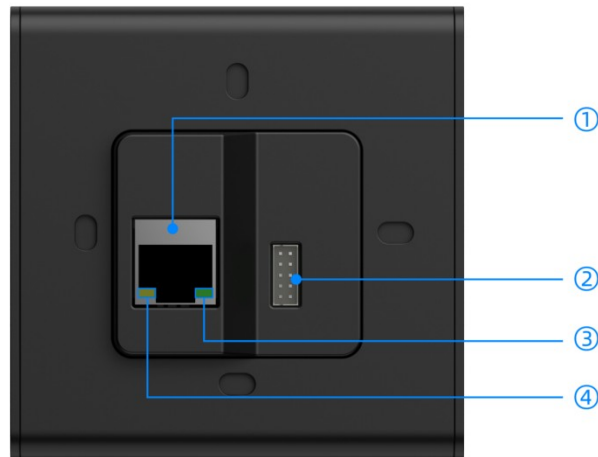


1. Interface Definition

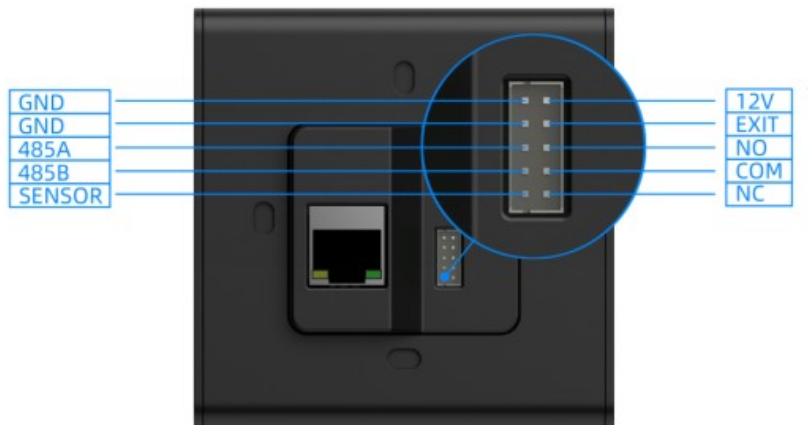


① is a standard 100M network port.

② Connect to the socket to connect power supply, electromagnetic lock, exit switch and other access control components to form an access control system.

③ is a green LED light. If it is always on, it means the 10M network connection is normal. If it is flashing, it means data is being sent or received on the 10M network.

④ is a yellow LED light. If it is always on, it means the 100M network connection is normal. If it is flashing, it means data is being sent or received on the 100M network.



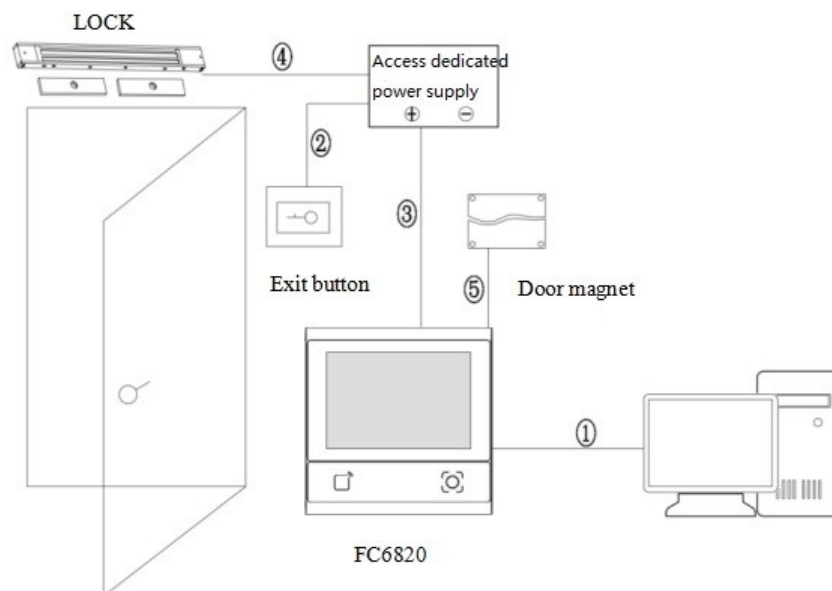
Pin Name	definition
12V	Positive pole of power supply
EXIT	Exit button
NO	Relay no
COM	Relay COM

NC	Relay NC
GND	Ground
GND	Ground
485A	485A
485B	485B
SENSOR	Door magnetic signal

2. Wiring Diagram

2.1 Standalone use

1) This scenario is mainly for FC6820 with Ethernet output mode FC6820 All-in-one device, FC6820 Connect to the server through the Internet to achieve online verification.



