IOTZONE®

1 channel 485 relay module User Manual
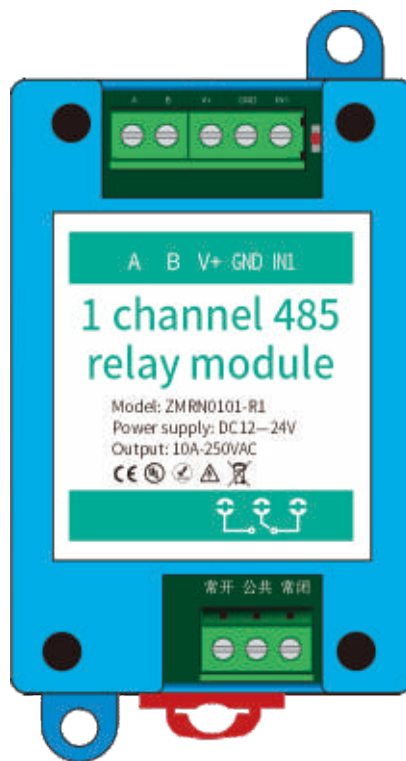
Zhenming Electronic Technology Co., Ltd

Product Introduction

1. Power supply voltage: 9-30V;

2. Output port: 1 independent 220V relay output;

3. Relay parameters: 10A 240VAC;

4. Standby power consumption: 0.8W, maximum power consumption: 3W;

5. Maximum voltage/current allowed in the output port: AC 220V/10A, more than 100,000 times;

6. Working temperature: -25~80 degrees Celsius;

7. Storage temperature: -40~85 degrees Celsius;

8. Storage humidity: 5%~95%RH;
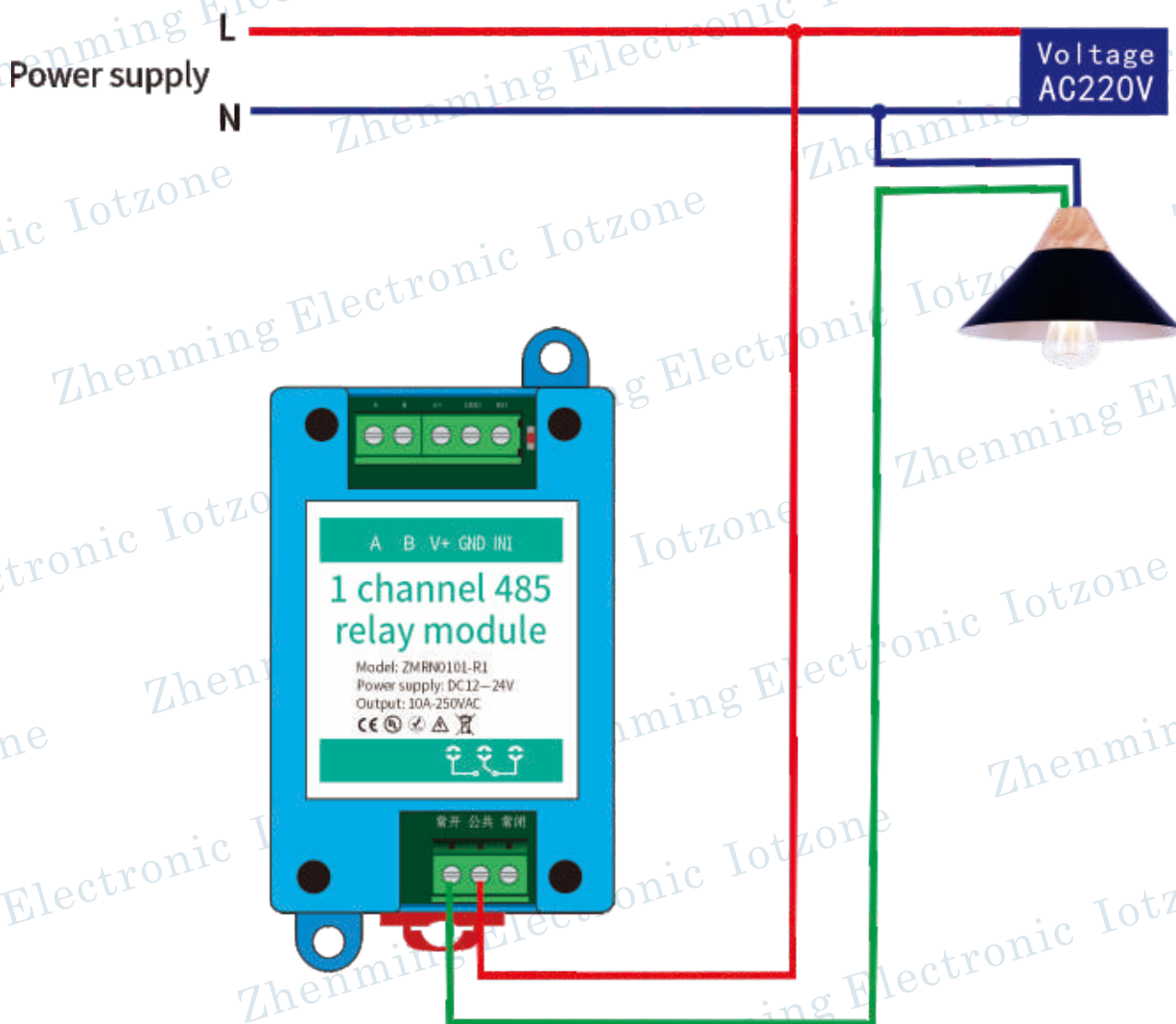
9. Shell size: 100×55×35mm

‹‹ Hardware connection ›

1.The basic hardware connection is as follows:

AC 220V equipment wiring method

2. Interface Introduction

There is 1 terminal block on the whole board, and 1 set of relay output. When the relay is closed, both terminal blocks are disconnected; In the open state of the relay, both terminal blocks are on. Relays are similar to switches ‹‹‹

There is an RS485 end under the PCB board and a power input end.

Operation use

1. MODBUS protocol

MODBUSRTU slave mode, support MODBUSRTU function code "03" (read data register); The host computer reads a 2-byte key-value register.

Address	Function code	Number of data bytes	Data	Efficacy
01	03	02	1、2	CRC16

Address: one byte, fixed at 01, can be changed;

Function code: one byte, only support function code 03, read data register

Number of data bytes: Two bytes

Data: Two bytes (16 bits), corresponding to the values of the 16 keys of the remote control

Check: CRC16;

Communication configuration: baud rate: 9600 Check bit: None Data bit: 8 bits Stop bit: 1 bit

1. 485 Communications

