

# ID IDENT 2000

## RFID and Barcode Reader



## Contents

Disclaimer.....	3
1. Preface .....	4
1.1. Product introduction .....	4
1.2. Product feature .....	4
2. Product appearance.....	4
2.1.1. OVERALL INTRODUCTION .....	4
2.1.2. PRODUCT SIZE .....	5
3. Parameters.....	6
3.1. General parameter .....	6
3.2. Reading parameter.....	6
3.3. Electric parameter .....	7
3.4. Working environment .....	7
4. Interface definition .....	7
5. Device configuration .....	8
6. Mounting method .....	11
7. Attention .....	12
8. Contact info.....	12

## 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 iDTRONIC 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, iDTRONIC reserves the right to modify the document at any time without notice.

Use of this product is at the user's own risk. To the maximum extent permitted by applicable law, damages and risks arising from the use or inability to use this product, including but not limited to direct or indirect personal damage, loss of commercial profits, iDTRONIC. will not bear any responsibility for trade interruption, loss of business information or any other economic loss.

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## 1. Preface

Thank you for using the ID IDENT 2000 QR code reader provided by iDTRONIC.

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

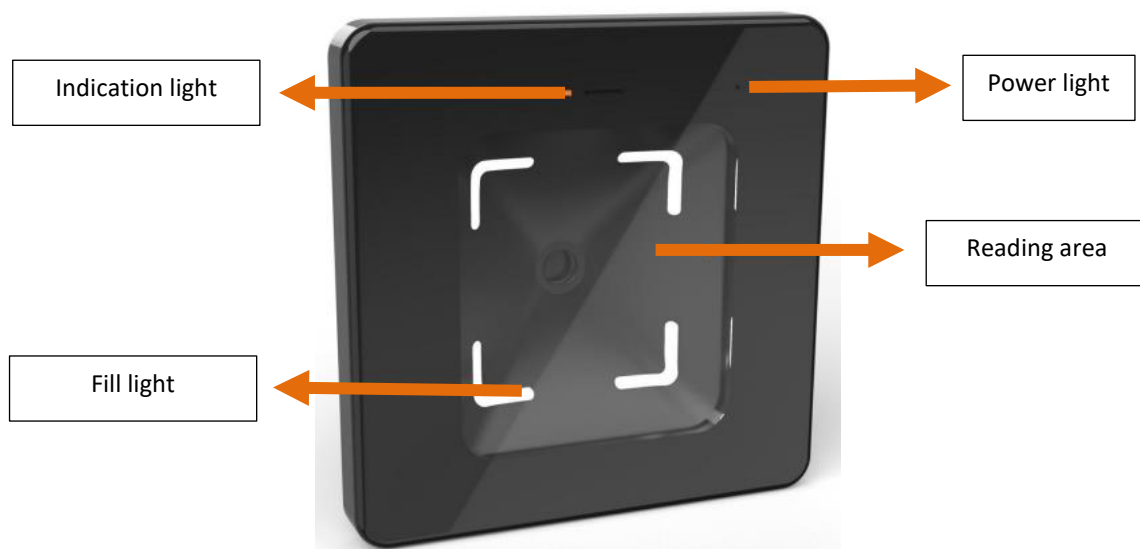
The ID IDENT 2000 QR code reader was a specially designed embedded type device, which has various output interface, including USB, RS232, RS485, TTL, Wiegand, suitable for access control, turnstiles.

### 1.2. Product feature

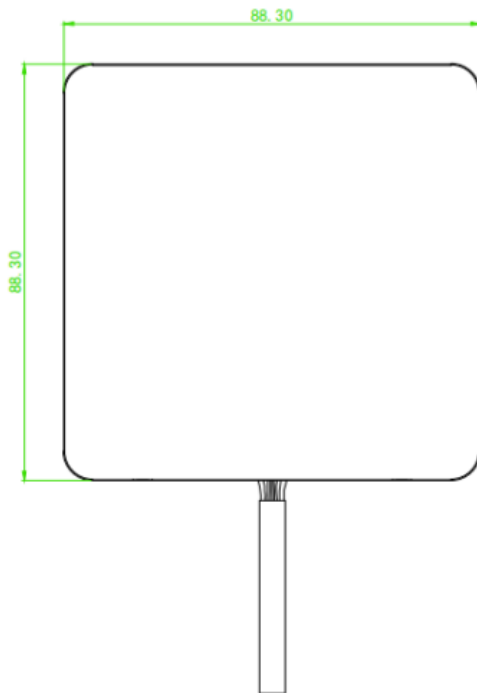
- 1, Scan code& swipe card all in one.
- 2, Fast recognition speed, high accuracy, 0.1 second the fastest.
- 3, Easy to operate, humanized configuration tool, more convenient to config the reader.