① The device is connected to the server management software through the network port, and online verification of permissions is required

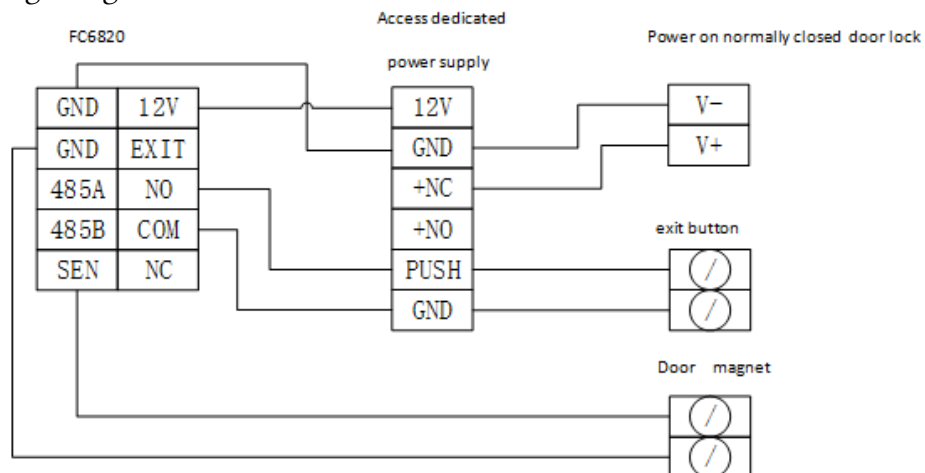
② The exit switch is connected to a professional access control power supply (or a device) to open the door by pressing a button indoors

③ The device is connected to a professional access control power supply

④ The electric lock is connected to a professional access control power supply. After the access personnel pass the authority verification, the door lock opens the door

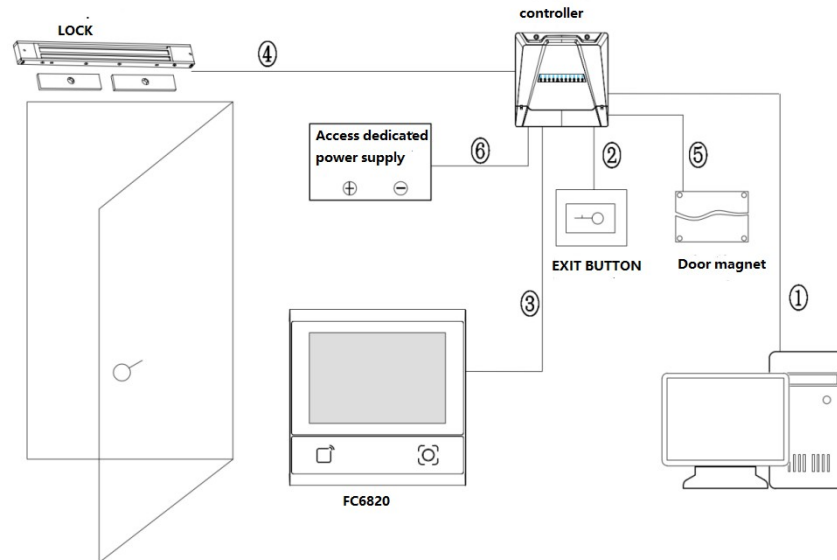
⑤ The device is connected to a door magnetic sensor to monitor the door status.

2) Wiring Diagram



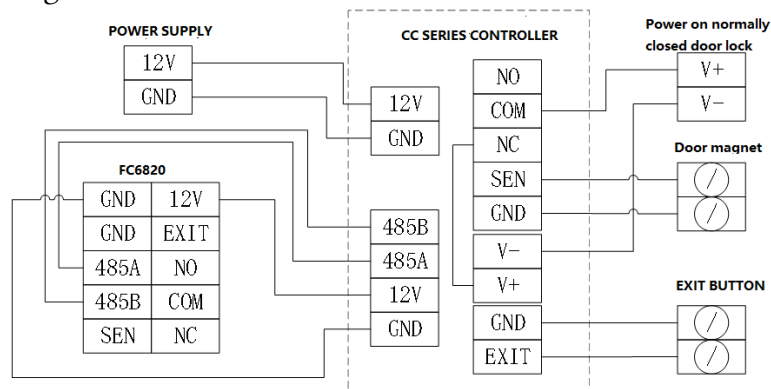
2.2 Cooperating with controller

1) This scene FC6820Combined with the controller to form an access control system, FC6820All-in-one machine through 485The access controller is connected to the controller via the protocol, and the access controller realizes local and online door lock control.