Communication Notes

Set the relay on or off

Address	Function code	Data address	The number of data reada	CRC validity
01	06	00　00	FF　00	CRC

Get the relay status

| Address	Function code	Data address	The number of data reada	CRC validity
01	01	00　00	00　01	CRC

Secondary development

Support the "ZMRN0101-Q1 Communication Protocol .pdf" of Zhenming Electronics, which can be obtained from our company.

Application occasions

Home Furnishings

Forget to turn off the lights when you go out, you don't have to turn back halfway. Lying in bed in winter, don't worry about the kitchen lights still on. You can turn on your home appliances anytime, anywhere, as you please.
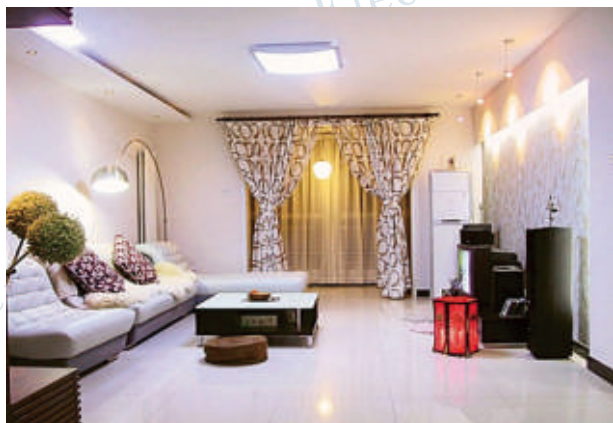
Office

You don't have to worry about turning off the water dispenser after work every day. Come to the office early to make a cup of coffee and start a new day of work. The company's lights, computers, water dispensers, etc. do not have to be in standby mode all the time, making the office smarter and more energy-efficient.

Industry

The machines in the workshop and the lights on the assembly line can be controlled reasonably by sitting in front of a computer, making it more energy-efficient.

Agriculture

The vegetables and fruits in the greenhouse need to be watered again. You don't need to run into the hot greenhouse, you can irrigate them at home.

Precautions for use

High voltage and strong current, please do not touch! Do not short-circuit! Please disconnect the power supply when wiring the controller! Please have a professional electrician perform the wiring operation!

After sales support

Three year warranty

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