

Security Access Control Instructions

UHF RFID Gate Reader

ST-G4



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1. Product Introduction

The second generation of intelligent security access control, compliant with ISO18000-6C (EPC C1G2) protocol, Simple and elegant appearance, stable quality and reliable performance It supports multi- tag reading and adopts infrared trigger reading mode. Supports counting of people entering and leaving, integrated with sound and light alarm, and can be used online/Offline EAS alarm two modes, the device supports network communication, and can expand WiFi, 4G and other communication methods.

2. Product Features

1. Strong multi-tag reading capability, extremely low missed reading rate and misreading rate
2. The antenna is specially designed, the access control coverage area is accurate and there is no blind spot
3. Built-in alarm light and buzzer
4. RFID The safety door can be placed at a wider distance. 2.4m
5. An external display can be connected to display the information and quantity of boks in real time, and count the number of people entering and leaving

3. Specifications

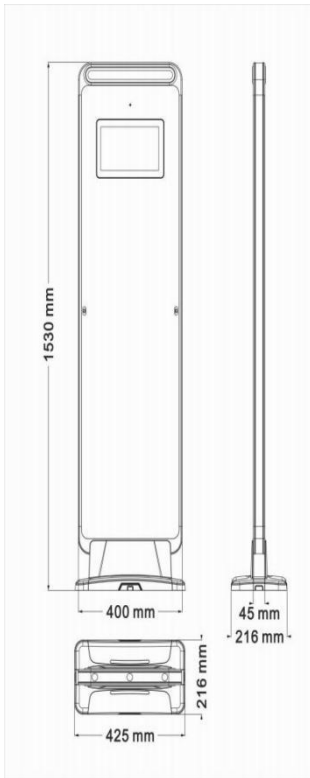
Main Specifications	
Product Model	ST-G4
Performance parameters	
operating system	Windows (Android optional)
Industrial control configuration	N29, 2G running, 32G memory (RK32 99 , 4G + 32G)
Identification method	Radio Frequency Identification (UHF RFID)

Read and write functions	Supports multi-tag identification, tag data filtering, and RSSI perceptible signal strength
Reading distance	0- 300 cm (for personnel access control) Best effect within 1.2 meters)
Function	Sound and light alarm/infrared trigger
Physical parameters	
Overall dimensions (height*width*depth)	426mm (L) *45mm(W) Base width 206mm * 1555mm (H)
Screen	10.1 inch capacitive touch screen (optional)
Resolution	1366*788
Screen ratio	16:9
Communication interface	Network port
Installation	No need to cut grooves, with 1.5m stainless steel wire duct and expansion screws
UHF RFID	
Frequency range	840MHz-960MHz
RF protocol standards	ISO 18000-6C (EPC C1 G2)

Identification permissions, optional functions	
Display	10.1 inch capacitive touch screen (optional)
Waterproof treatment available	Optional
power supply	
Power input	AC220V
Operating Environment	
Operating	0~60°C

temperature	
Operating humidity	0%RH~60%RH

4.Product size



5.Equipment Installation

Accessories List

Serial number	Name	unit	quantity	Remark
1	Channel access control	set	1	One main door and one auxiliary door
2	1.5m power cord	strip	1	
3	Network cable (signal cable)	strip	1	
4	2m RF cable	strip	2	

5	M8 expansion screw	individual	8	Each door is equipped with 4 individual
6	1.5m cable tray	individual	1	
7	Certificate	individual	1	

5.1 Unboxing

The product is packed in honeycomb cartons and has a wooden pedal base. First check whether the outer packaging is damaged. If there is any damage, please do not sign for it. Please take a photo for record and contact customer service in time . You can use a utility knife or scissors to cut the packing tape, then open the top to take out the device. There are accessories inside the carton.

Please check whether everything is complete. If you have any questions, please contact customer service in time.

