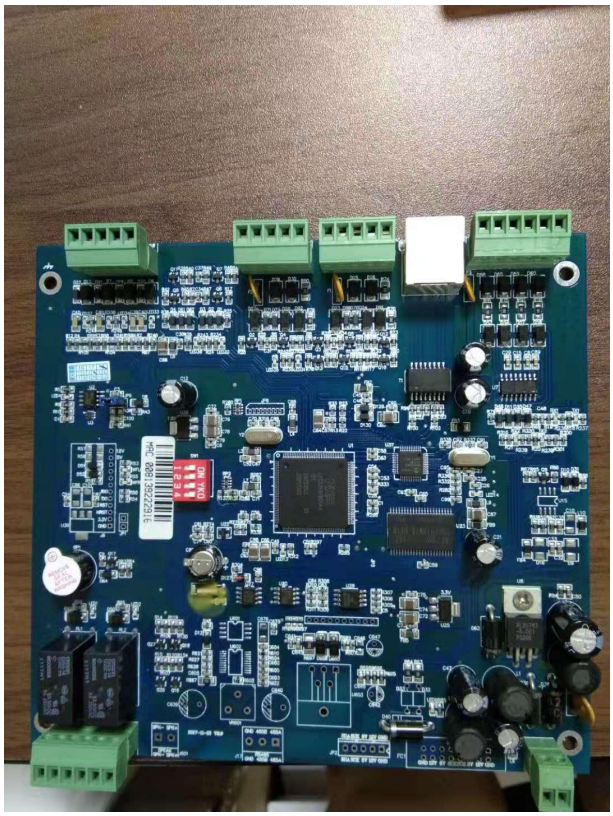
QR CODE ACCESS CONTROLLER



QR code access controller is a two-dimensional code network access controller developed based on 32-bit embedded ARM high-performance processor and multi-task embedded real-time operating system, combined with two-dimensional code scanning head and electronic control door lock , Door sensor and other equipment form a stable, reliable, intelligent and safe QR code access control management system. It is widely used in the access control management of banks, prisons, police stations, office buildings, residential districts, large state-owned enterprises and enterprises and institutions.

Key performance characteristics:

1: The controller is based on a 32-bit ARM microprocessor platform;

2: Built-in multi-task embedded real-time operating system in the controller;

3: Using DataFlash and ferroelectric memory, the data will not be lost for 10 years after power failure;

4: The controller card capacity is 65,000 pieces, and the event capacity is 100,000 pieces, which can be expanded; the capacity of QR code is 100,000 times

5: Support TCP/IP communication mode, support WAN connection;

6: Support connection of different types of identification devices: QR code scanner, ID/IC card reader, password reader, biometric card reader, etc.;

7: Support multiple door opening methods such as scanning the QR code to open the door, swiping the card to open the door, card + password to open the door, super password to open the door, dual card to

open the door, first card to open the door, duress code to open the door, emergency full open and full closed, forced door normally open and normally closed;

8: It can realize the independent and complete control of 1 access door: including the control of in and out bidirectional card reader and QR code scanning head;

9: It can realize the control of the time period for all personnel to enter and exit;

10: Support remote download and remote upgrade;

Technical specifications

A: communication method

Communication port

10/100M self-adaptive Ethernet interface, automatic adaptation of direct-connected network cable and crossover network cable, with three-level lightning protection and surge protection design

B: protocol

TCP/IP protocol, serial communication protocol, serial communication baud rate: 9600

C:Transmission distance

TCP/IP: <100 meters (100 meters is the standard distance of twisted pair)

Controller bottom software

Embedded multi-task real-time operating system

With software and hardware guardian design, the system will automatically and quickly recover when the controller voltage or software is abnormal

Support offline operation

Allow online or remote upgrade

Support cross-gateway, cross-network segment, the maximum allowable access network controller in the same network segment: 250

Weekly programming: 15 groups×7 days×8 periods

Holiday programming： 15 groups×100 days ×2 periods

Opening schedule： 1group ×7 days×8 periods

Control schedule： 1group ×7days×8 periods

Memory

Card users: 65,000 (standard type), expandable to 250,000 users

Event records: 80,000 (standard type), expandable to 500,000,If the memory is full, the oldest information will be overwritten

The capacity of QR code is 100,000 times

Power-off data retention time: 10 years, using ferroelectric and DataFlash to save records and data

Electrical parameters

Controller power input： 12VDC

Access control dedicated 5A power supply: 110~260VAC 50/60HZ, can provide electric lock power supply, with automatic charging and backup battery switching function

Backup power supply: 12V / 7AH lead-acid battery (optional)

Working current: <150mA (Note: Electric lock and reader current not included)

Communication port: TCP/IP network port

RS232 serial port: 2 channels, support connection of QR code scanner/ID card reader

Reader port: 2 channels, support Wiegand 26/34 reader

Relay output: Omron relay DC30V/5A, 250VAC/5A

Relay delay: 1-255 seconds delay of door lock relay can be set, other relays can be set 1-65535 seconds

Interface protection: All input and output interfaces have over-current and over-voltage protection, communication ports and power ports have multi-level lightning protection

Door lock output 01: 1 channel, relay capacity 30VDC 5A, relay delay 1-255 seconds can be set

Door lock output 02: 1 channel, relay capacity 30VDC 5A, relay delay 1-255 seconds can be set

Voice output: 1 channel with voice power amplifier interface

Door sensor input: 1 channel, normally open and normally closed can be set, the transmission distance between the ordinary network cable and the controller is less than 200 meters

Exit button input: 1 channel, normally open and normally closed can be set, the transmission distance between the ordinary network cable and the controller is less than 200 meters

User alarm input: 1 channel, normally open and normally closed can be set, the transmission distance between the ordinary network cable and the controller is less than 200 meters

Door lock fully open input: 1 channel, effective closing, door lock fully open, transmission distance between ordinary network cable and controller ≤200m

Door lock fully closed input: 1 way, closing is effective, door lock is fully closed, the transmission distance between ordinary network cable and controller is ≤200m

Performance parameter

Card reading speed： < 0.2 seconds, support card reader to swipe at the same time

Swipe interval： < 0.5s

Network download card: > 200 cards/s, the download time of 20,000 cards is less than 100 seconds

Network upload record: > 350 records/s, upload time of 100,000 records is less than 330 secondsSupport card reader type： IC, ID, password, biometrics, etc.

Scanning QR code speed： < 0.5s

Scan code interval： < 0.5s

QR code verification： Rule verification, support QR code to open the door offline

Physical parameter

PCB size：160mm × 150 mm

Operating temperature：-20℃ — 65℃

Relative humidity：0 — 90% No condensation