

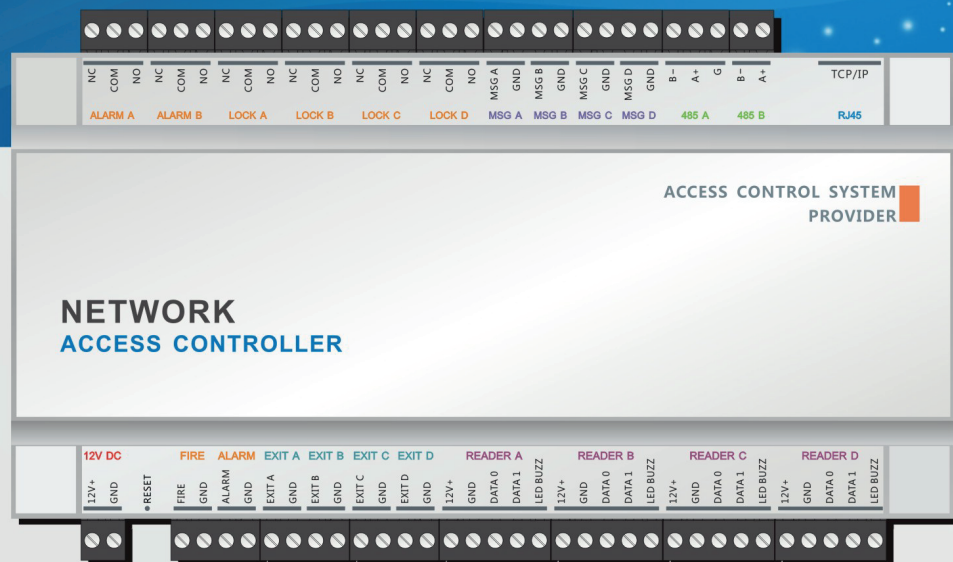
# Standard network access controller

Standard network access controller series is most commonly used access control products which include 10 kinds of access controllers:

RS485: One door controller, two door controller, 4 door controller, turnstile controller, elevator controller,

TCP/IP: One door controller, two door controller, 4 door controller, turnstile controller, elevator controller.

This user manual can be used for all controllers except elevator controller.



## Acs Parameter

User: 30000  
 Event: 60000 (485) / 50000 (TCP/IP)  
 Alarm event: 60000  
 Communication: RS485 or TCP/IP  
 Communication distance:  
 1200meters (485)  
 Card reader: Wiegand protocol  
 Door open method: Card, card+PSW, PSW, double card, software, free pass, push button, door timer.

## Acs Standard interface

Card reader: 2/4/4  
 Alarm output: 1  
 Alarm input: 1  
 Fire alarm input: 1  
 Fire alarm output: 1  
 Release button: 1/2/4  
 Door sensor input: 1/2/4  
 Lock output: 1/2/4  
 communication: RS485 /TCP/IP

## Acs Basic parameter

Panel size: 210×125×22mm  
 Panel color: Deep blue  
 Panel weight: 200g - 350g  
 Plastic cover : 214×105×37mm  
 Metal box size: 320×272×74mm  
 350×282×74mm  
 Box color: Black  
 Box weight: 1.8KG(bigger:2.2KG)  
 Working temperature: <60degree  
 Humidity: 10%--95% R.H  
 Working voltage: 12V  
 Working current: <80ma  
 Rated power: ≤5W  
 Data protection if no power supply: 10years

## Acs Application area

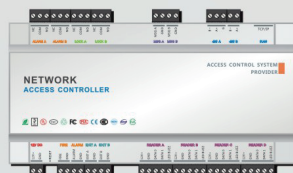
Government, research institution  
 Industrial and mining enterprises  
 Intelligent building, office building  
 Intelligent community, villas  
 Apartment, communication room  
 Bank financial institutions, treasury  
 Military installation, prison  
 Subway, airport, busstation  
 Turnstile control, car parking system  
 University, hospital, hotel

## Features

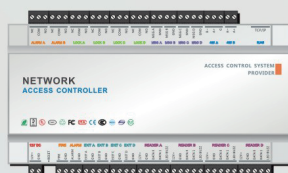
- ◇ Standard RS485 or TCP/IP communication
- ◇ Big flash capacity can keep data for 10 years if no power.
- ◇ All of input interfaces have optocoupler protection and system is more stable.
- ◇ WEB server is built in access control. We can manage and real time monitor and no need install software.
- ◇ Access control's time zone can reach as many as 8 group and each group can have different verifications.
- ◇ Support multi verifications: Card, card+PSW, PSW, double cards, first card opening, door timer, timed alarm.
- ◇ Two door and Four door controller support inter-locking function.
- ◇ Support remotely open or close door, alarm, fire alarm.
- ◇ Support software or manage door through WEB and realize global anti passback.
- ◇ Support alarm output of multi events like invalid card and time, door alarm, door open overtime.
- ◇ All of wiegand interfaces are compatible with wiegand protocol like 26, 34, 37.
- ◇ Data automatically sends without limitation of access controller QTY.
- ◇ Separately set each cards' validity.
- ◇ All of our access controllers support 485, TCP/IP controller's mixing installation.
- ◇ Support time attendance and on line guard tour function.
- ◇ Support real time management monitor by multi users and multi devices.
- ◇ Working with IP camera to realize network real time monitor and videocapture.



One door controller  
(485 or TCP/IP)



Two door controller  
(485 or TCP/IP)



4 door controller  
(485 or TCP/IP)

# Access controller wiring diagram explanation

Wire from card reader to access controller: suggest using 8 core multi-strand twisted-pair shielded cable. 2 cables to be connected to 12V+, 2 cables to be connected to GND, GREEN line for D0, White line for D1, Blue line for LED/BUZZER line. Line diameter should be  $>0.5\text{mm}$ , and the distance between reader and controller should be less than 60meters, shield line for access control's GND.

Wire from release button to access controller: Suggest 2 core line, line diameter should be  $>0.3\text{mm}$ . We can use 2 lines of 8 core network line.

Wire from lock to access controller: suggest using 2 core power supply line. Line diameter should be  $>1\text{mm}$ . If distance between lock and controller is  $>50$  meters, we should use thicker line, or use more lines for example 2 lines or more for lock's 12V line, and 2 lines or more for lock's GND.

Wire from door sensor to access controller: suggest using 2 core line. Line diameter should be  $>0.3\text{mm}$ .

RS485 communication layout: suggest using 2 core (line diameter $>0.5\text{mm}$ ) shield line from converter to access controller. In theory, the communication distance can be as long as 1200 meters. However, we suggest that the distance should be less than 800 meters if taking the environment into consideration.

TCP/IP communication: Use country standard network line, the distance between controller and HUB or PC should be less than 100 meters.

How to reset access controller: Reset is to clear all data inside chip and makes it come back to default. There are 2 kinds of reset: Software and hardware. If failure through software, we have to initialize by hardware. IP address will be default IP. Reset pole is right side of Power input with the mark of "RESET".

1. Software reset operation: Open software---right click on the controller to be initialized---device---Reset controller

2. Hardware reset operation: use sharp things like clip/refill/screw/tooth pick/iron wire to plug into reset pole, and press down the reset key for 4 sec. After hearing beep, beep, release reset key, and repower controller. TCP controller will automatically restart.

