

Vguang

QR code scanner expert



Beijing Vguang Internet Technology Co., Ltd

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MP86 series 485 device

\bigstar Wiring instruction

Connect to the 485 port according to the line diagram of the attached page, and the power supply specification is 9-15V.



- Preparation tool: Scanner, 485 to USB tool (not included in the standard wiring) Serial debugging tools, configuration tools. (Configuration tool download address: http://www.vguang.vip/mp86xl)
- 2) Configure the scanner: Use the scan code configuration, open the configuration tool, and configure as follows.

连接设备信息	工作模式		
设备状态: 未连接		→ NFC选项	
固件版本号: Ordi	nary 🥌	配置密码(必填): 1234567887654321	
产品系列型号选择		常规配置	影响管理
◎ MX系列 ◎ SR系列	◎ 开发	码制选择 前后缀格式 解码引起	<u>۽</u>
◎ QT660系列 ◎ C700/JL7066系列	l 輸出方式(必选项)	☑ QR码	O强 ShN编
◎ MC系列 ◎ C3007L3088系列 ◎ QT420系列 ◎ Q400	○ USB键盘	PDF417 □ ISBN13 指出控制 与风前级 ·	
◎ TX系列	RS485/232	CODE128 CODE39 扫码后缀:	
MP86	◎ 以太网	☐ ISBN10 ☐ CODE93 ☐ 换行 □ 回车 ▼	指示灯
连接设备 保存配置	◎ 韦根	ITF 扫描设置: 紙质码效果増	强 ▼
恢复默认密码	5	控制设置	
生成配置的 退出		扫码模式	
		② 単次模式 ④ 间隔模式 间隔时间(笔秒): 300	
		扫码行为:	
		☑ 蜂鸣器	
		蜂鸣延迟: 30 章秋闪灯延迟: 200 章秋	
二维码显示位置	<u>串口参数设置</u>	设备号: 0	
Ba	aud rate	完度调节:	
	校验位: N ▼	 直接輸出 	
	数据位 · 8 ▼	◎ char(数字字符)转hex	
		◎ char(数字字符)转hex 反序	
	停止位: 1 🔻	◎ char(16进制字符)转hex	
		○ Char(16进制子付)转hex 反序	

Figure 2

连接设备信息		工作模式		
设备状态:	未连接			🔶 返回常规
固件版本号:		() 普通	NFC基本配置	
圖件版本号: 产品系列型号: ● MX系列 ● QT660系列 ● MC系列 ● QT420系列 ● TX系列 ● MP86 连接设备 生成配置码 二堆码显示位置	选择 ③ SR系列 ④ C700/JL7066系列 ④ C500/JL5066系列 ④ Q400 ④ C100_QG系列 保存配置 退出 数	 普通 开发 输出方式(必选项) USB键盘 RS485/232 以太网 末根 	NFC基本配置 NFC开关: VFC开关 输出起始位: 1 ・・ 輸出形度: 8 ・・ 前后缀格式: hex @ c NFC后缀: NFC后缀: NFC后缀: 同卡后行为 V 响蜂鸣器 同灯灯 闪灯灯 同/绿灯 刷卡输出格式设置 ① 直接输出 ② 转16进制输出 @ 周卡输出正反序设置 普通卡: @ 反序 ③ 身份证: @ 反序 ③	- If card iping function eded, open the C switch

Figure 3

After selected all the options needed, click "product code", and then scan this configuration code by using the scanner, when heard "di" sound, power off and restart the scanner, configuration process completed.

