# GS-S-CO-LED

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# Wall Mount Carbon Monoxide Detector with LED Indication and Relay Output



## **Features**

- User selectable relay output detection levels
- LED indication on CO levels
- Real time CO levels with measuring range of 0 to 500ppm

# Specification

Range 0 to 500ppm

Output signals:

Relay Dry contact 24V @ 2A

Modbus RS485 19200bps, 15KV antistatic protection

Power supply 18 to 38Vac/dc

Consumption 2.5W

Sensor life 5 years, typical

Response time <5 minutes, for 90% step change

Stabilization time:

First time 36 Hours Operational 10 Minutes

LED's See page 2 for information

Environmental:

Operational: Temp

0 to 70°C

RH 0 to 95% non-condensing

Storage:

Temp  $-40 \text{ to } +70^{\circ}\text{C}$  CE Conformity CE Marked

Housing:

Material ABS

Dimensions 100 x 80 x 28mm

Protection IP30 Country of origin China

# **Product Codes**

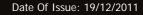
# GS-S-CO-LED

Carbon Monoxide detector with LED indication and relay output

#### GS-S-CO-LED-M

Carbon Monoxide detector with LED indication, relay output and RS484 output





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# **Technical Overview**

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The GS-S-CO-LED has 6 LED indicator lights which change colour based upon concentration levels. This allows for easy visual awareness of the CO levels, with either a relay or RS485 interface output.

#### Installation

 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.

- Gently remove the front cover from the back plate. The front plate is removed by pressing the tab at the top of the sensor with a flat bladed screwdriver. Gently slant the screwdriver and this will separate the front cover from the back plate.
- Using the base as a template mark the hole centres and fix to the wall with suitable screws. Alternatively the base plate can be mounted on to a conduit box or a standard recessed back box.
- 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, and push excess wire back into wall or junction box.
- 5. Select the relay switching point using jumpers J1 & J2.
- 6. Ensure that the supply voltage is within the specified tolerances.
- Replace the front cover to the base plate until a click is heard.
- 8. Power the unit, pre-commissioning checks can be made after 10 minutes. Full commissioning should not be carried out for at least 36 hours.
- 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.

## **LED Indication**

| 1st Green LED          | <20ppm  |
|------------------------|---------|
| 1st & 2nd Green LED's  | >20ppm  |
| 1st Yellow LED         | >50ppm  |
| 1st & 2nd Yellow LED's | >100ppm |
| 1st Red LED            | >200ppm |
| 1st & 2nd Red LED      | >300ppm |

# **Relay Jumper Settings**

|                   |          | Status  |         |
|-------------------|----------|---------|---------|
| Jumpers           | CO Value | ON      | OFF     |
| J1 = OFF J2 = OFF | 50ppm    | >55ppm  | <45ppm  |
| J1 = OFF J2 = ON  | 100ppm   | >105ppm | <95ppm  |
| J1 = ON J2 = OFF  | 300ppm   | >305ppm | <295ppm |
| J1 = ON J2 = ON   | 500ppm   | >505ppm | <495ppm |

The default jumper position is 100ppm

#### Connections

