frame on the 86 box, align the screw holes with the screw holes on the 86 box

3. Tighten the screw, fix the mounting frame and the 86 box together

4. After the screws are fixed, as the picture shows.

5. Put the main part of MET into the installation box, Pay attention to the direction

6. Press to let the main part of the MET embed into the mounting frame, Let the buckle get stuck

7. Install the frame of MET cover, lightly press to lock the buckle

8. The installation is complete, as the picture shows

7.2. disassembly

1. Prepare a screwdriver before disassemble

2. Use a screwdriver to pry the cover frame lightly

3. Take the cover frame off

4. Insert the screwdriver into the buckle position and push the buckle to separate the main part from the mounting frame
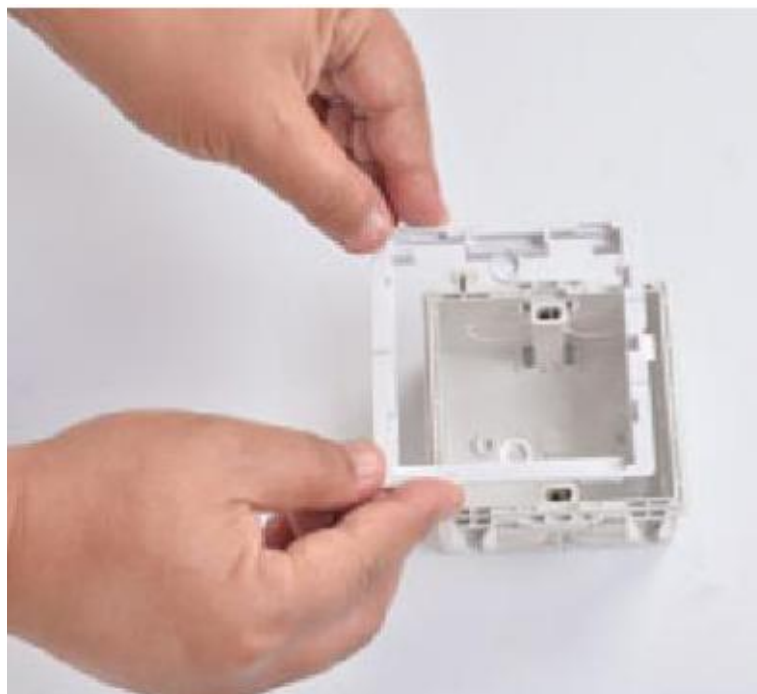
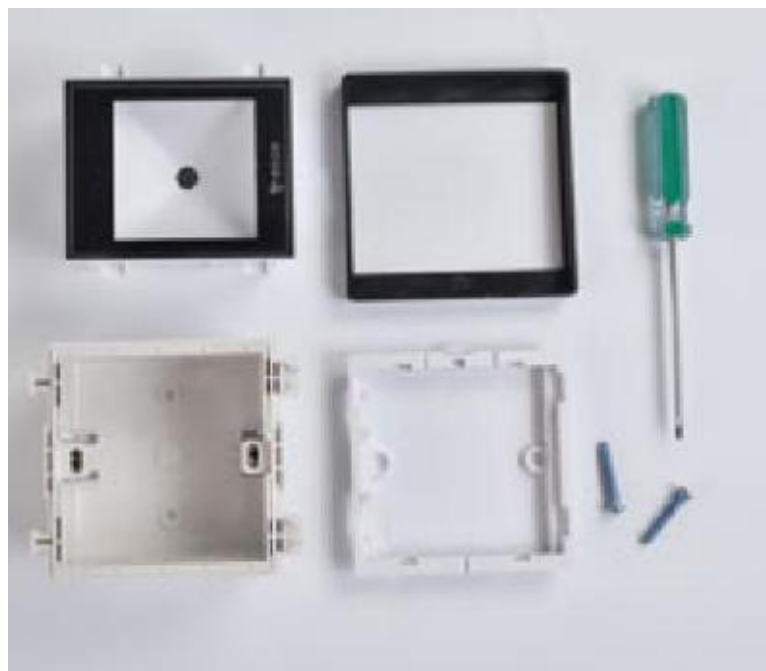5. After all the buckles are opened, take the main part of MX86 out

6. Take off the screw with a screwdriver

7. Take off the mounting frame

8. As shown, the disassembly is completed

8. FAQ

1. The device can not connect to the configuration tool.

When configuring the scanner, please scan the config QR code to config, which means use the config tool to generate the config QR code, and then use the scanner to scan it(need to power off and restart)

2. After the device was configured successfully, scan QR code didn't request upload to the server.

A. Please check if the networking was success, can configure the scanner to static IP, and then 'ping' the scanner, to see if it works. If not, check the network connection.

B. If the network was normal but still do not have request upload, you may refer to the Vguang QR code scanner WIFI interface specification V1.2, and then debugging the server interface.

3. The server can receive the request but didn't parse the data.

The scanner upload the character string data, it was text formatting data but not Jason data, parse the data as Jason data will not success.

4. After the server returned "code =0000",the scanner didn't output relay signal.

A. Please check if you have select the "relay control" in the "success action" part in the Vguang config tool.

B. Make sure you selected TCP or HTTP or HTTPS in the output set, only in these methods the scanner will return "code=0000".

C. The returned "code=0000" was testing formatting, but not Jason data.

5. When powered the scanner it start normally, but scan the config Qr code didn't have response.

There may be some thing wrong with the device, please consult the technicians.

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