





✓ Various output interface

Suitable for kiosk, turnstiles etc



Beijing Vguang Internet Technology Co., Ltd

Disclaimer

Before using the product, please read all the contents in this 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
2021.5.15	V1.0	Initial version	





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1. Preface

Thank you for using the Q340 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

The Q340 QR code reader was a specially designed embedded type device, which has various output interface, including USB, RS232, RS485, TTL, Wiegand, suitable for vending machines, turnstiles.

1.2. Product feature

- 1. Scan code& swipe card all in one.
- 2. Fast recognition speed, high accuracy, 0.1 second the fastest.
- 3. Easy to operate, humanized configuration tool, more convenient to config the reader.
- 4. Protection level IP67.

1.3. FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user' s authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - -- Consult the dealer or an experienced radio/TV technician for help.

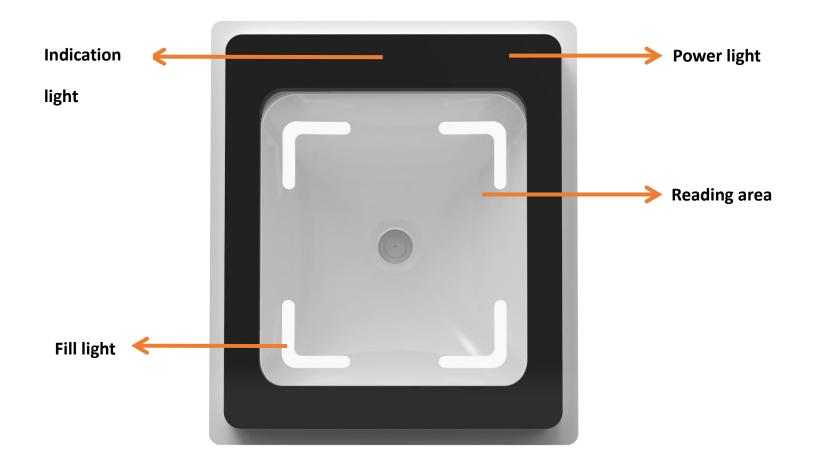
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.





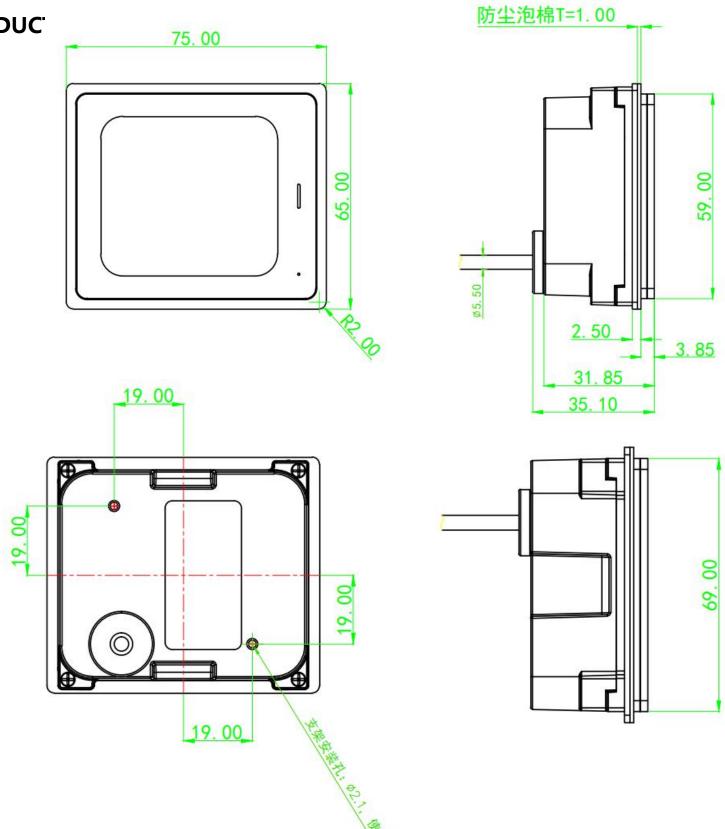
2. Product appearance

2.1.1. OVERALL INTRODUCTION



2.1.2. PRODUC

Unit: mm





3. Parameters

3.1. General parameter

General parameter		
Output interface	USB、RS232、RS485、TTL、wiegand	
Indicating method	Red, green light indicator	
	Beeper	
Imaging sensor	300,000 pixel CMOS sensor	
Max resolution	640*480	
Mounting method	embedded mounting	
Size	75mm*65mm*28.35mm	
Reading window size	56mm*51mm	
Certification	EC、FCC	





