



CDE/CWE Series

Environmental CO₂ Sensors Duct & Wall Mounting

The CDE/CWE Series is a non-dispersive infrared analyzer designed for measuring environmental CO₂ concentration in ventilation systems and indoor living spaces. Its measurement range of 0-2000 ppm makes it compliant with ASHRAE and other standards for ventilation control.

The CDE/CWE Series provides a user-selectable 4-20mA or 0-10VDC output. Microprocessor-based digital electronics and a unique self-calibration algorithm improves long-term stability and accuracy.

APPLICATIONS

- Control HVAC in response to occupancy—save energy by providing ventilation only as required
- Improve tenant comfort
- Facilitate compliance with ASHRAE 62.1-2004 standard for air quality

Microprocessor design reduces long-term drift and calibration requirements

- Non-dispersive infrared technology (NDIR) repeatable to ±20 ppm ±1% 0-2000 ppm range
- Innovative self-calibration algorithm
- 5-year calibration interval (recommended)
- Low ambient sensitivity
- Field-selectable 4-20mA/0-10VDC output

Demand control ventilation provides reduction in energy costs

- Improve comfort and facilitate compliance with ASHRAE 62.1-2004 standard for air quality
- Non-dispersive infrared technology (NDIR) for high accuracy and long term stability
- 1-year factory warranty from date of purchase

Revolutionary direct duct mounting design

- Integrated tube...eliminate need to install a separate pick-up tube
- Snap on face plate...no screws required
- NEMA 4 housing

ORDERING INFORMATION

DUCT MODELS:

CDE (No Options)

WALL MODELS:

(US or EU) CWE

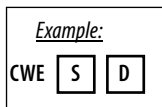


S = Standard
C = CE

(Temp Option)



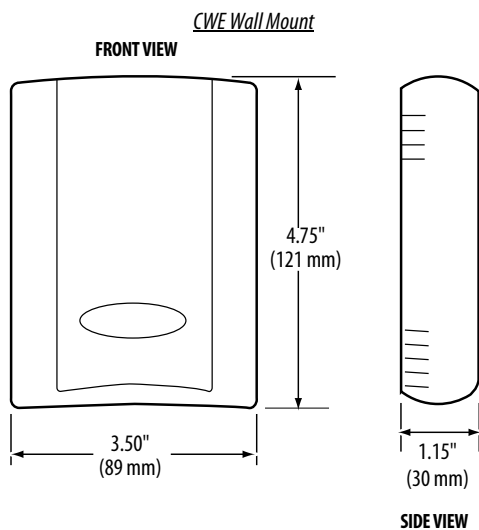
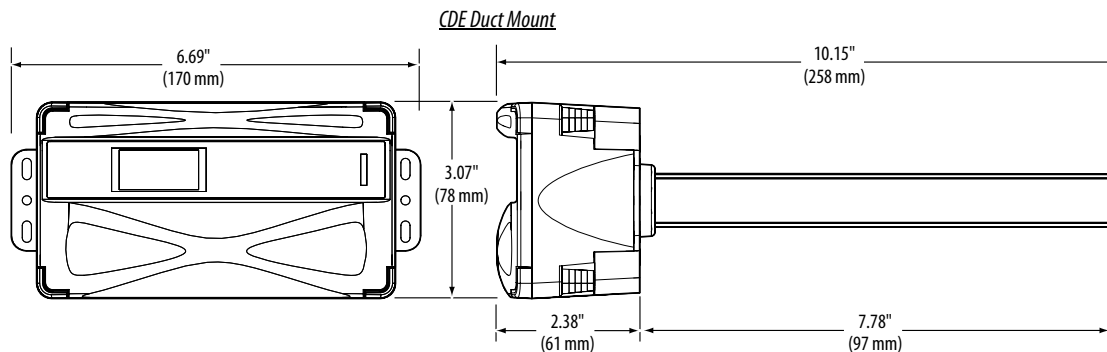
- B = 100R Platinum, RTD
- C = 1k Platinum, RTD
- D = 10k T2, RTD, Thermistor
- E = 2.2k, Thermistor
- F = 3k, Thermistor
- G = 10k CPC, Thermistor
- H = 10k T3, Thermistor
- J = 10k Dale, Thermistor
- K = 10k w/11k shunt, Thermistor
- M = 20k NTC, Thermistor
- N = 1800 ohm, Thermistor
- R = 10k US, Thermistor
- S = 10k 3A1B, Thermistor
- T = 100k, Thermistor



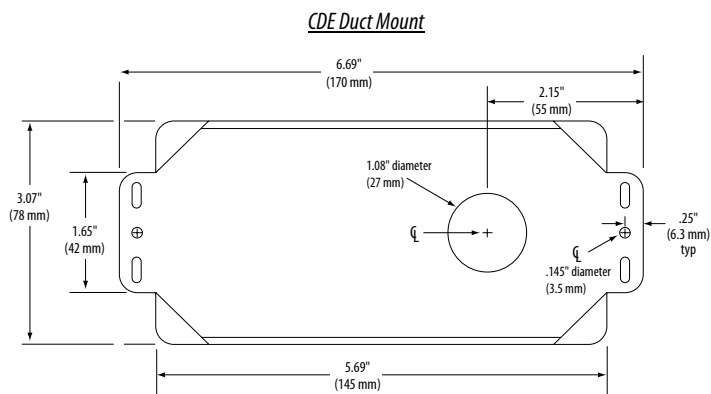
ACCESSORIES

Calibration kits, disposable gasses, handheld meters... See page 234

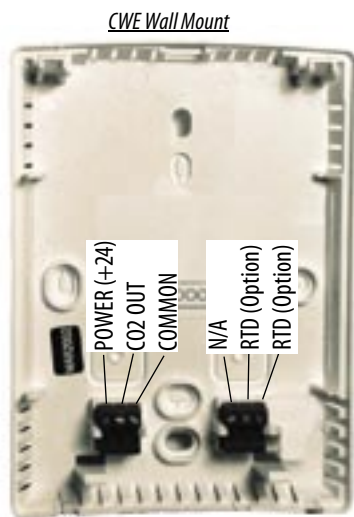
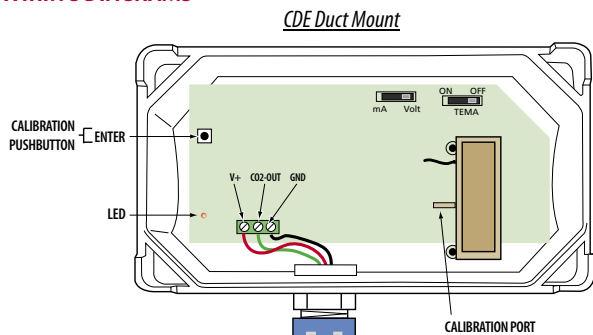
DIMENSIONS



MOUNTING DIMENSIONS



WIRING DIAGRAMS



SPECIFICATIONS

Input Voltage	20 to 30VDC, or 24VAC
Analog Output	4-20mA, (clipped and capped)/0-10VDC (selectable)
Sensor Current Draw	100mA Maximum
Operating Temperature Range	0° to 50°C (32° to 122°F)
Material	high impact ABS plastic
CO₂ Transmitter:	
Sensor Type	Non-dispersive infrared (NDIR), diffusion sampling
Measurement Range	0-2000 ppm
Accuracy	±30 ppm ±5% of measured value
Repeatability	±20 ppm ±1% of measured value
Response Time	<60 seconds for 90% step change