连接设备信息		工作模式					
设备状态: 未述 固件版本号:	至接	() 普通					→ 返回常规
 产品系列型号选择 MX系列 QT660系列 MC系列 QT420系列 TX系列 	 SR系列 C700/JL7066系列 C500/JL5066系列 Q400 C100_QG系列 	 开发 输出方式() USB關 RS485 	必选项) 建盘 5/232	NFC亜本和 <u>日</u> NFC开关: 输出起始位: 输出长度: 前后缀格式: NFC前缀:	NFC 7 1 8 0 hex	Ŧ关 ▼ ▼ ● char	
MP86	Click to produ	ice con	figuratior	n code]	
连接设备 生成配置码	保存配置 该复默认密码 退出			● 内红灯	**	-	
		串口参数1 波特率: 校验位: 数据位: 停止位:	Scan thi code by scanner "di" sou and rest configu complet	is configurate using the , when heard and, power of art the scanter ration processed.	tion d off ner, ess	进制输出 @ 第 @ 反序 ① 正 @ 反序 ② 正	10进制输出 字 字



Open the serial debugging tool, select the corresponding serial port parameters, and scan other code (non-configuration code), you will see the data upload

★ FAQ

1) If scan code has a response, but no output, you can check the reasons from the following aspects \vdots

A Whether the product model is MP86 series 485 device

B Whether the baud rate in the serial port debugging tool consistent with the scanner

C Whether the signal wiring of the 485 to USB module reversed, you can try to exchange the two wiring.

D Whether scan code output format is correct, If you are not sure, you can try it one by one.

F Whether the card output format is correct, uncertain situations can be tried one by one.

2) If scan code or swipe card has no response, you can check the reasons

from the following aspects :

A The scanner is in development mode and needs to be configured in normal mode.

B If it is still not available. Please check whether the configuration tool code selection is configured correctly.

C Whether the NFC switch is open 3)

Swipe card or scan code output data is wrong

A If scan code output data is incorrect. Check if the scanner output format is correct.

B Swipe card output data is incorrect, Check the swipe card output format and whether the swipe card positive and inverted sequence output is correct.

If the above steps are invalid, you can contact the after-sales to confirm the problem.

Description of other configuration items:

A Password management: used to change the configuration password to prevent the device from being maliciously configured

B Prefix and suffix: Add some characters before or after the output of the QR code content. The output format can be char and hex.

C "New line" and "enter" are added to new line after outputting the QR code content. The indicator light is the blue indicator light of the scanner.

D Single mode: the same two-dimensional code, can not be swept twice. Interval mode: The time interval between two scans of the same code.

E Scan code behavior: refers to the action that the scanner will produce when scanning the code. There are buzzer, flashing blue light, flashing red light, flashing green light.

F The buzzer delay and flash delay are configured separately for the buzzer sound and flash time.

G The device number is used to configure the ID of the scanner. It can be used as a distinction. Generally, it is not used. H Brightness adjustment is used to configure the brightness of the

backlight.

I Scanning settings: if qr code needed select "qr up", if bar code needed then select "bar code up"

J The swipe card output format is used to configure the serial card number output format after swiping.

K Card swiping behavior are similar to scan code behavior (see E)

L Swiping card positive and inverted sequence output was also a kind of card's serial number output format.

 \bigstar Configure the development mode

Configure the development mode are similar to configure the ordinary mode, only need to select "develop", and then select secondary development options.

连接设备信息		工作模式		
设备状态: 未连接			→ NFC违项	
固件版本号:		◎ 普通	davialar ⁴⁵⁶	7887654321
产品系列型号选择			develop	→ 密码管理
MX系列	◎ SR系列	④ 开发	的制度学	前后缀格式 解码引擎
QT660系列	◎ C700/JL7066系列	絵山士士の姓香	V QR码 EAN13	◎ char ◎ qr加强
MC系列	○ C500/JL5066系列	和1日/3元(化/2544)		◎ hex ◎ 条码加强 輸出控制
◎ QT420系列	© Q400	◎ USB键盘	ISBN13	扫码前缀:
○ TX系列	◎ C100_QG系列	RS485/232 RS485/232	CODE128	扫码后缀:
MP86		〇 以太网	ISBN10	🔲 换行 📄 回车 🔽 指示灯
连接设备 保存配	12	◎ 韦根	TF TF	
生成配置码 退出	恢复默认密码	二次开发选项	控制设置 扫码模式	扫描设置:
		🔘 usbhid	◎ 单次模式 🧿 间隔模式	式 间隔时间(室秒): 300
		 485/232 0 微光通信协议 	rotocol	11月 🗌 闪绿灯
		④ 485一拖多协议	蜂鸣延迟: 30 章和	如闪灯延迟: 200 毫秒
6 1 A C		串口参数设置	设备号: 0	
10.00		波特率: 115200 🔻	完度调节:	
	11 11 11	校验位: N ▼	◎ 直接輸出	⑦ 10进制转pidvid楷式.
631323		数据位: 8 ▼	◎ char(数字字符)转hex	 10进制转pidvid 反序
高兴的		停止位: 1 •	 char(数字字符)转hex 反序 char(16)#制字符/ffhare 	Ŧ
TELEVING STREET			◎ char(16进制字符)转hex 质	反序

