



HGS 4-20 CO SENSOR

Budget CARBON MONOXIDE 0-150ppm 4-20mA DC SENSOR

Features

- CO cell complies with all relevant standards with international compliance.
- Easy Site Calibration with ZERO and GAIN potentiometers.
- Choice of wire entry: rear, bottom or top.
- 2 WIRE 4-20mA

Use

The HGS 4-20 is designed as a budget but fully compliant Car park Carbon Monoxide measurement sensor for connection to a CO Controller or BMS system. Hevac manufacture a compatible CO controller model HCP7 which can except 4 of the HGS 4-20mA sensors. The sensor is a 2 wire connection powered by **24vDC** and produces a 4 to 20mA DC signal over the measurement range of 0 to 150 ppm CO. The sensor is marked with a signed calibration date sticker. HEVAC recommend a 12 month recalibration period.

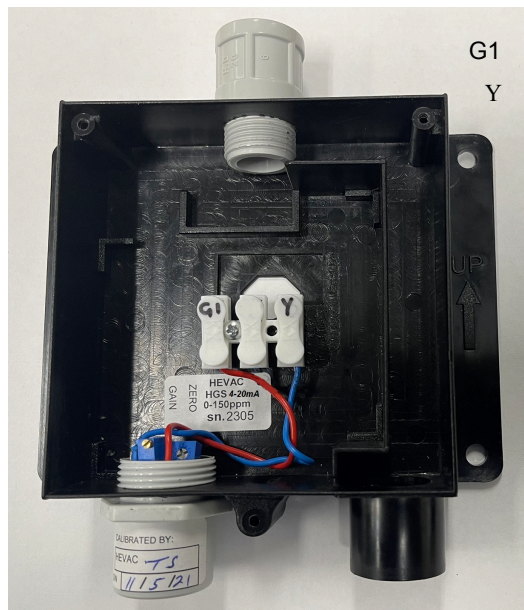
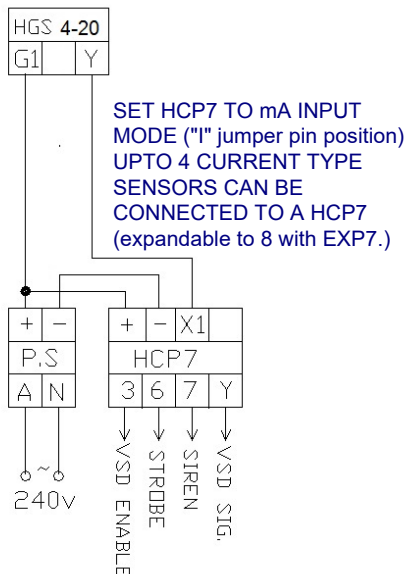


100% Australian Owned Company

Technical Data

General Specifications	Operating Voltage	24 Volts DC
	Power Consumption 17- 24 DC Volts	20 mA @ 150ppm
	Re Calibration Period	12 months
Environmental Conditions	Operation	
	Ambient Temperature	0...40oC
	Humidity	< 95 % RH (Non Condensing)
	Storage and Transport	
	Ambient Temperature	1...50oC
	Humidity	< 90 % RH (Non Condensing)
Product Standards	As per Australian standards.	
Weight	Including Packaging	150 grams
Housing	Colour	BLACK
	Material	ABS POLYCARBONATE
	UV Stabilised	YES
	Fire Retardant	YES
	Size	H122mm x W98mm x D35mm
	Mounting Method	Wall mount 4 screw locations

CONNECTION GUIDE



G1 24 Volt Supply Active **DC**
Y 4-20mA DC Signal Out



INSTALLATION

The standards call for the maximum distance between sensor locations not to exceed 25 meters with sensors mounted between 750mm & 1800mm above floor level

MAINTAINANCE

HEVAC RECOMMEND OUR CO SENSORS BE CALIBRATED EVERY 12 MONTHS FROM THE LAST CALIBRATION DATE BY QUALIFIED PERSONAL USING APPROPRIATE CALIBRATED TEST APPARATUS.

REQUIRED EQUIPMENT:

- 1 X CARBON MONOXIDE GAS BOTTLE CALIBRATED TO 0 ppm (STILL WITHIN USED BY DATE)
- 1 X CARBON MONOXIDE GAS BOTTLE CALIBRATED TO **100 ppm** (STILL WITHIN USED BY DATE)
- 1 X GAS BOTTLE REGULATOR C/W TUBING & FLOW HEAD TO FIT SENSOR HEAD
- 1 X ELECTRONIC VOLT METER SET TO DC mA SCALE

CALIBRATION STEPS :

TO CALIBRATE HEVAC HGS 4-20 SENSORS PLEASE FOLLOW THE FOLLOWING PROCEDURE.

- 1.) REMOVE SENSOR COVER AND LOCATE "ZERO" & "GAIN" POTENTIOMETERS ON THE CELL.
- 2.) USE THE CURRENT METER PROBES TO MEASURE THE SENSOR OUTPUT CURRENT.
CONNECT THE METER IN SERIES WITH THE "Y" OUTPUT TERMINAL.
- 3.) USING THE "0ppm" GAS BOTTLE & REGULATOR ATTACH FLOW HEAD SNUGGLY OVER CO SENSOR HEAD, LOCATED PROTRUDING BOTTOM LEFT OUT OF THE HGS HOUSING.
- 4.) OPEN THE REGULATOR ON THE "0ppm" GAS BOTTLE AND LEAVE TO SETTLE MEASUREMENT FOR 15 SECONDS, NOTE THE CURRENT OUTPUT.
- 5.) ADJUST THE "ZERO" POTENTIOMETER WITH A SMALL PHILIPS HEAD SCREW DRIVER UNTILL THE CURRENT O/P READS 4mA. (4-20mA O/P =0 to150 ppm with 0.106mA per 1ppm)
- 6.) CLOSE THE REGULATOR ON THE "0ppm" BOTTLE AND CONNECT THE "100ppm" GAS BOTTLE AND REGULATOR.
- 7.) OPEN THE REGULATOR ON THE "**100ppm**" GAS BOTTLE AND LEAVE FOR 30 SECONDS OR UNTIL MEASUREMENT SETTLES, NOTE CURRENT OUTPUT.
- 8.) ADJUST "GAIN" POTENTIOMETER SUCH THAT THE O/P CURRENT READS 14.66mA +/- 0.02 mA
- 9.) TURN OFF REGULATOR AND REPLACE SENSOR HOUSING LID.
- 10.) ATTACH A NEW CALIBRATION STICKER TO CELL or HOUSING SHOWING NEXT DUE CALIBRATION DATE AND IDENTIFICATION OF THE SERVICE TECHNICIAN & COMPANY.



EX FACTORY CALIBRATION CERTIFICATE

SENSOR MODEL NUMBER : HGS 4-20

THIS IS TO CERTIFY THAT THIS SENSOR HAS BEEN CALIBRATED IN ACCORDANCE WITH AUSTRALIAN STANDARDS AS1668.2 , AND IS REQUIRED TO BE SITE CALIBRATED IN 12 MONTHS FROM THE ABOVE DATE BY QUALIFIED PERSONAL.

Gas Type:	CO (Carbon Monoxide)
Sensor full scale :	150 ppm ~ 4 to 20 mA
Recommened Calibrated period	Every 12 months
Test CO Gas Cylinder Valid Until:	
Sensor Serial Number :	
Calibration Date :	
Technician Signature :	