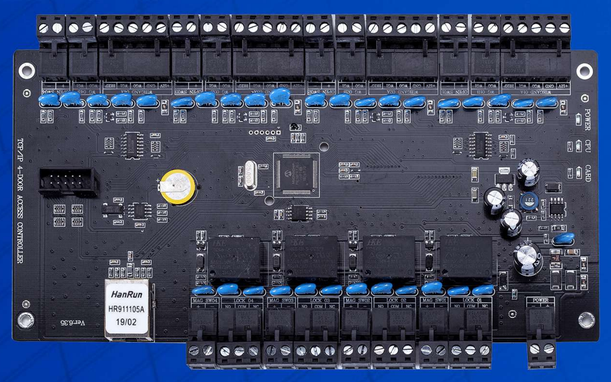
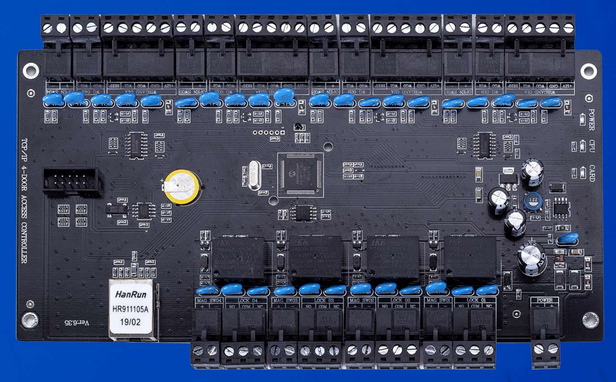
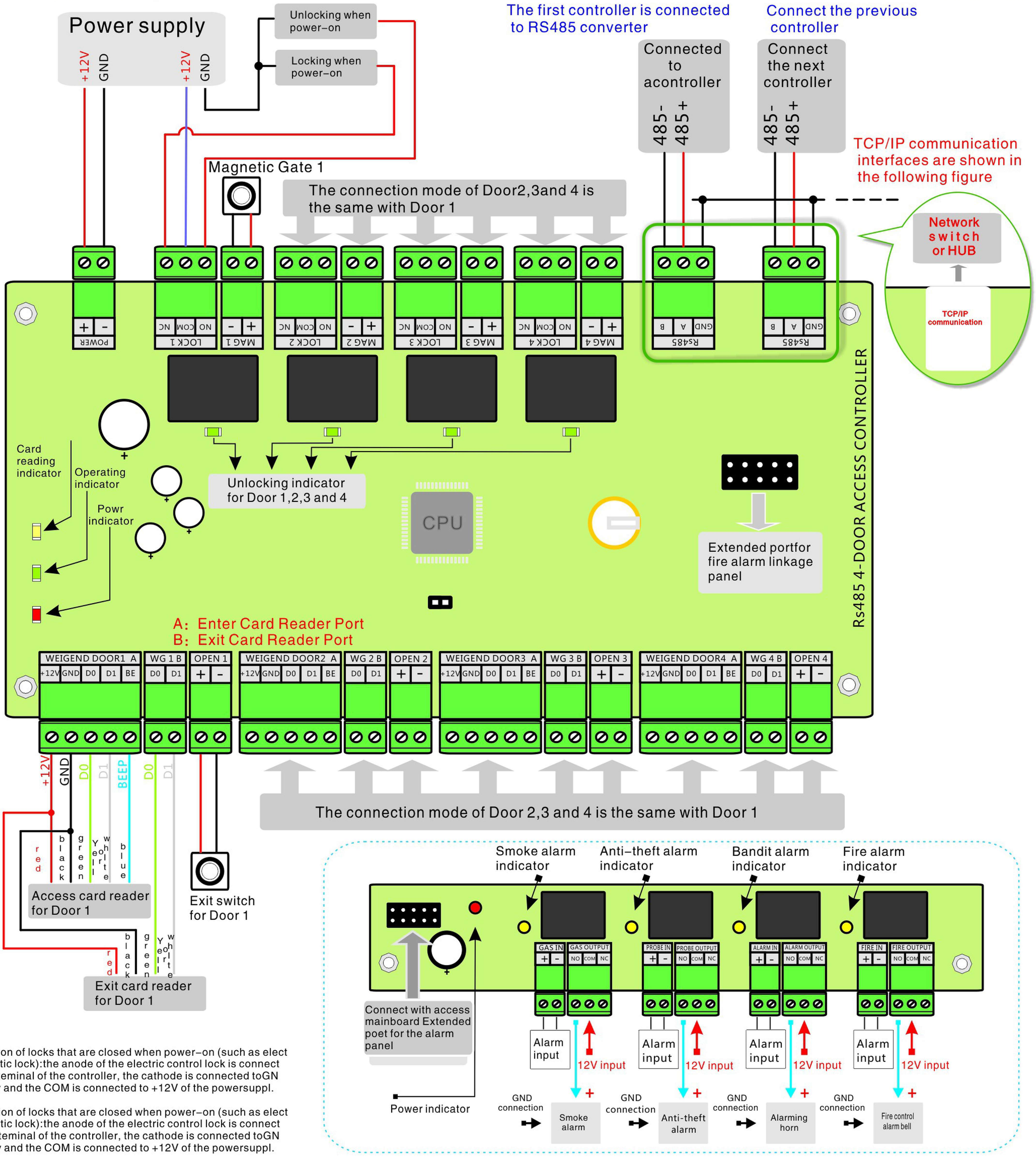
Manual For Industrial Grade 4–Channel Access Controller