3.2. Reading parameter

QR code recognition parameter				
Symbologies	QR、PDF417、CODE39、CODE93、CODE128、ISBN10、ITF、EAN13、			
	DATABAR、 aztec, etc			
Supported decoding	Both Mobile QR code and printed QR code			
DOF	0mm~62.4mm(QRCODE 15mil)			
Reading accuracy	≥8mil			
Reading speed	100ms per time(average), support reading continuously			
Reading direction	tilt±56.3° rotation±360° deflection±55.7° (15milQR)			
FOV	Horizontal Field 72.1° Vertical field 56.6° filed angle 84.3° (15milQR)			
RFID reading parameter				
Supported cards	ISO 14443A, ISO 14443B protocol cards			
Reading method	Read UID			
Working frequency	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 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 5V-24V	
Working current	200mA (5V typical value)	
Power consumption	1000mW (5V typical value)	

3.4. Working environment

Work environment parameter		
ESD protection	±8kV (Air discharge) , ±4kV (contact discharge)	
Working temp	-20°C-65°C	
Storge temp	-40°C-80°C	
RH	5%-95% (No condensation) (environment temperature)	
Ambient light	0-100000Lux(Non direct sunlight)	





4. Device configuration

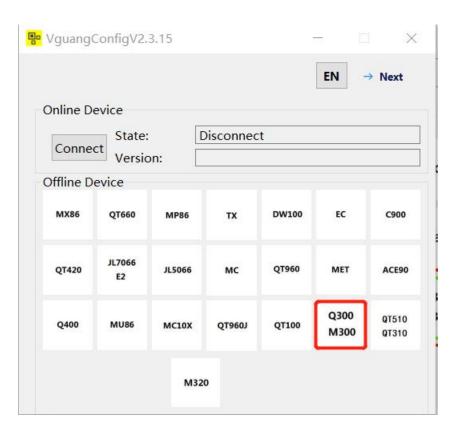
Use the Vguang config tool to configure the device.



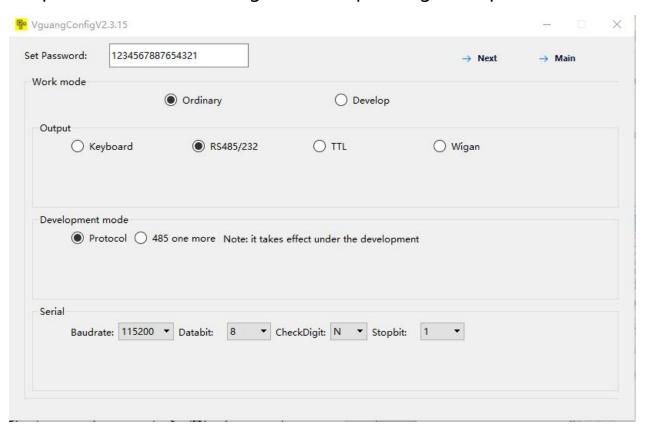
5.1 config tool

Config the device as the step shows, the example are showing 485 version reader.

