

H2S SENSOR

RY-H2S

MANUAL



INTRODUCTION

H₂S sensors are H₂S and O₂ that undergo corresponding redox reactions at the working and counter electrodes and release charges to form a current. The current is proportional to the concentration of hydrogen sulfide. The level of hydrogen sulfide can be determined by testing the current.

APPLIACATION

This product is widely used in industrial, underground and environmental protection for hydrogen sulfide detection.

FEATURES

- ▲Low power consumption
- ▲High accuracy
- ▲High sensitivity
- ▲Wide linear range
- ▲Strong anti-interference ability
- ▲Excellent repeatability and stability

TECHNICAL SPECIFICATION

- Detection range: 0-100ppm maximum range 5000 ppm
- Sensitivity: $(0.8 \pm 0.15) \mu A / ppm$
- Reproducibility: output signal $\pm 2\%$
- Response time: $\leq 30s$
- Signal attenuation: $\leq 2\% / month$
- Zero drift :0.2ppm (clean air)
- Temperature range: $-20 \sim +50 \text{ }^\circ\text{C}$
- Temperature drift : $\leq 0.5 ppm (20-50 \text{ }^\circ\text{C})$
- Humidity range: $\leq 95\% RH$
- Pressure range: 90-110kpa
- Recommended storage temperature: $0-20 \text{ }^\circ\text{C}$
- Storage period: 6 months
- Expected service life > 24 months
- Product weight: About 200g
- Shell size: 140mm x 30mm

INSTALLATION & USE

1.Choice of installation location.

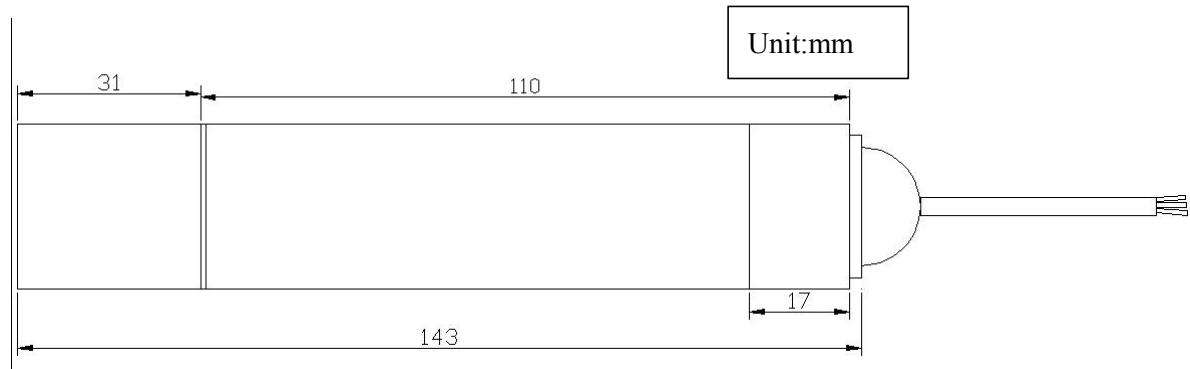
This product can be installed indoors and outdoors, and away from high-power electrical equipment to prevent interference.

2.Fixed way

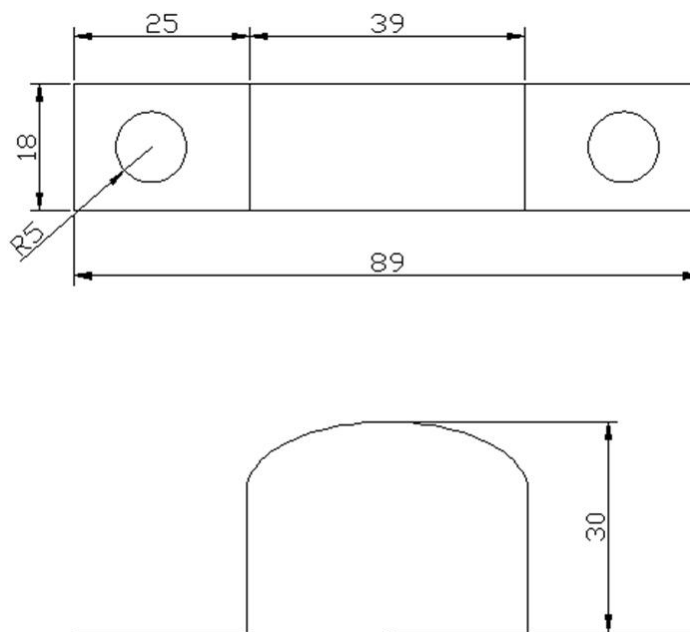
U-shaped clip,To test whether the data collection is normal after fixing the product on the mounting bracket or indoor wall. If it is abnormal, please check whether the cable plug is connected well.

SIZE

1. Sensor size



2. U-shaped clip



COMMUNICATION PROTOCOL

Communication specification

Baud rate: 9600

Data bit: 8

Stop bit: 1

Check bit: None

Flow control: None

Unified format of data package

(XX: slave station No. 0x01-0xff; crclo crchi: CRC check code low byte first, high byte last)

Write station number command

Host send command format:

Device address Function code Start register address No. of registers Data length
Data CRC check

xx 10 0001 0001 02 00xx CRCloCRChi (XX=0X01-0XFF)

Slave response command format:

Device address Function code Start register address No. of registers CRC check
xx 10 0001 0001 CRCloCRChi

Example:

Command 00 10 00 01 00 01 02 00 33 EA 04

Respond 00 10 00 01 00 01 51 D8

Read station number command (fixed command)

Host send command format:

Device address Function code Start register address No. of registers CRC check
00 03 0001 0001 CRCloCRChi

Slave response command format:

Device address Function code Data length Data CRC check
00 03 02 00xx CRCloCRChi (XX=01-ff)

Example:

Command 00 03 00 01 00 01 D4 1B

Respond 00 03 02 00 FF C5 C4

Read station number command

Host send command format:

Device address Function code Start register address No. of registers CRC check
xx 03 0000 0001 CRCloCRChi

Slave response command format:

Device address Function code Data length Data CRC check
xx 03 02 00yy CRCloCRChi

Example:

Command FF 03 00 00 00 01 91 D4

Respond FF 03 02 02 08 91 36

Note: H2S value=02 08 (hexadecimal) = 520/10=52 (Decimal) ppm

WARRANTY & SERVICE

Warranty commitment: the warranty period is 12 months from the delivery period (except for the product problems caused by the failure to operate according to the corresponding technical requirements or other human behaviors).

After sales commitment: users can consult relevant technical problems by phone and get clear solutions. If it is a quality problem, it can be returned to the factory for maintenance or replacement.

Service Phone: 0310-8033736