CARBON DIOXIDE TRANSMITTER NDIR CO₂ Sensor with Universal Outputs in an Industrial Housing





The Series CDWP Carbon Dioxide Transmitter accurately monitors the CO2 concentration in industrial and indoor environments to help achieve energy savings. For increased sensor life and accuracy, a single-beam dual-wavelength non-dispersive infrared (NDIR) sensor is used to eliminate light source aging effects. This sensing technology provides the highest level of accuracy compared to Automatic Baseline Correction methods, which can unintentionally shift the calibration based on CO2 levels and barometric pressure conditions.

MODEL CHA	RT					
Example	CDWP	-05	W	-M4	-FC	CDWP-05W-M4
Series	CDWP					Carbon dioxide transmitter
Range		02 05 10				2000 PPM 5000 PPM 10000 PPM
Mounting			W H			Wall mount Suspended mount
Electrical Connection				C1 C5 M4 M6		Cable gland 1 to 6 mm cable Cable gland 5 to 10 mm cable M12 connection 4 to 6 mm cable M12 connection 6 to 8 mm cable
Option					FC	Factory calibration certificate

ACCESSOR	IES
Model	Description
A-CDWP-L A-CDWP-H	Replacement lid with filter material Suspended mount bracket

8 X Ø3/16 [4.76] 4 × 3/4 [19.05] 8 X Ø3/16 [4.78] 4 × 3/4 [19.05] 1-6 MM OR 5-10 MM CABLE GLAND (OPTIONAL 4-6 MM OR 6-8MM	SUSPENSION [110.32] Ø1/4 [6.35] BRACKET) 2-1/32 [51.59] 8 X Ø3/16 [4.76] 4-13/16 [122.23] [130.96]
	[19.05] CABLE GLAND J (OPTIONAL 4-6 MM OR 6-8MM

SPECIFICATIONS

Sensor: Single beam, dual-wavelength NDIR

Range: CO₂: 0 to 2000. 0 to 5000. or 0 to 10000 ppm (depending on model). Accuracy: CO2: ± 40 ppm ±3% of

reading.

Temperature Dependence: ±8 ppm/°C at 1100 ppm.

Non-Linearity: 16 ppm.

Pressure Dependence: 0.13% of reading per mm of Hg.

Response Time: 300 s (T63).

Temperature Limits: 32 to 122°F (0 to 50°C)

Humidity Limits: 10 to 95% RH (noncondensina).

Power Requirements: 16 to 35 VDC or 19 to 28 VAC.

Power Consumption: Average: 2 w; Peak: 3.75 w.

Output: Current: 4 to 20 mA (max. 500

Ω): Voltage: 0 to 5 VDC or 0 to 10 VDC (min. 500Ω).

Enclosure Rating: IP54.

Mounting Orientation: Vertically, with electrical connections points downward.

Weight: 26.24 oz (744 a). Agency Approvals: CE.

FEATURES/BENEFITS

- IP54 aluminum housing
- · Grav finish tested to withstand 168 hour salt spray test
- Single-beam dual-wavelength sensor automatically corrects for aging effects
- Measures unfiltered light intensity directly and eliminates error from incorrect assumptions of gas concentration in theoretical logic assumption methods
- Universal outputs to work with any building management system

APPLICATIONS

- Animal husbandry
- CO₂ refrigeration monitoring
- Mechanical room
- Greenhouses