ACCESS CONTROLLER

TCP/IP 4–Channel
Access Controller





Note

- Correct wire connection of locks that are closed when power–on (such as elect ric bolt lock or magnetic lock):the anode of the electric control lock is connect ed to NC of the input teminal of the controller, the cathode is connected toGN D of the power supply and the COM is connected to +12V of the powersuppl.
- Correct wire connection of locks that are closed when power–on (such as elect ric bolt lock or magnetic lock):the anode of the electric control lock is connect ed to NO of the input teminal of the controller, the cathode is connected toGN D of the power supply and the COM is connected to +12V of the powersuppl.

Wiring requirements

AC220V power cords: it is recommended to use 3 × 1.0 (or above) square millimeter power cords to prevent electric leakage. Earth wires of the power cords shall be grounded.

Electric lock cable: use 2 × 1.0 (or above) square millimeter cables shall be used. The maximum cabling length shall not exceed 50 meters.

Rs485 communication lines: it is recommended to use 3 × 0.6 (or above) square millimeter twisted–pair communication lines. The maximum wiring length shall not exceed 1200 meters. Please add RS485 repeaters to extend the communication distance if the cabling length exceeds 1200 meters.

TCP/IP communication lines: please use standard network cables, and the maximum cabling length shall not exceed 100 meters.

Card reader cable: it is recommended to use 8 × 0.5 (or above) square millimeter cables. The maximum cabling length shall not exceed 80 meters.

Door magnetic switch or exit switch cable: it is recommended to use 2 × 0.5 (or above) square millimeter cables. The maximum cabling length shall not exceed 100 meters.