5.2 Install

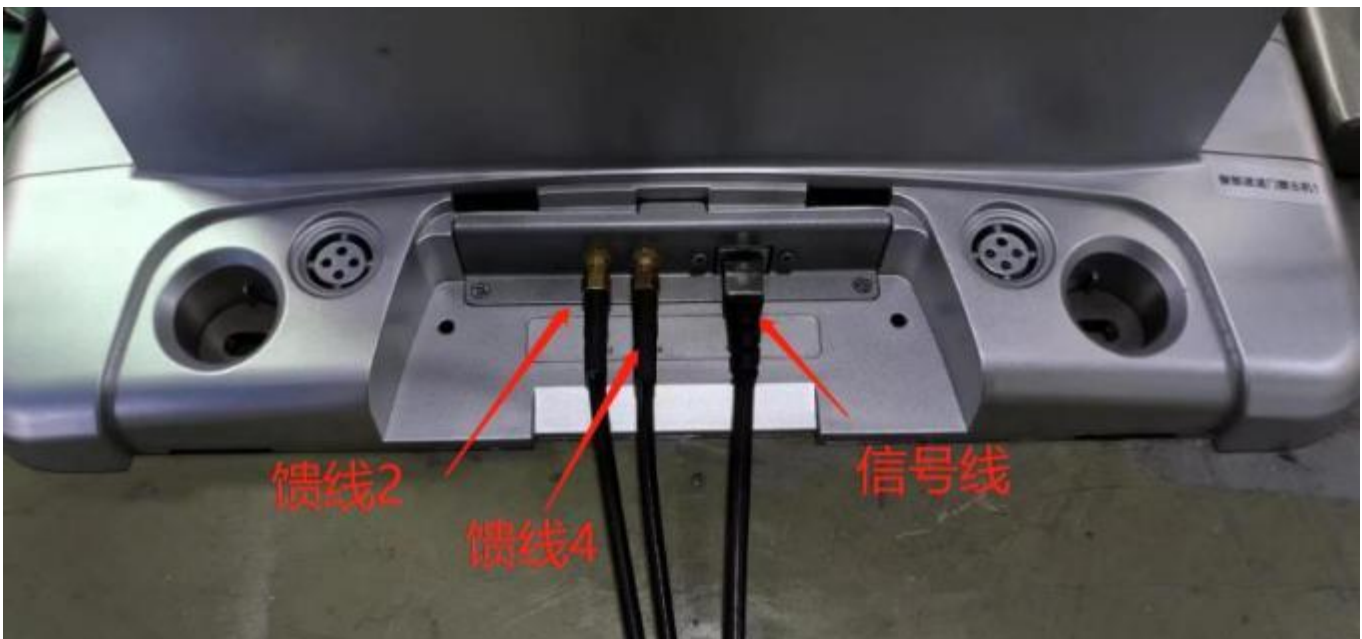
As shown in the figure: Place the safety door on the ground, and align the infrared beams of the main and auxiliary doors in parallel. (Infrared radiation facing channel)



Use both hands to pull outwards to remove the main and auxiliary door covers.



Use the network cable and feeder cable in the accessories to connect the main and auxiliary doors as shown in the figure



The base cable duct is reserved by default when it leaves the factory, and can be cut according to the actual situation during on-site installation.



5.3 Fixed base

Open the base 2 Side cover, use the accessories 8 Cell M8 Use an air drill to drill holes for expansion screws, as shown below:



There is a power interface reserved on the back of the main door. USB Port, network port



