



# Z-A0800

Product Application Manual

Industrial IoT empowers the edge

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## 1 .Features

- DC12-24V Wide-voltage power supply, over-current and over-voltage anti-reverse connection lightning protection
- power supply indication
- High-speed magnetic isolation RS485 communication
- Communication rate 20 Hz
- Support standard modbus protocol
- standard 35 mm Rail installation
- size 120 mm\*70mm\*41mm
- Built-in watchdog, refuse to crash
- All brand new original high-quality power chips, high speed ADI Magnetic isolation, high precision low temperature drift TI Benchmark, ARMM0 Processor, brand-new Jinshengyang isolated power supply and imported original op amp, carefully selected materials, built-in watchdog, refuse to crash.

## 2 .Product Features

● **-25MA Current input:**Resolution 0.01MA, Supports two-wire, three-wire, and four-wire current sensors

● **-10V Voltage input:**Resolution 0.01V, input resistance 1 M

**ADC:** 12 Bit, 0.2%TI Voltage reference

**Low pass parameters:**Collect current/voltage/thermocouple/weighing, etc. Low-pass parameters can be set 0-100,default 0, The more setting data

The larger the result, the larger the filter, which is suitable for data collection with relatively large fluctuations

**parameter settings:**Provides built-in software to set parameters such as baud rate, device address, etc.; all set parameters are saved after power-off

**reset:**When the baud rate setting of the system is forgotten or caused by other reasons RS485 Can't connect to the device, you can open the collector to find J1 The terminal should be short-circuited before power-on, and then disconnected after power-on, and the factory settings will be restored 9600-The communication mode without verification is not saved, and the device parameters need to be reset before saving

### Serial port RS485:

Support baud rate: 2400, 4800, 9600, 19200, 38400, 57600, 115200 No parity, odd parity, even parity, default 9600-8-1;

**RS485 supply** 120R Matching resistance, not connected by default, if needed, you can disassemble the collector to find J2 Jumper cap hand

Mobile access

## 3 .Interface Description

**VCC:** power supply 12-24V GND: Power ground

485-A: 458-A

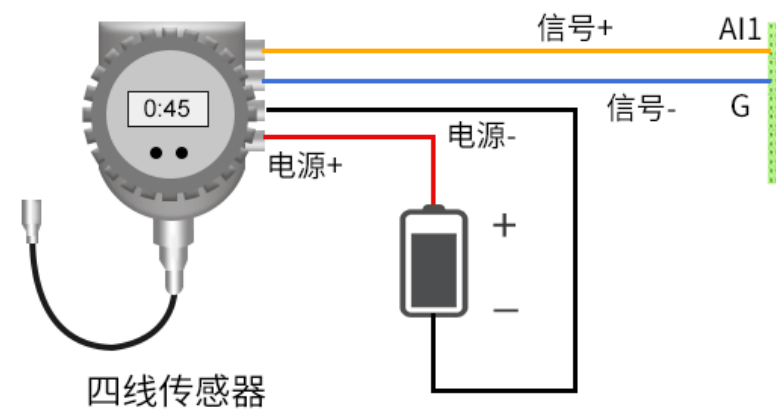
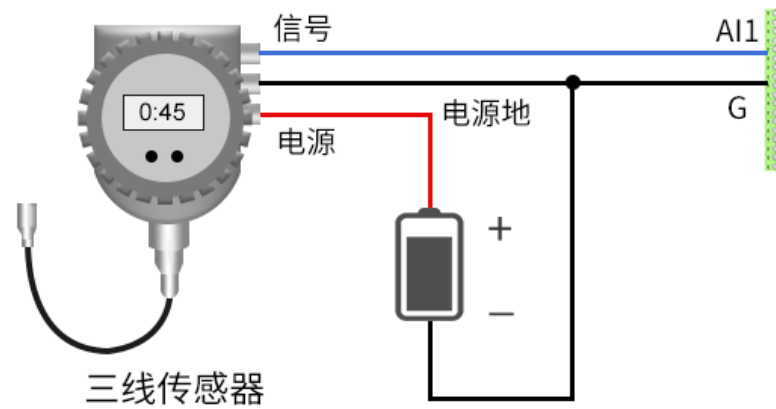
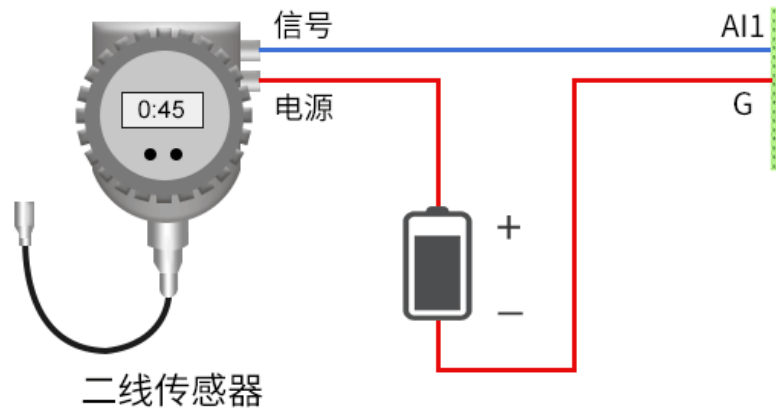
485-B: 458-B