## 2. Product appearance

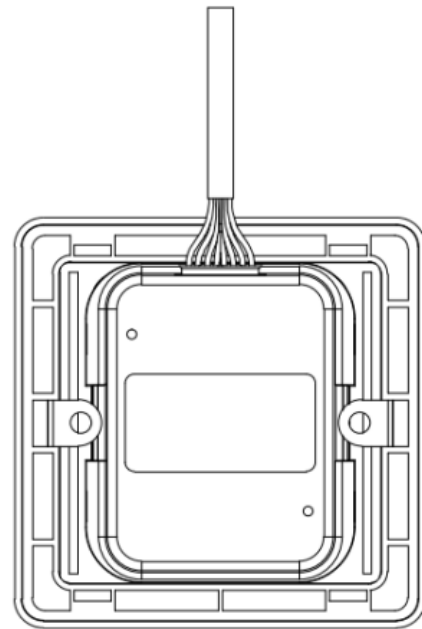
### 2.1.1. OVERALL INTRODUCTION



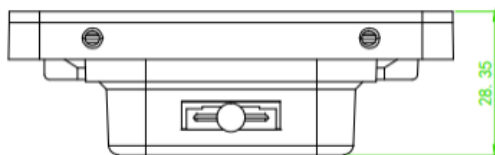
### 2.1.2. PRODUCT SIZE



Front view



Bottom view



Side view

## 3. Parameters

### 3.1. General parameter

General parameter	
output interface	USB, RS232, RS485, TTL, Wiegand
indicating method	Red, green, white light indicator Beeper
imaging sensor	300,000 pixel CMOS sensor
max. resolution	640*480
mounting method	embedded mounting
product dimensions	88,3 x 88,3 x 28,35 mm
reading window size	56 x 51 mm

### 3.2. Reading parameter

QR code recognition parameter	
sybologies	QR, PDF417, CODE39, CODE93, CODE128, ISBN10, ITF, EAN13, DATABAR, AZTEC, etc
supported decoding	mobile phone screen/ printed barcodes
reading distance	0 mm – 62,4 mm (QRCODE: 15 mil)
reading accuracy	> 8mil
reading speed	70ms per time (average), support reading continuously
reading direction	Tilt $\pm 56,3^{\circ}$ rotation $\pm 360^{\circ}$ deflection $\pm 55,7^{\circ}$ (15milQR)
FOV	Horizontal $72,1^{\circ}$ vertical $56,6^{\circ}$ FOV $84,3^{\circ}$ (15milQR)

RFID parameter	
type	ISO 14443A, ISO 14443B protocol
operation method	read UID, read the sector of M1 card
frequency	13.56 Mhz
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 5V – 24V
working current	200mA (5V typical value)
power consumption	1W (5V typical value)

### 3.4. Working environment


work environment parameter	
ESD protection	±8kV (air discharge)    ±4kV (direct discharge)
working temperature	-20°C - 70°C
storage temperature	-40°C - 80°C
relative humidity	5% - 95% (no condensation, environment temperature)
ambient light	0-100000 Lux (Non direct sunlight)

## 4. Interface definition

Pin Nr.	Definition	Description
1	TTL_RX	TTL receiving end
	D0	Wiegand 0
2	TTL_TX	TTL sending end
	D1	Wiegand 1
3	GND	Ground
4	VCC	Power source
5	232_RX	232 receiving end
	485A	485 PIN
6	232_TX	232 sending end
	485B	485 PIN
7	DM	USB_data-
8	DP	USB_data+