When the 485 device doing secondary development, the secondary development options are recommended to use "Vguang protocol", which can download from the official website (http://www.vguang.vip/mp86xl) (Protocol File tab under this page) (FAQ for secondary development, see the end of the document) Note: if one-connected-more function is needed, you need to change "Vguang protocol" into "485 one drag" and then configure the scanner according to the protocol we provide. (http://www.vguang.vip/mp86xl)

MP86 series Ethernet device

\bigstar Wiring instruction

Connect the network interface according to the product line diagram of the attached page, and supply power to the scanner.

Specifications: 9-15V, POE power supply is not supported.

\bigstar Configure the device

- 1. Preparation tools: Scanner, local server test tool (such as TCP/UDP debug tool, CDSpace).
- (Configuration tool download address: <u>http://www.vguang.vip/mp86x1</u>)
- 2. Test procedure :
 - A. Open the configuration tool and use the scan code configuration

连接设备信息	工作模式	[
设备状态: 未连接		→ NFC选项	🚺 Wire	ed option
回件版本号:	inary	配置密码(必填): 12345673 常规配置	887654321	→ 密码管理
MX系列 SR系列 QT660系列 C700/JL7066系列 MC系列 C500/JL5066系列 QT420系列 Q400 TX系列 C100_QG系列 MP86 保存配置 生成配置码 退出	 开发 输出方式(必选项) USB键盘 R5485/232 R5485/232 Ethernet 	码制选择 「QR码 EAN13 PDF417 ISBN13 CODE128 CODE39 ISBN10 CODE93 ITF 控制设置 扫码模式	前后缀格式 char hex 输出控制 扫码前缀: 扫码后缀: 扫码后缀: 拍描设置: 44	 解码引擎 ● qr加强 ● 条码加强 ● 条码加强 回车 ● 指示灯 ● 质码效果增强
二维码显示位置		 单次模式 ● 间隔模式 扫码行为: ② 蜂鸣器 四如 蜂鸣延迟: 30 童柳 设备号: 0 设备号) 完度调节: 扫码输出格式 ● 直接輸出 	IRINAHTIRI(電刊): (1 回 闪 (1) (1) (1) (1) (1) (1) (1) (1)	300 默丁 全秒

连接设备信息	工作模式	
设备状态: 未连接]	→ 返回常规
固件版本号:	• 普通	NFC基本配置
产品系列型号选择		
○ MX系列 ○ SR系列	◎ 开发	If card swiping
◎ QT660系列 ◎ C700/JL7066系列	検山去子小公準備)	· · · · · · · · · · · · · · · · · · ·
○ MC系列 ○ C500/JL5066系列	制山力玉(沙达泉)	· · · · · · · · · · · · · · · · · · ·
◎ QT420系列 ◎ Q400	◎ USB键盘	前后缀格式: () hex () char NFC function
◎ TX素列 ◎ C100_QG素列	RS485/232	NFC前缀:
MP86	 ③ 以太网 	NFC后缀:
	◎ 韦根	刷卡后行为
進接设备 保存配置 株自野は 東西		☑ 顶轮回器
生成配置码 退出		
		刷卡输出格式设置
		直接輸出 壹 转16进制输出 ● 转10进制输出
		刷卡输出正反序设置
		普通卡: ⑧ 反序 ◎ 正序
二维码显示位置		身份证: 💿 反序 🔘 正序
		о ж., о ш.





