WS-TPVRCO2 - Wall mount CO_2 /temperature/humidity sensor

0-10V outputs

Features

- Models for CO_2 plus temperature or CO_2 plus temperature and humidity
- CO_2 range 0 to 2,000 ppm
- Temperature range 0°C to +50°C
- Relative humidity 0 to 100%
- Outputs 0-10V
- Optional LEDs for CO_2 indication
- NDIR sensor for accuracy and stability
- Typical life 15 years

Description

The TPVRCO2 range of room sensors provide CO_2 measurement using NDIR technology and can be supplied with optional temperature and relative humidity outputs. Optional LEDs can be added to provide indication of the measured CO_2 concentration levels.

The CO_2 sensor employs Automatic Background Calibration (ABC Logic) to continuously adjust the calibration base to correct for changes in the background concentration levels and sensor drift. The CO_2 sensor calibration algorithm starts after the first 24hrs of operation and continuously monitors and automatically adjusts the sensor calibration over the life time of the product.

The ABC Logic self-calibration takes place over a 24 hour period of operation when the space being monitored is subjected to an unoccupied period and the background CO_2 concentration is subjected to the prevailing external level.

This transducer is ideal for direct connection to a PLC or can be used with AIC's extensive range of DC analog input instrumentation. Visit AIC's website (http://www.aicpl.com.au) for information about Amalgamated Instrument Co (AIC) instrumentation products.

Order Code

WS-TPVRCO2T - CO_2 plus temperature (no leds)
WS-TPVRCO2HT - CO_2 plus temperature plus humidity (no leds)
WS-TPVRCO2T/L - CO_2 plus temperature with front leds
WS-TPVRCO2HT/L - CO_2 plus temperature plus humidity with front leds
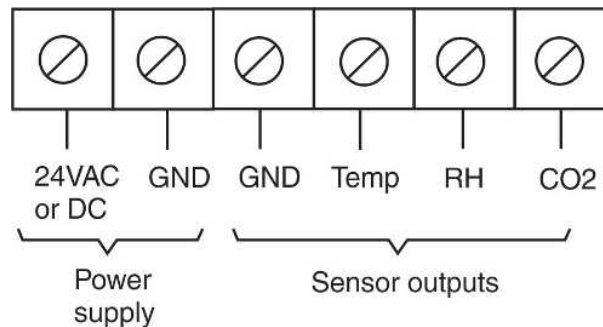
Specifications

Enclosure:	Flame retardant polycarbonate
Outputs:	0-10VDC for 0-2,000 ppm, 0°C to +50°C and 0 to 100% (optional)
Sensor	NDIR technology
Supply:	24VAC or DC $\pm$15%
Current consumption:	100mA
Dimensions:	80mm x 80mm x 29mm
Accuracy:	CO_2 $\pm$ 40ppm + 2% of reading
	Temperature $\pm$0.5°C
	Humidity $\pm$3% RH
Operating conditions:	0 to +50°C, 10 to 80% RH non condensing
Warm up:	2 mins operational, 10 mins peak accuracy
Optional LEDS:	Green (below 800 ppm)
	Yellow (800 to 1,500 ppm)
	Red (above 1,500 ppm)
Electrical connections:	Screw terminals (max 1mm^2 cable)
Sensor lifespan:	Typically 15 years

Applications

Ideal for Offices, Schools, Universities, Sports Halls, Leisure Centres and other public buildings.

Connection Details

Associated sensors

Other sensors in this range include:

- Carbon Monoxide (CO) sensors (0-5V, 0-10V or 4-20mA output versions available)

- Temperature sensors (indoor and outdoor types) with 4-20mA output

- Black bulb temperature sensors (Pt100, Pt1000, 4-20mA or 0-10VDC output versions available)

- Humidity and combined humidity/temperature sensors (0-10V or 4-20mA output versions available)

- Light sensors (indoor and outdoor types with 0-10V or 4-20mA output)

- Rain sensors

- Differential pressure sensors

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