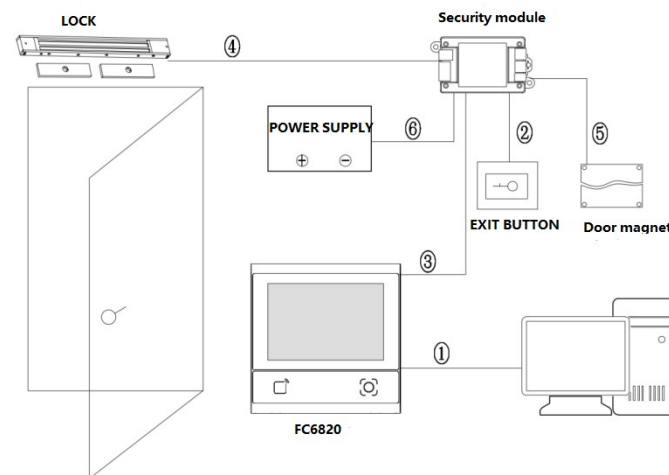
- ① The controller is connected to the server management software through the network port to achieve local control and network control
- ② Connect the door switch to open the door by pressing it indoors
- ③ FC6820 connects to the controller via RS485
- ④ The controller is connected to the electric lock. Passengers swipe their credentials on FC6820 and pass the authorization verification through the controller. After passing, the controller controls the door lock to open the door
- ⑤ The controller is connected to the door magnetic sensor to monitor the door status.
- ⑥ The controller is connected to a professional access control power supply to power the controller, and the controller powers FC6820, door locks, etc.

2) Wiring Diagram



2.3 Cooperating with security module

1) This scene FC6820 Together with the security module, it forms a more secure access control system. 200 Connect to the server through the network to achieve online verification, and then encrypt 85 The protocol communicates with the security module to realize door lock control.



① FC6820 Connect to the server management software through the network port to achieve online verification

② The exit switch is connected to the security module to open the door by pressing it indoors

③ FC6820 connects to the security module via RS485 to achieve door lock security control

④ The security module is connected to the electric lock. Passengers scan their credentials on FC6820 and upload them to the server for permission verification. After passing, the security module is notified to control the door lock to open the door.

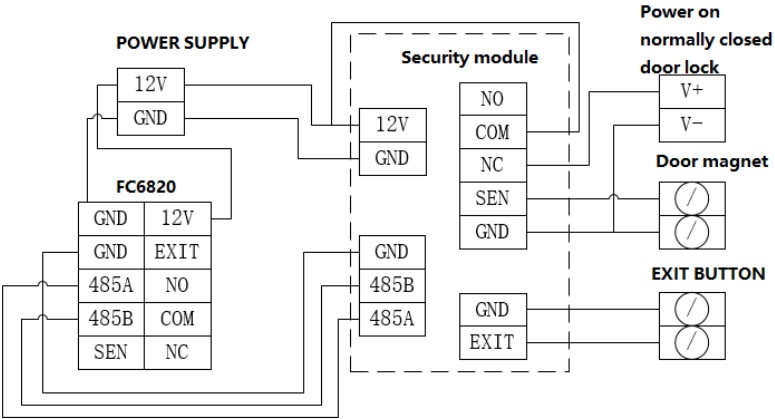
⑤ The security module is connected to the door magnetic sensor to monitor the door status.

⑥ Professional access control power supply provides power to security modules, FC6820, door locks, etc.

2) Wiring Diagram

Typical applications are shown in the figure below. For more safety

applications, please refer to FCA4900Product instructions.



2.4 Wire Selection

Signal	Soft sheathed wire		Network cable	
	Specification	Maximum transmission distance	Specification	Maximum transmission distance
Power cord	RVV2*1.0	100rice	/	/
	RVV2*1.5	200rice		
RS485	RVVSP3*0.5	1000rice	Cat5eor above; Single-line DC impedance is less than 100ohm/km	1000rice
Exit switch	RVV2*0.5	100rice	/	/
Door magnetic signal	RVV2*0.5	100rice	/	/
Relay signal	RVV2*0.5	100rice	/	/

Note: The maximum transmission distance is a theoretical value and may be shortened due to the on-site environment.