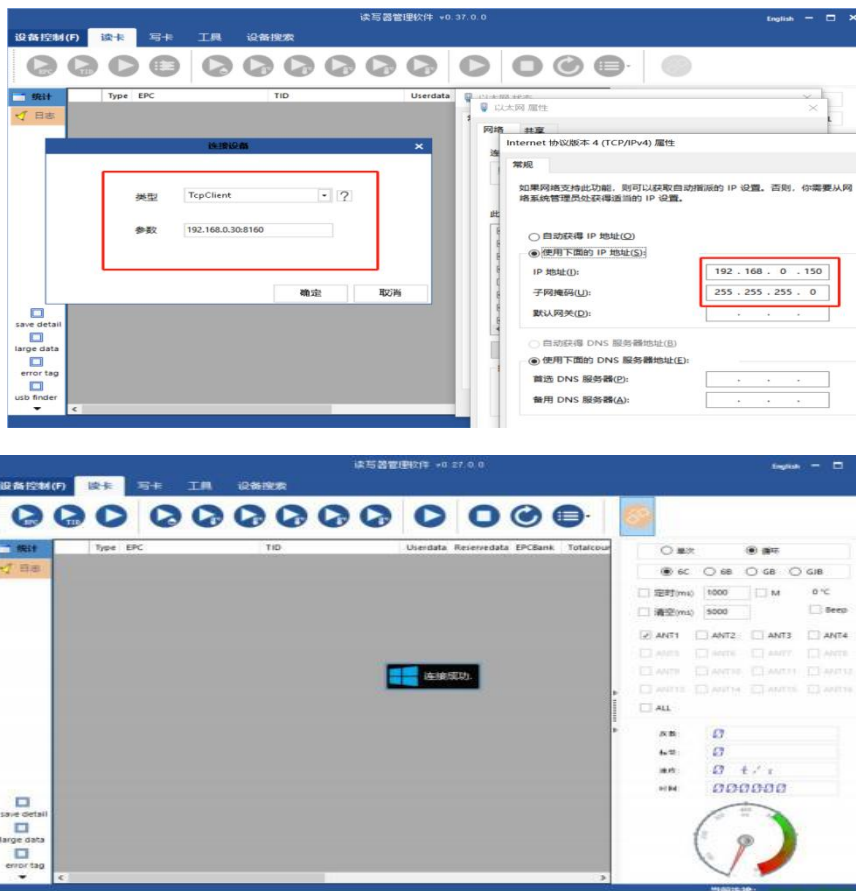
6. Equipment Testing

Device Connection

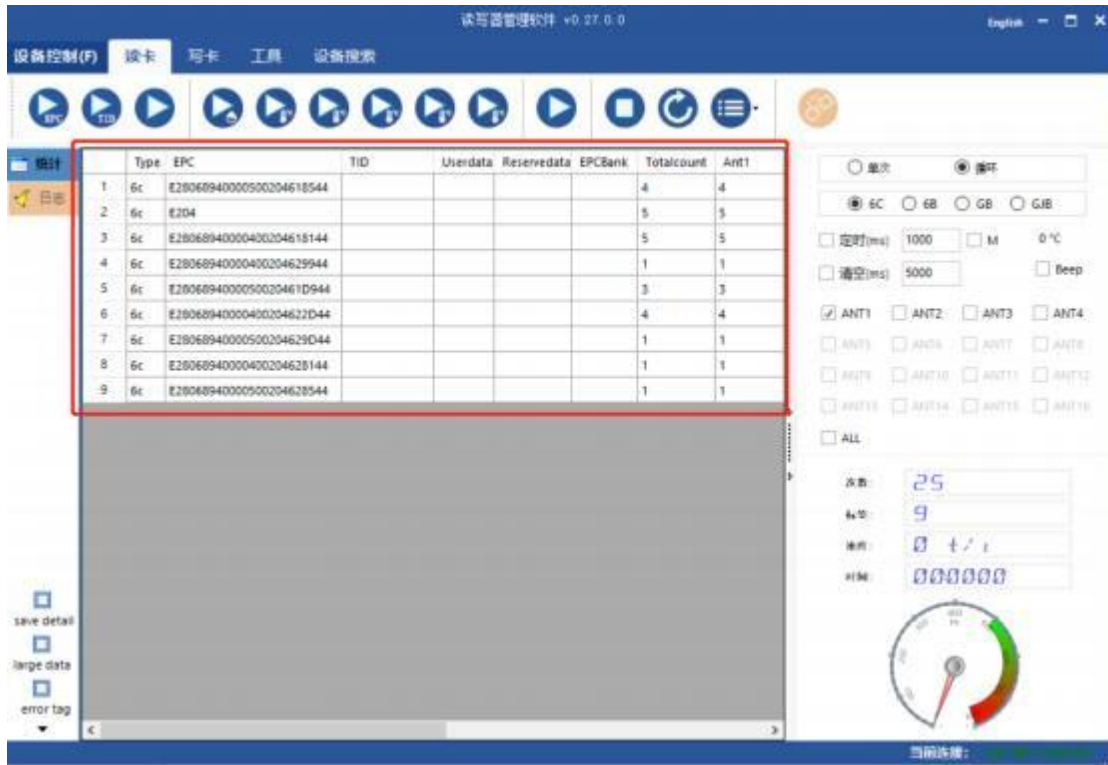
1. Demo software , default IP : 192.168.0.30
2. After the access control system is powered on, the internal reader is started (a "beep" buzzer sounds, If there is no or continuous beeping,

