

Wall Mount Carbon Monoxide Sensor



Features

- User selectable 0-10Vdc or 4-20mA output
- Up to 5 year life time
- Robust housing

Specification

Ranges:

GS-S-CO-W-K 0 to 100ppm

GS-S-CO-W-P 0 to 1000ppm

Output signals (jumper selectable):

0-10Vdc

4-20mA

Modbus RS485 19200bps, 15KV antistatic protection

Power supply:

Voltage output 24Vac/dc, $\pm 10\%$

Current output 24Vdc only, $\pm 10\%$

Consumption 2.8W

Sensor life 5 years, typical

Response time Within 60 seconds

Accuracy $< 1\text{ppm}$ @ 25°C

Stability $\pm 5\%$ (over 900 days)

Stabilization time 1 Hour

Environmental:

Operational:

Temp 0 to 50°C

RH 0 to 99% non-condensing

Storage :

Temp 10 to 50°C

RH 10 to 70% non-condensing

CE Conformity CE Marked

Housing dimensions:

Housing 100 x 80 x 50mm

Probe 69 x 26mm

Housing material ABS

Protection IP30

Country of origin China

Product Codes

GS-S-CO-W-K

Carbon Monoxide sensor, 0-100ppm selectable 0-10Vdc or 4-20mA output

GS-S-CO-W-P

Carbon Monoxide sensor, 0-1000ppm selectable 0-10Vdc or 4-20mA output



Please Note:

Current versions are NOT loop powered and will require a common 0V connection.

Technical Overview

A user selectable 0-10Vdc, 4-20mA or optional Modbus output is available with the GS-S-CO-W range. Using a robust long life electrochemical Carbon Monoxide sensor, the GS-CO-S-W is ideal for many applications including underground parking, loading bays and warehouses.

Installation

1. Select a location on a wall of the controlled space which will give a representative sample of the prevailing room condition.

Avoid sitting the sensor in direct sunlight, near diffusers and steam sources.

2. Unscrew and remove the front panel from the base.
3. Using the base as a template mark the hole centres (100mm) and fix to the wall with suitable screws. The probe must be pointing downwards.
4. Feed cable through the knockout in the base of the housing and terminate the cores at the terminal block. Install wiring into terminal blocks as required.
5. Select output type, 0-10Vdc or 4-20mA the default is 0-10Vdc. Do **not** adjust the potentiometers W1 & W2, as this will void warranty.
6. Ensure that the supply voltage is within the specified tolerances.
7. Replace the front cover to the base plate, and tighten the screws.
8. Power the unit, pre-commissioning checks can be made after 6 minutes. Full commissioning should not be carried out for at least an hour.
9. It is recommended that screened cable be used and that the screen should be earthed at the controller only. Care should be taken not to lay control signal wiring in close proximity to power or other cables which may produce significant electromagnetic noise.

Jumper Settings

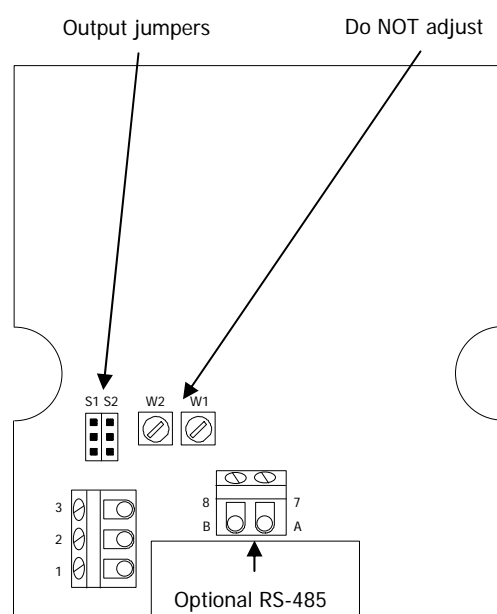
0-10Vdc



4-20mA



Connections



Terminals

- | | |
|---|--------------------------------------|
| 1 | 24V (see below) |
| 2 | 0V |
| 3 | Selectable output, 0-10Vdc or 4-20mA |
| 7 | A (TX+) RS 485 |
| 8 | B (RX-) RS 485 |

Note:

Voltage output

This can be supplied with 24Vac/dc.

Current output

If using in current output mode, the sensor must only be used with a 24Vdc supply. The sensor may be damaged if supplied with AC.

When using current output mode they are **NOT** loop powered and will require a common 0V connection.

Trend Scaling

IQ1xx and early IQ2x series (without type 5, characterise)

0-10Vdc	4-20mA
(0 to 100ppm)	
Brange: -100	Brange: -150
Trange: 100	Trange: 100
Upper: 100	Upper: 100
Lower: 0	Lower: 0
Exponent: 3	Exponent: 3

(0 to 1000ppm)	
Brange: -1000	Brange: -15000
Trange: 1000	Trange: 1000
Upper: 1000	Upper: 1000
Lower: 0	Lower: 0
Exponent: 4	Exponent: 4

Later IQ2x series and IQ3 (with type 5, characterise)

0-10Vdc	4-20mA
(0 to 100ppm)	
Upper: 100	Upper: 100
Lower: 0	Lower: 0
Exponent: 4	Exponent: 4
Points Used: 2	Points Used: 2
I1: 0	I1: 4
O1: 0	O1: 0
I2: 10	I2: 20
O2: 100	O2: 100

0-10Vdc	4-20mA
(0 to 1000ppm)	
Upper: 1000	Upper: 1000
Lower: 0	Lower: 0
Exponent: 4	Exponent: 4
Points Used: 2	Points Used: 2
I1: 0	I1: 4
O1: 0	O1: 0
I2: 10	I2: 20
O2: 1000	O2: 1000