图 5

A. After scanning the configuration code, the scanner can be configured

successfully after power off and restart.

B. When set up the local server, and the data will be

uploaded after the scanner scans the code.

Ethernet tab filling notes :

(1) The wired output mode supports TCP, TCP, HTTP, and HTTP protocols. For details, see the following FAQs.

(2) Heartbeat packet is only for TCP output mode

(**3**) HTTP filling method, server address + port number + save path, for example http://192.168.0.176:80/test

★ FAQ

1 Save failed when click Save Configuration

Check whether the HTTP server address is filled in correctly and is filled in

according to the specified format.

- 2 After setting up the server, scan code has no data upload, and the request is not visible in the background.
 - (1) In the http/ http protocol mode, whether the server address is filled in correctly.
 - (2) Whether the scanner submit data to the server in POST mode?
 - (3) Check if the request was intercepted by another program
 - (4) The scanner transmits data to the server as character stream
 - (5) Restart the router or switch
- 3 Differences between TCP, TCP protocol, HTTP, and HTTP protocol Both TCP and HTTP upload data in "pass-through" form The TCP protocol and the HTTP protocol upload data in the form of field. You can download the "wifi interface specification" (http://www.vguang.cn/mp86xl) from the official website for reference.

★ Configure the development mode

Configure the development mode are similar to configure the ordinary mode, only need to select "develop" mode, and then select secondary development options. After configuring the development mode, the scanner must be powered off and restarted. So it can be used normally.

连接设备信息	工作模式				
设备状态: 未连接					🔶 返回常规
固件版本号:	◎ 普通		有线输出方式	网络传输行为	
产品系列型号选择			TCP	成功行为:	失败行为:
◎ MX系列 ◎ SR系列	develop		◎ TCP协议	📄 响蜂鸣器	📄 响蜂鸣器
◎ QT660系列 ◎ C700/JL	L706 輸出方式の次洗道	n -		া হোগ্য	Carter VT
◎ MC系列 ◎ C500/JL	15066系列	×	O UDP		Matn
◎ QT420系列 ◎ Q400	◎ USB键盘			□ 闪绿灯	🔲 闪绿灯
⑦ TX系列 ⑦ C100_Q	QG系列 ② RS485/232	/		📃 继电器控制	
MP86	Ethernet 📈				
· 连接设备	प्राप 🕖	心跳设置	- IP	模式配置	
版 版	复默认密码	卅天: ◎ 打升 心跳包时间:)动态IP 🔘	静态IP
生成配置码 退出		60		http://	
国际的经济系统的公式系统	25.3-42 m	心跳包内容:			6
	◎ 485/232	www.vguang.	cn 🕅	· · · · · · · · · · · · · · · · · · ·	
100 Harris 20	Vguang	protocol P服务器	器地址:		
建建和方法		TCP號	[미号:		
	串口参数设置	TCP接	1000日(秒): 2	2	
10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	波特率: 1152	200 - HTTP: 服务器如	包址:		
	校验位: N	HTTP接	收超时 (秒): 2	2	
	数据位: 8	•			
	停止位: 1	-			

Figure 6

After configuring development mode, you need to use the "vguang Communication Protocol" for development. The http server does not support secondary development.

(download address : http://www.vguang.cn/mp86xl)

★ Network equipment access control solution

The scanner access control solution is mainly for the door lock controlled by the relay signal.

Wiring: There are three lines of powder (NO), gray (NC) and yellow (COM) in the scanner lead wire. According to actual needs, connect the normally open (NO) or normally closed (NC) and COM terminals to the door lock to complete the wiring process.

The scanner needs to be configured in TCP protocol or HTTP protocol mode, and the turn on relay control function, as shown below:



Figure 7

When the server receives the QR code data uploaded by the scanner, it returns a character string of "code=0000" to the scanner within the timeout period. Then, The scanner will think that the transmission is successful, it will show "network transmission success behavior", and will output a relay signal to control the switch of the door lock.

MP86 series Wiegand device

\bigstar Wiring instruction

Connect the Wiegand interface according to the product line diagram of the attached page. The power supply specification is 9-15V.