Check whether the wiring is abnormal, or contact an engineer for processing)

3. Use an Ethernet cable to connect the computer to the external network port of the access control system. IP Requires reader IP In the same network segment



Use UHF tags and pass through the channel door to trigger the tag reading (the factory setting is 4 seconds after triggering). antenna readings)



Common interface introduction

1. Modify the reader power: Device Control – RFID Configuration – Settings Interface, power value reference range: 15–30, the maximum

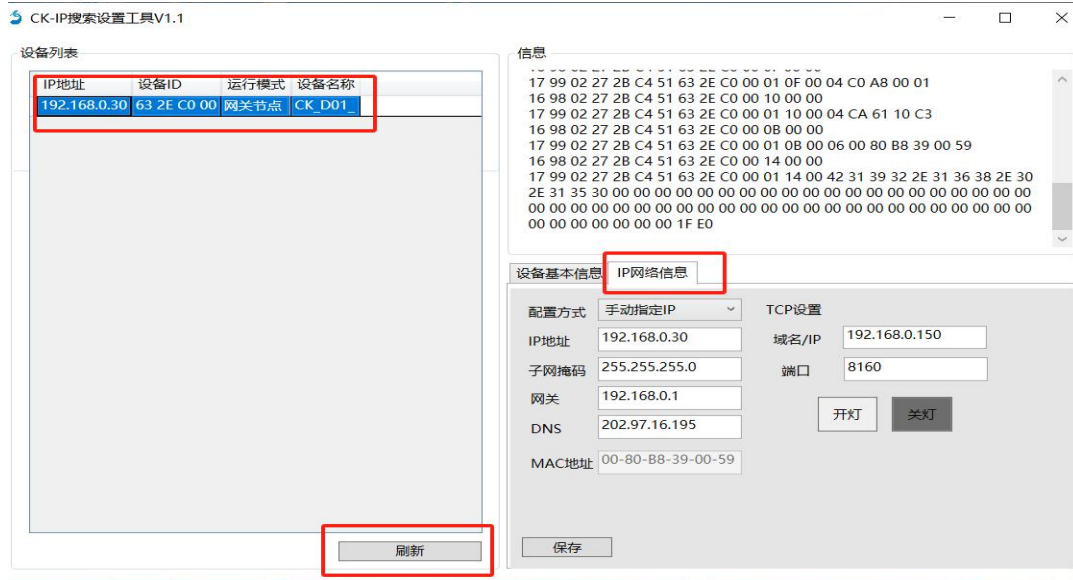
Large value 33



2. Modify the reader/writer IP



Open the software CK search tool and click Refresh - click Network Information - double-click IP address



3. GPIO Configuration interface : Device Control—Device Configuration—GPIO (No modification required)

(Cannot trigger tag reading, check GPI1,2 Status, GPI01,2 Is the configuration normal? (The diagram shows single-channel access control parameters))



4. Personnel counting interface: Device control – Customized application – In and out counting – Display the number of people in and out