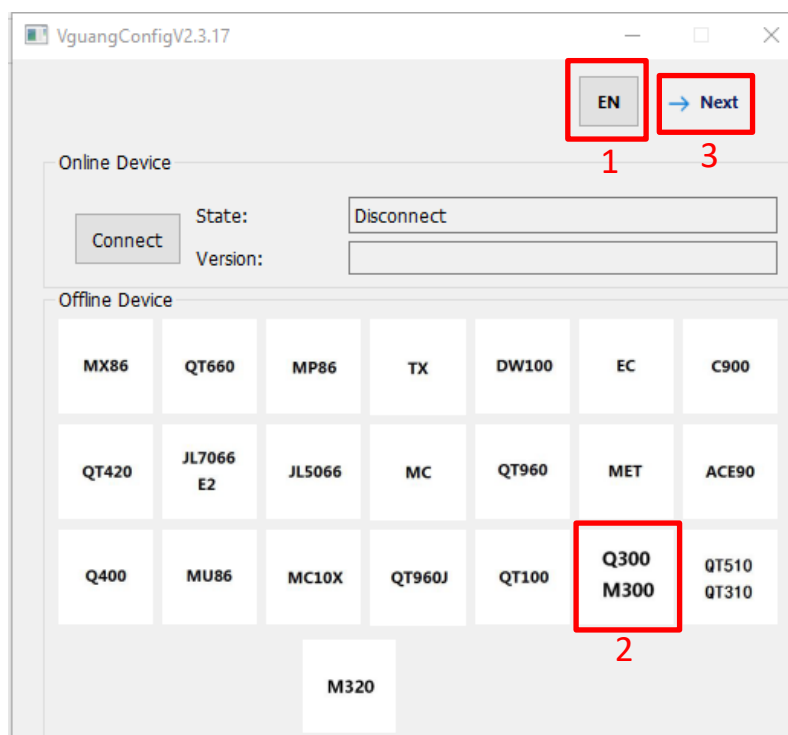
## 5. Device configuration

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

 Vguangconfigv2.3.17

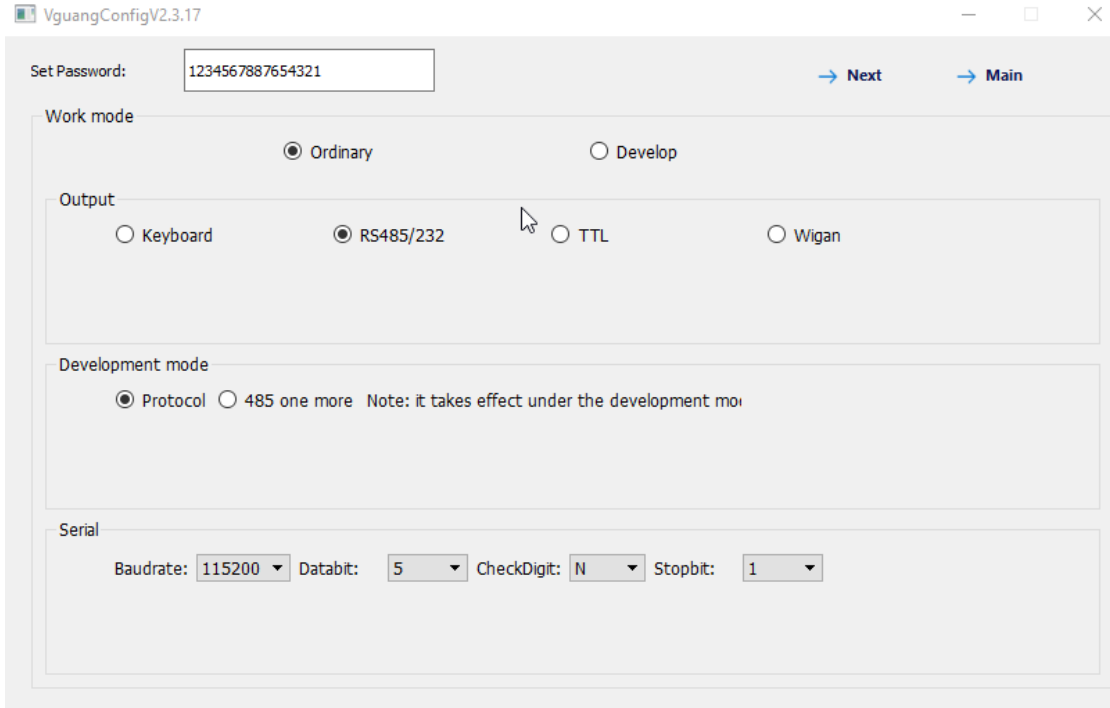
Configure the server address as the step shows:

Step 1: select language and device



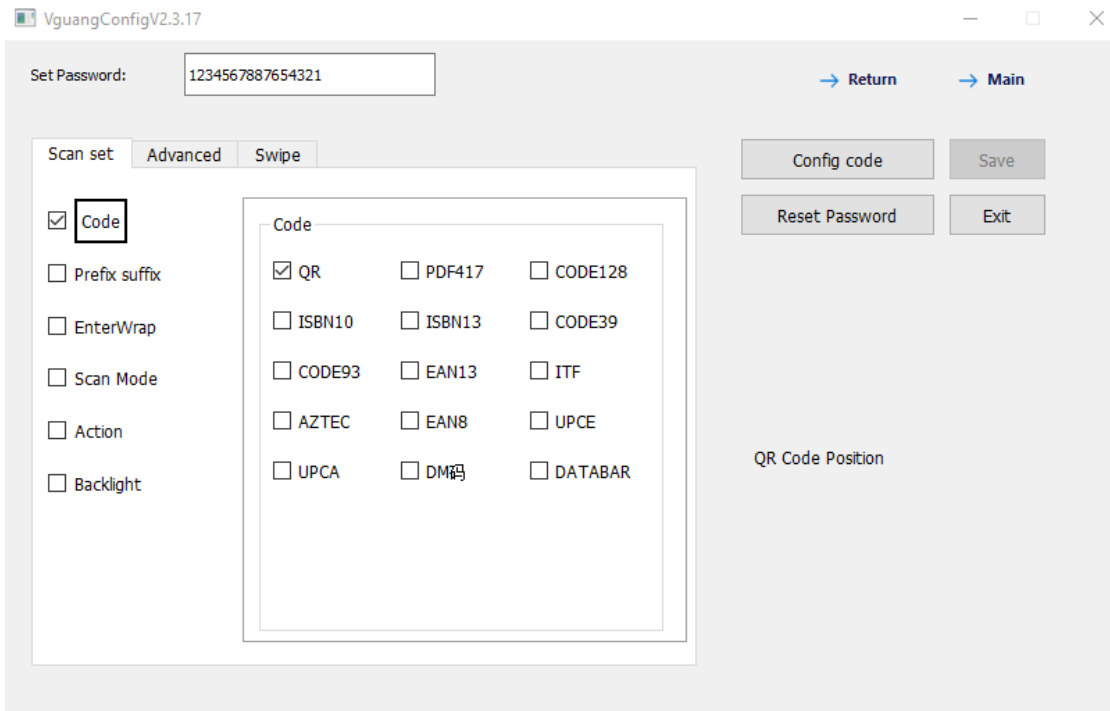


Step 2: select the output interface, and config the corresponding serial parameters.