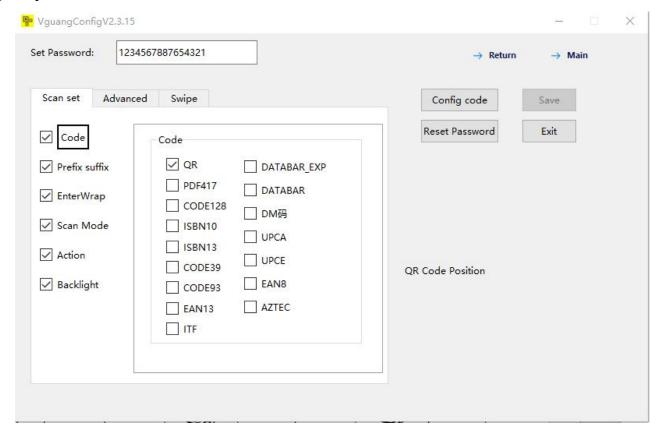
Step 1, select the model number Q300



Step 2, select the output interface, and config the corresponding serial parameters.

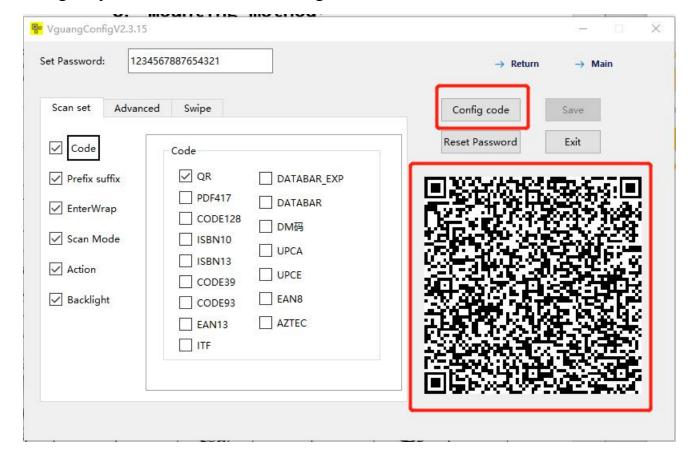


Step 3, config as your needs





Step 4, after config as your needs, click "config code"



Step 5, use the scanner to scan the configurations QR code generated by the tool, then restart the reader to finish the new configurations

For more details about configurations, please refer to the "Vguang configuration tool user manual" .

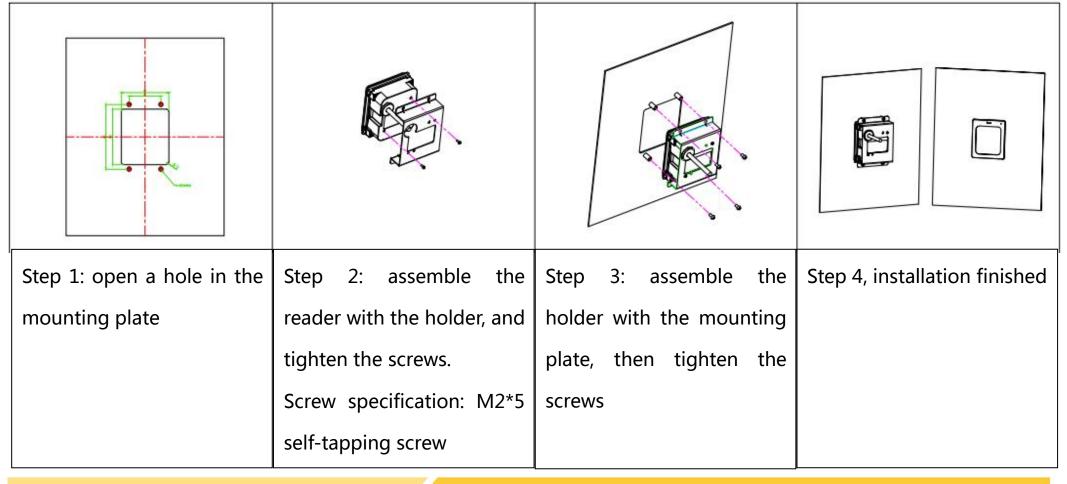


5. Mounting method

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, and also a good 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



6. Attention

- 1. The equipment standard is 5-24V power supply, 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. The installation position of the scanner should avoid direct sunlight. Otherwise, the scanning effect may be affected. The panel of the scanner must be clean, otherwise it may affect the normal image capture of the scanner. The metal around the scanner may interfere with the RFID magnetic field and affect card reading.
- 4. The wiring connection 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.



7. Contact info

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