

H2S SENSOR

RY-CH2S

MANUAL



INTRODUCTION

H2S sensor is that H2S and O2 undergo a corresponding redox reaction at the working electrode and the counter electrode and release a charge to form a current. The current is proportional to the concentration of hydrogen sulfide, and the level of hydrogen sulfide can be determined by measuring the current.

TECHNICAL SPECIFICATION

- Detection range: 0-100ppm maximum range 5000 ppm
- Sensitivity: $(0.8 \pm 0.15) \mu\text{A} / \text{ppm}$
- 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: $\leq 0.5 \text{ ppm}$ ($20 \sim 50 \text{ }^\circ\text{C}$)
- Humidity range: $\leq 95\%$ RH
- Pressure range: $90 \sim 110\text{KPa}$
- Storage temperature: $0 \sim 20 \text{ }^\circ\text{C}$ recommended
- Storage period: 6 months
- Expected service life: > 24 months
- Product weight: about 200g
- Case size: 140mm x 30mm

COMMUNICATION PROTOCOL

Communication specifications

Baud rate: 9600

Data bits: 8

Stop bit: 1

Check digit: None

Flow control: None

Unified packet format

(XX: slave station number 0X01-0XFF; CRClo CRChi: CRC check code low byte first, high byte second)

Write station number command

The format of the command sent by the host:

Device address function code start register address register number 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 register number CRC check

Xx 10 0001 0001 CRCloCRChi

Example:

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

Reply 00 10 00 01 00 01 51 D8

Read station number command (fixed command)

The format of the command sent by the host:

Device address function code start register address register number 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

Reply 00 03 02 00 FF C5 C4

Read data command

The format of the command sent by the host:

Device address function code start register address register number 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

Reply FF 03 02 02 08 91 36

Note: H2S value = 02 08 (16 binary) = 520/10 = 52 (10 binary) ppm

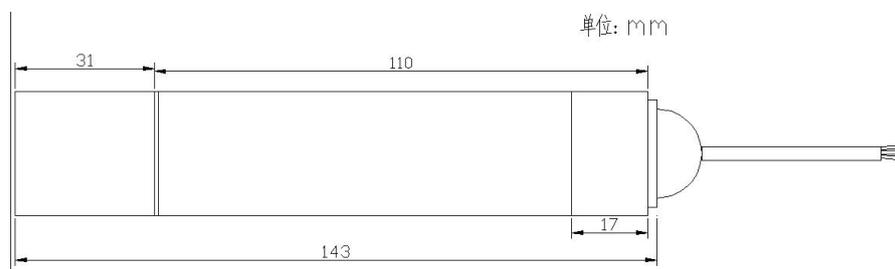
INSTALLATION & USAGE:

Selection of installation location. This product is installed in indoor high-rise buildings and away from high-power electrical equipment to prevent interference.

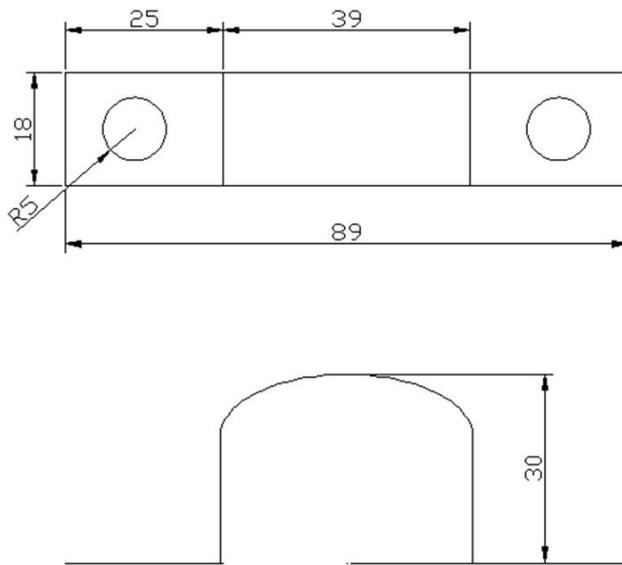
PRECAUTIONS & MAINTENANCE:

U-shaped clip, place the product fixed on the installation rack or indoor to test whether the data collection is normal, if it is not normal, please check whether the cable plug is connected well.

Sensor dimension drawing:



U-shaped clip size drawings:



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