This is just a demonstration interface. SDK Interface self-development



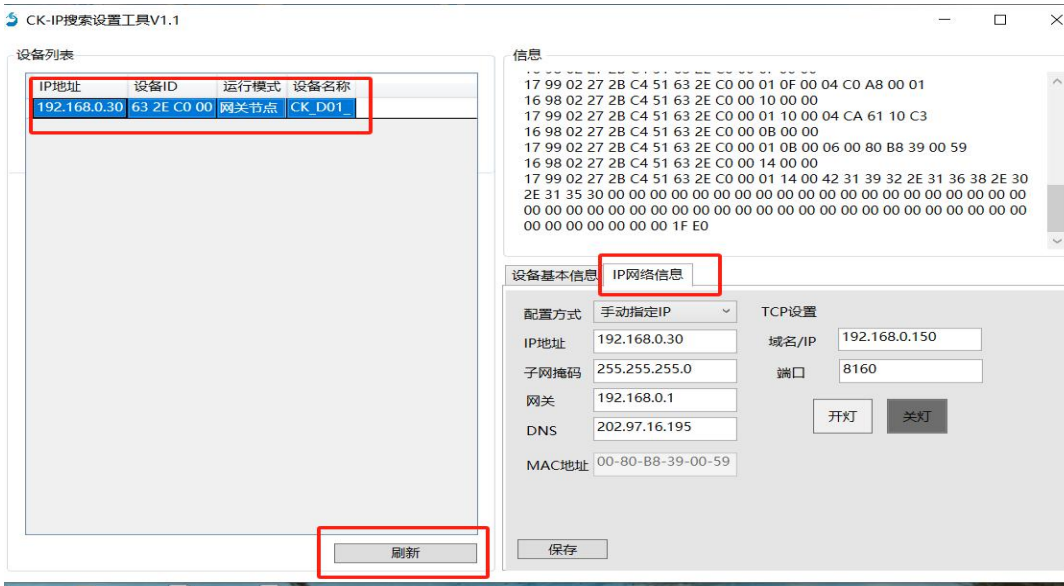
5. Device information query



6. Reader/Writer IP search.



Open the software CK search tool and click Refresh - click Network Information



7. Baseband upgrade



8. EAS Alarm interface

Device Control (F) ---- Device Configuration ----- Customized -1 As shown in the figure:



1. Select Switch as : " Open "
2. "" Matching Area " selection:match EPC"
- 3." Start Byte Address " setting: The setting range is generally Between 0 and 11 , inclusive 11.The default starting byte address is 0 , when the byte address is n hour, exist EPC The matching position on the data is 2^n .

For example, the starting byte address is set to 3, and the matching content is 10 When EPC The data needs to match it, so XXXXXX 10 XXXXXXXXXXXXXXXXXXXX (X is 0~F number) . The matching content will be retrieved from Start from 2^n .

"Matches (hex) γ : Need to EPC data corresponds to the matching data. For example, if the matching content is set to 1234 , and start Character Festival land site yes 0:00 . but EPC number according to but for

1234 XXXXXXXXXXXXXXXXXXXX (X is 0~F number) The EPC alarm will respond.

"Mask " :Used to achieve bit matching with the matching content. The mask is a "bit AND " of the tag . To match, you can usually just set it to "F".

Note: After all settings are completed, you need to press the "Set " button to save the set parameters. Then press the "Query " button to check whether the settings are successful.

1) EAS Matching successful action

A.This interface is used to set EAS When responding, the status of GPO1~4 ports output high or low level

B."Action hold time " is EAS The time of the level output state during response.

2) EAS Matching failure action

A.This interface is used to set EAS When not responding, GPO1~4 The port status output is high or low

B."Action hold time " is EAS The time when the level output state is not responded.

Note: The same GPO The "Success /Failure " status can only be selected .

Note: After all settings are completed, you need to press the "Set " button to save the set parameters. Then press the "Query " button to check whether the settings are successful.

EAS alarm principle : The read tag value is bitwise ANDed with the mask to obtain A value , matching content and mask are bitwise ANDed to obtain B Value , if A value is equal to B Value is executed EAS Match successful action , otherwise, execute EAS Match failure action .

7. Frequently Asked Questions

Question 1: If you pass the access control without a book, the alarm will sound.

