



# Smart QR Code Access Control Terminal User Manual



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# 1. Function Description

## 1.1 Select the boot mode

The dip switch SW1 on smart QR Code access control device circuit board can select the operating mode. When neither dip switch 1 nor dip switch 2 is toggled, the access control device operates in normal online cloud access control mode; when dip switch 1 is toggled to ON and dip switch 2 is not toggled, the access control device operates in online mode with 485 access control; when dip switch 1 is not toggled and dip switch 2 is toggled to ON, the access control device operates in normal offline mode; when both dip switch 1 and dip switch 2 are toggled to ON, the access control device operates in offline mode with 485 access control.

## 1.2 Unlocking method

After the access control device starts normally, it can be unlocked in the following ways:

### **Card Swipe Unlock:**

Place an authorized legitimate card near the card swipe area at the bottom of the access control device. The optimal distance for card readability is 0 to 6cm. Upon successful unlocking with a legitimate card, the buzzer will emit a "beep" sound, and the indicator light will flash once with a green light. If an unauthorized card is used for unlocking, the buzzer will emit three "beep" sounds, and the indicator light will flash thrice with a red light, indicating unlock failure.

### **Remote Unlocking:**

When the access control device is connected online, open the mobile app(Trudian cloud app), tap the "Unlock" button, or have the administrator on the cloud platform click "Unlock" to remotely unlock. Upon successful unlocking, the buzzer will emit a single "beep" sound, and the indicator light will flash once with a green light. If the unlocking fails, the buzzer will emit three "beep" sounds, and the indicator light will flash three times with a red light.

### **Bluetooth Unlocking:**

Open the mobile app, tap the "Unlock" button. Upon successful unlocking, the buzzer will emit a single "beep" sound, and the indicator light will flash once with a green light. If the unlocking fails, the buzzer will emit three "beep" sounds, and the indicator light will flash three times with a red light.

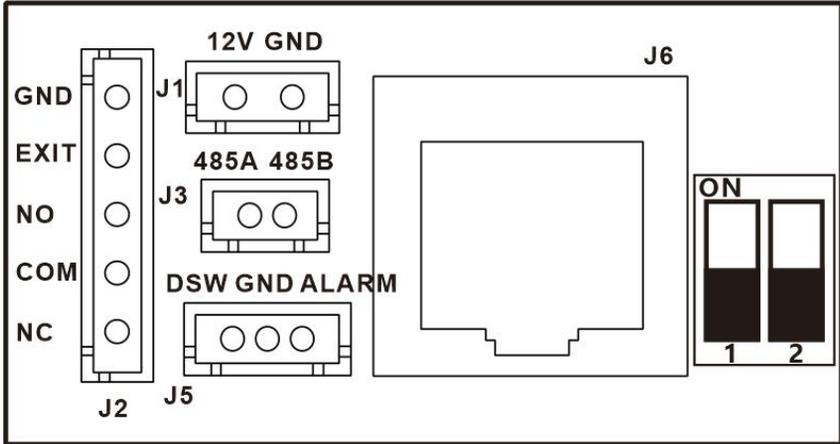
### **QR Code Unlocking:**

Open the mobile app(Trudian cloud APP), click on "Authorization Code Unlock" on the main interface to generate a QR code. Click on "Authorize to Visitor" below the QR code, set the visitor's identity, authorization code validity, and rules. Click "Send to Visitor" to share it with the visitor via WeChat, Tencent QQ, or SMS. Present the QR code generated in the mobile app in front of the camera, ensuring it is within the recognizable range. This will complete the QR code unlocking process. After successful unlocking, the buzzer will emit a single "beep" sound, and the indicator light will flash once with a green light. In case of unlocking failure, the buzzer will emit three "beep" sounds and the indicator light will flash three times with a red light.

## **1.3 Elevator Control**

The communication between the access control device and the elevator is achieved using the 485 bus. The 485A/B bus in the J3 interface of the device is correspondingly connected to the 485A/B bus on the elevator controller, allowing the synchronization of information between the two by swiping the elevator control management card. When the access control device is operating in the mode with 485 access control, users can achieve elevator interlock functionality by swiping an authorized legitimate IC card or scanning an authorized QR code after authorization in the card swipe area of the access control device.

## 2. Interface Description

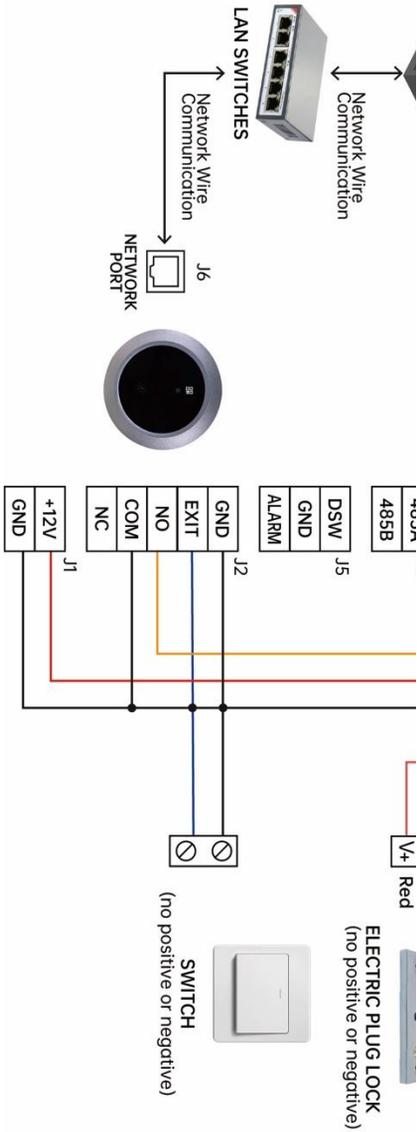


Location	Function Description
J6	LAN network cable port
J1	Power input interface
J3	485 Bus A/B port
J2	Door lock control and door opening button interface
J5	Linkage interface for door sensor detection and fire control
SW1	00: Normal TCP/IP network mode 10: Network mode with 485 access control 01: Normal offline mode 11: Offline mode with 485 access control

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Interface Name	Function Description
12V	DC12V power input
GND	Ground connection
NC	Relay Normally Closed
COM	Relay Common terminal
NO	Relay Normally Open
EXIT	Door opening key signal detection
DSW	Door magnetic signal detection
485A/B	485 bus A/B end
ALARM	Fire Linkage Interface

### 3. Wiring Diagram



## **4. Notices**

1. Do not expose to rain or inclement weather; if unavoidable, consider installing a rain cover.
2. Avoid direct exposure of the camera to sunlight or strong light; try to maintain uniform lighting for the camera.
3. Do not install near strong magnetic fields.
4. Do not install in areas with background noise exceeding 70dB.
5. Non-professionals are not allowed to dismantle the device for repairs.

## 5. Specifications

Operating voltage	DC12V±10%
Operating current	200mA~380mA
Camera	640 x 480 camera
Door opening method	Qr code, swipe card, Bluetooth, mobile App remote, cloud platform remote
Card capacity	Unlimited (read/write sectors)
Card type	IC card
Card reading distance	0~4cm
QR code reading distance	4~18cm
Communication interface	10/100Mbps adaptive Ethernet interface, 485 bus interface
External interface	Door lock control *1, door opening button *1, door magnetic detection *1
Operating humidity	10%~93%
Operating temperature	-20°C~+70°C
Installation method	wall mounting type

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Device appearance dimension	$\phi 110 * 25 \text{mm}$
Material	ABS case + acrylic lens

