

## GS-S-CO-W

### Wall Mount CO Detector with 0-10Vdc/4-20mA Output



#### Features:

- 5 Year sensor life time
- Accurate and reliable
- Robust housing

#### Technical Overview

The GS-S-CO-W range of Carbon Monoxide sensors are available with a 0-10Vdc, 4-20mA or Modbus output.

Using a robust long life electrochemical Carbon Monoxide sensing element, the output measuring ranges are 0-100ppm or 0-1000ppm, making the GS-S-CO-W is idea for many applications including underground parking, loading bays and warehouses.

## Specification:

Ranges:	GS-S-CO-W-K	0 to 100ppm
	GS-S-CO-W-P	0 to 1000ppm
Output signals:		
	0-10Vdc	
	4-20mA	
	Modbus	RS485 19200bps, 15KV antistatic protection
Power supply:		
	Voltage output	24Vac/dc, ±10%
	Current output	24Vdc only, ±10%
Consumption		2.8W
Sensor life		5 years, typical
Response time		Within 60 seconds
Accuracy		<1ppm @ 25°C (77°F)
Stability		±5% (over 900 days)
Stabilization time		1 Hour
Environmental:		
	Operational:	
	Temp	0 to 50°C (32 to 122°F)
	RH	0 to 99% non-condensing
	Storage:	
	Temp	10 to 50°C (50 to 122°F)
	RH	10 to 70% non-condensing
CE Conformity		CE Marked
Housing dimensions:		
	Housing	100 x 80 x 50mm (3.94 x 3.15 x 1.1")
	Probe	69 x 26mm (2.72 x 1.02")
Housing material		ABS
Protection		IP30
Country of origin		China

## Part Codes:

<b>GS-S-CO-W-K</b>	CO sensor, 0-100ppm, 0-10Vdc or 4-20mA output
<b>GS-S-CO-W-P</b>	CO sensor, 0-1000ppm, 0-10Vdc or 4-20mA output
<b>GS-S-CO-W-K-M</b>	CO sensor, 0-100ppm, Modbus output
<b>GS-S-CO-W-P-M</b>	CO sensor, 0-1000ppm, Modbus output



The products referred to in this data sheet meet the requirements of EU Directive 2004/108/EC

## Installation:



Antistatic precautions must be observed when handling these sensors. The PCB contains circuitry that can be damaged by static discharge.

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 (3.94")) 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. Do **not** adjust the potentiometers, as this will void warranty.
6. Set jumper links according to output type required (see below for jumper details).
7. Ensure that the supply voltage is within the specified tolerances.
8. Replace the front cover to the base plate, and tighten the screws.
9. Power the unit, pre-commissioning checks can be made after 6 minutes. Full commissioning should not be carried out for at least an hour.
10. 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:

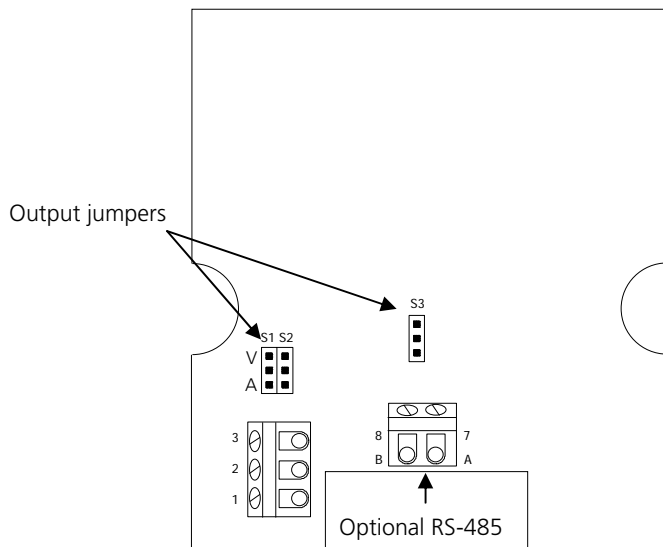
0-10Vdc:



4-20mA:



## Connections:



### Terminals

1. 24V (see below)
2. 0V
3. 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.

Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

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