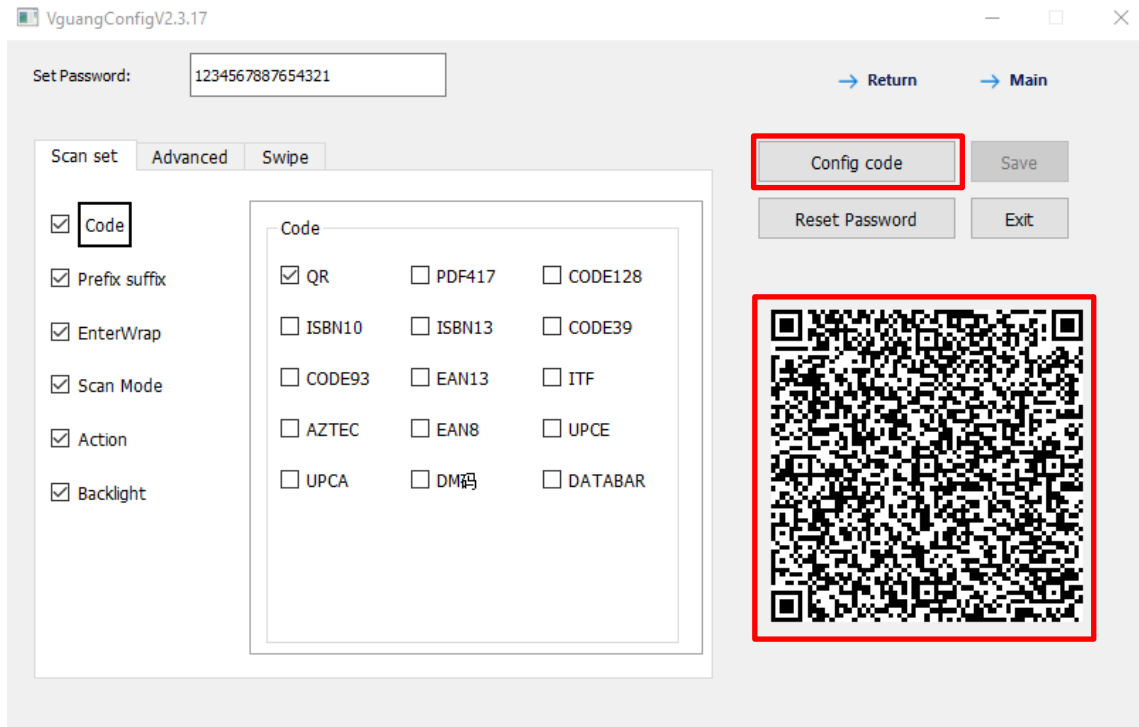
The screenshot shows the 'VguangConfigV2.3.17' window. At the top, there is a 'Set Password:' field with the value '1234567887654321' and buttons for 'Next' and 'Main'. Below this is the 'Work mode' section with two radio buttons: 'Ordinary' (selected) and 'Develop'. Under 'Ordinary', there is an 'Output' section with four radio buttons: 'Keyboard', 'RS485/232' (selected), 'TTL', and 'Wigan'. Below 'Output' is the 'Development mode' section with two radio buttons: 'Protocol' (selected) and '485 one more', followed by a note: 'Note: it takes effect under the development mode'. At the bottom is the 'Serial' section with four dropdown menus: 'Baudrate:' (115200), 'Databit:' (5), 'CheckDigit:' (N), and 'Stopbit:' (1).

Step 3: config as your needs.



The screenshot shows the 'VguangConfigV2.3.17' window. At the top, there is a 'Set Password:' field with the value '1234567887654321' and buttons for 'Return' and 'Main'. Below this is the 'Scan set' section with three tabs: 'Scan set', 'Advanced', and 'Swipe'. The 'Scan set' tab is active, showing a list of checkboxes: 'Code' (checked), 'Prefix suffix', 'EnterWrap', 'Scan Mode', 'Action', and 'Backlight'. To the right of this list is a 'Code' section with a grid of checkboxes: QR (checked), PDF417, CODE128, ISBN10, ISBN13, CODE39, CODE93, EAN13, ITF, AZTEC, EAN8, UPCE, UPCA, DM码, and DATABAR. To the right of the 'Scan set' section are four buttons: 'Config code', 'Save', 'Reset Password', and 'Exit'. Below these buttons is the text 'QR Code Position'.

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

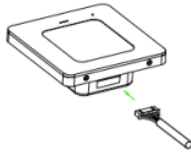
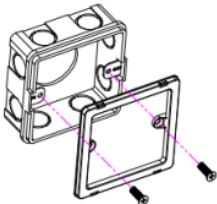
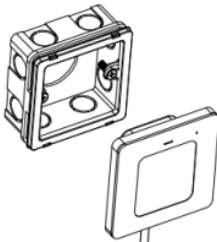

For more information about the configuration tool, please refer to the VguangConfig user manual.

## 6. 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, 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.

			
<p>1. plug the cable to the reader</p>	<p>2. install the holder on the 86 box, tighten with screws</p>	<p>3. install the reader on the holder, push to the end</p>	<p>4. installation completed</p>

## 7. 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 to 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 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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