\bigstar Usage methods

1. Configure the scanner, use the scan code configuration, first open the configuration tool, select as shown below



Figure 2

连接设备信息		工作模式	
设备状态:	未连接		→ 返回常规
固件版本号:		● 普通	NFC基本配置
产品系列型号	选择		
MX系列	◎ SR系列	◎ 开发	teutreete. 1 T
QT660系	列 © C700/JL7066系列	輸出方式(必洗项)	thur a card swiping
◎ MC系列	◎ C500/JL5066系列		witter: 8 function
	列 © Q400	◎ USB键盘	前后缀格式: ③ hex ④ char needed
◎ TX系列	◎ C100_QG条列	R5485/232	NFC前缀:
MP86		〇 以太网	NFC后缀:
(VELANDA		● 韦根	刷卡后行为
建接收留	保存配合	1	◎ 响蜂鸣器
生成配置码	退出		
			● 直接制出 ● 我10世前期出 ● 我10世前期出
	Sele	ect according	刷卡輸出正反序设置
	to ac	ctual needs	普通卡: ④ 反序 ⑦ 正序
二维码显示位置	<u>-</u>		身份证: 反序 ① 正序



達接设备信息 设备状态: 未连接 面件版本号:	工作模式 ● 普通 ● 开发 輸出方式(必选项) ● USB键盘 ● BS485/222 	- 韦根輸出方式 ④ - 韦根26 ⑦ - 韦根34	Select wiegand protocol according to needs	→ 返回常親
 MP86 连接设备 保存配置 生成配置码 退出 	 ○ KS485/232 ○ 以太网 ◎ 韦根 	 韦根26扫码输出化 ③ 輸出低 韦根26刷卡输出化 輸出低 Wiegan dues b 	22设置 三位 ④ 輸出高三位 22设置 三位 ④ 輸出高三位 nd 26 support output	high, low
二维码显示位置			n, select according t	

After selecting the configuration option, click "Generate Configuration Code", scan the configuration code with the scanner, and after the "Di" sounds, power off and restart the scanner, and the configuration process is completed.



2. Connect the scanner to the Wiegand control board. The purple line of the scanner is connected to the Wiegand board D1, the orange line is connected to the Wiegand board D0, the black line is connected to GND, and the red line is connected to VCC.

3. After the connection is completed, scan code or swipe card to test whether the card number can be uploaded normally.

\star FAQ

No card number upload or the uploaded card number is incorrect.

1. The device is not configured as a Wiegand output

2. The corresponding Wiegand output configuration is incorrect

and needs to be reconfigured

Secondary development FAQ

1) Device is not controlled in development mode

First, make sure that it is configured as development mode, after the configuration is completed, the scanner needs to be power off and restart to take effect. Second, if the development mode has been configured, the secondary development option can be configured as "Vguang communication protocol." (USB using SDK develop need to be configured as USBHID mode, using Vguang protocol to develop)

2) In the second development, the logic is: turn on the device, scan the code, and turn off the device. Then the scanner often has problems. why?

Because the scanner needs time to open and close, at this time, the logic can be rewritten into open the device, add code system, scan code, clear code system, add code system, scan code... (repeating).

Appendix :

Wiring sequence diagram

Ethernet device wiring diagram:

MP86	Purple	Orange	Blue	Brown
Network cable color	Orange	Orange white	Green	Green white

Color	Cyan-blue	Green	White	Black	Red	Gray
Definition	Reserved	Reserved	Reserved	GND	+12V	NC
Color	Yellow	Pink	Purple	Orange	Blue	Brown
Definition	СОМ	NO	TX-	TX+	RX-	RX+

485 and Wiegand device wiring diagram:

Color	Cyan-blue	Green	White	Black	Red
Definition	Reserved	Reserved	Reserved	GND	+12V
Color	Blue	Brown	Yellow	Orange	Purple
Definition	485B	485A	LED_IN	D0	D1

Note: The cyan-green-white reserved line are not available.



Dimensions :











Installation icon :









3. Tilt installation, hung the top two hooks and press



4. Tighten the fixing screws from below