**AI1+ ~ AI8+:**Current input positive (differential input, both positive and negative must be connected) / voltage input positive

**AI1- ~ AI8- :**Current input negative (differential input, Both positive and negative must be connected)/voltage input negative (actually shared with the power ground ground)

## 4 .Wiring

4 ~20mA Current input:



## 5 .Register address description

### Current input:

project	parameter
Register address range	3 0 0 6 5 ~30072( 0 x0040~0x0047)
function code	0 3

Reading 0 road 0 1 0 3 0 0 4 0 0 0 0 1 8 5 DE

Reading 1 road 0 1 0 3 0 0 4 1 0 0 0 1 D4 1 E

Reading 2 road 0 1 0 3 0 0 4 2 0 0 0 1 2 4 1 E

Reading 3 road 0 1 0 3 0 0 4 3 0 0 0 1 7 5 DE

Reading 4 road 0 1 0 3 0 0 4 4 0 0 0 1 C4 1 F

Reading 5 road 0 1 0 3 0 0 4 5 0 0 0 1 9 5 DF

Reading 6 road 0 1 0 3 0 0 4 6 0 0 0 1 6 5 DF

Reading 7 road 0 1 0 3 0 0 4 7 0 0 0 1 3 4 1 F

Read all 0 1 0 3 0 0 4 0 0 0 0 8 4 5 D8

### Voltage input:

project	parameter
Register address range	3 0 0 9 7 ~30104( 0 x0060~0x0067)
function code	0 3

Reading 0 road 0 1 0 3 0 0 6 0 0 0 0 1 CRC

Reading 1 road 0 1 0 3 0 0 6 1 0 0 0 1 CRC

Reading 2 road 0 1 0 3 0 0 6 2 0 0 0 1 CRC

Reading 3 road 0 1 0 3 0 0 6 3 0 0 0 1 CRC

Reading 4 road 0 1 0 3 0 0 6 4 0 0 0 1 CRC

Reading 5 road 0 1 0 3 0 0 6 5 0 0 0 1 CRC

Reading 6 road 0 1 0 3 0 0 6 6 0 0 0 1 CRC

Reading 7 road 0 1 0 3 0 0 6 7 0 0 0 1 CRC

Read all 0 1 0 3 0 0 6 0 0 0 0 8 CRC



## 6 .Update history

2 0 2 1 /6/23

Establish

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Chengdu Zongheng Intelligent Control Technology Co., Ltd.

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## 7. Contact information

Company: Chengdu Zongheng Intelligent Control Technology Co., Ltd.

Address: Huafu Avenue, Shuangliu District, Chengdu City, Sichuan Province 5 9 9 No

URL: [www.iotrouter.com](http://www.iotrouter.com)

telephone: 0 2 8 -83268936