Check whether the power is too high.

Are there other tags near the access control that are misread?

Question 2: No alarm will be triggered when you pass through the access control system with unchecked books.

Check if the power is too low

Check whether the GPI status is normal. Is the access control aligned and the signal line connected? GPI status defaults to low

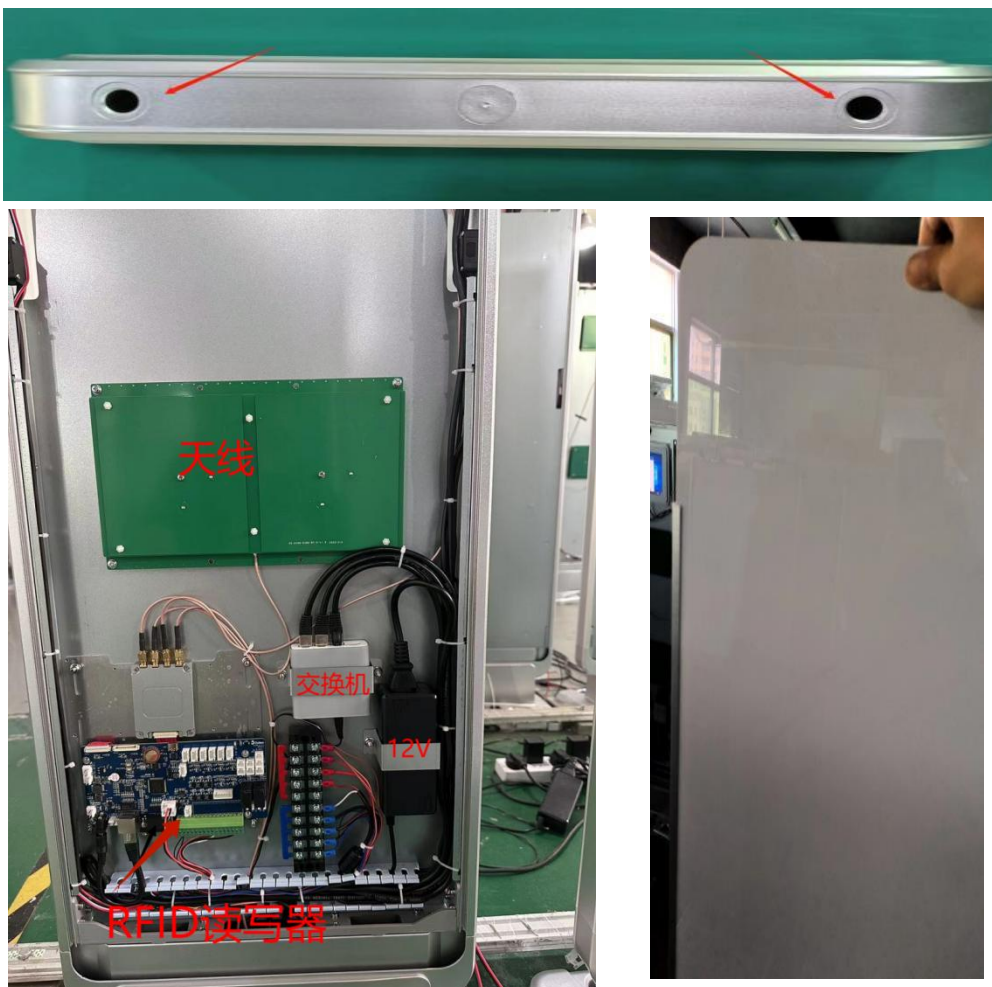
Check whether the GPI action configuration is set correctly, refer to the GPIO configuration interface

Check whether EAS is configured correctly, refer to EAS configuration interface


8. Equipment disassembly and assembly

If you need to replace the module during use, you can remove the panel by yourself. As shown in the figure, there is a screw hole on the top of the device. Use a medium-sized cross screw

Remove the panel by pulling it upwards.



9. Technical Support

 there is an emergency, please disconnect the power supply immediately. Contact the equipment manufacturer in time.