FAQ about access controller

Defects	Access control panel of accessories	Possibilities	Troubleshooting
Access controller fails when power–on	All POWER LEDs are not ON	Positive and negative power cords wrongly connected	Correctly connect the power cables again
	Low measured voltage	Low power supply voltage	Replace DC12V power supply for the access controller
The computer abnonmally communicatres with theaccess controller via Rs485 or fails to communicate with it	Communication LED (RX) remains OFF	Wrong serial port number (COM port number)	Select correct serial port number (COM port number)
	Communication LED (RX) remains OFF	Serial port damaged or occupied	Replace serial port (COM port)
	Communication LED (RX) remains ON	Line A and Line B of RS485 wrongly connected	Follow correct connection methods (Line A to Line A, and Line B to Line B)
	Commuincation LED (RX) flashes	Too many equipment controlled by the RS485 communication bus	Reduce the number of access controller or add signal amplifiers
	Communication LED (RX) flashes is OFF or remains ON	Rs485 communication converter damaged or mismatching	Use the specified RS485 converter
	Communication LED (RX) flashes is OFF or remains ON	Rs485 communication converter damaged or mismatching	Use the specified RS485 converter
	Communication LED (RX) is always ON or glimmers	Electric leakage of the computer or the power supply	Replace the electric leakage equipment and provide grounding connection for the access power supply
	Communication LED (RX) is always ON or glimmers	External strong current interference	Eliminate interference and provide grounding connection for the access power supply
The computer abnonmally communicatres with theaccess controller via TCP/IP or fails to communicate with it	Communication LED for Rj45 port (orange) is OFF	Improperly connected network cables or faulty communication lines	Properly connect or replace communication lines
	Communication LED for Rj45 port (orange) is OFF	Failure of the hub terminal	Replace the terminal or hub (router)
	Communication LED for Rj45 port (orange) is ON	IP conflicted or occupied	Reset the IP for the access controller (IP shall be within the same network segment with the computer)
	Communication LED for Rj45 port (orange) is ON	IP for the access controller is not within the same network segment with the computer	Reset the IP for the access controller (IP shall be within the same network segment with the computer)
Failtoopen the door by using the card reader	CARD LED for the access controller flashes while reading cards	Unauthorized and unregistered (no card is issued)	Register the card to obtain privilege (card issuing)
	CARD LED for the access controller flashes while reading cards	Expiry of privilege	Adjust the validity period of the card
	CARD LED for the access controller flashes while reading cards	Cables for WG0 and WG1 of the card reader wrongly connected	Correctly connect cables between the card reader and the controller
	CARD LED for the access controller flashes while reading cards	Too long cables for the card reader	Replace the cables or select card readers with stronger communication signals
	CARD LED for the access controller remains ON	Wrong connection of card reader cables or damage of the card reader	Check the cables and replace the card reader
	CARD indicator for the access controller remains ON or glimmers	Strong interference suffered by card reader cables	Replace the cables and avoid the source of strong interference (such as AC220 powerful electric wires and motor)
Invalid to press the exit switch	The access controller receives no signals from the exit switch	Abnormal lines	Check the cables and ensure the cables are connected properly
	The access controller receives signals from the exit switch	The exit switch sets time interval control function	Adjust the valid time intervals of the exit switch by software
The electric bolt lock and the magnetic lock work abnormally	The access controller works normally but the lock fails	COM port of the access controller unconnected to the power supply +12V	The COM terminal of the controller connects with power supply +12V, the NC terminal
	The access controller works normally but the lock fails	Wrong connection of NC port and NO port of the access controller	The COM terminal of the controller connects with power supply +12V, the NC terminal connects with the anode of the electric lock, and the cathode of the electric lock connects with GND of the power supply
	The access controller operates properly, but the lock doesn't work at its best state	Low voltage of the access controller or excessive length of the electric lock	Make sure that the operating voltage of the electric lock is within the specified range
	It takes too short or too long time to unlock the electric lock	Not applicable to adjusting the unlocking delay time	Adjust the unlocking delay time by managing the software
	The access controller sounds an alarm message that the electric lock remains ON	Fire alarm or smoke alarm	Identify the alarm source and clear the alarm
	The access controller works normally but the electric lock remains ON	The access function is set as always ON	Disable the "Always On" function by software, or long press the exit switch for 5 seconds to disable to enable the "Always ON" function
The electric lock of the access controller works abnormally	High temperature of the electric lock or the electric lock often	The unlocking delay time is too long	The unlocking delay time of the electric lock is generally set as 0.5 second
	High temperature of the electric lock or the electric lock is often burned	Wrongly connect cables of the electric lock	The COM terminal of the controller connects with power supply +12V, the NC terminal connects with the anode of the electric lock,and the cathode of the electric lock connects with GND of the power supply
Abnormality of alarm extension panel	The power LED of the extension panel is OFF	Abnormal connection between the access controller and the alarm extension panel	Properly connect cables between the access controller and the alarm extension panel
	The extension panel cannot sound an alarm	Abnormal lines or disablement of alarm function	Check the input lines and signals, and check whether the alarm function is valid
	Frequent alarm prompts	Wrong connection of lines or improper parameter settings	Check the alarm input line, and identify the cause of alarm in the "Properties of the Access Controller" of the management system

Contact us if any more problems

Technical parameters:

- Product name:industrial grade 4-door 2-way access controller
- Size: 212*130*20mm
- Communication mode: TCP/IP (LAN and WAN) or RS485
- Extendable readers: 8 (Weigand 26034bit)
- Operating voltage:DC12V
- PCB color: green
- Software kit:all-in-one card management system,equipment search program
- Operating current: <500mA
- Number of doors controlled: 4
- Operating temperature: 0℃–60℃
- Records: 100K pcs
- Users (max): 26K cards
- Database: ACCESS and SQL