

## CDE/CWE Series Environmental CO<sub>2</sub> Sensors Duct & Wall Mounting



The CDE/CWE Series is a non-dispersive infrared analyzer designed for measuring environmental CO<sub>2</sub> 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 up to 30% on energy by providing ventilation only as required
- Improve tenant comfort
- Facilitate compliance with ASHRAE 62-1989 standard for air quality

### Microprocessor design reduces long-term drift and calibration requirements

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

### Demand control ventilation provides up to 30% reduction in energy costs

- Improve comfort and facilitate compliance with ASHRAE 62-1989 standard for air quality
- Non-dispersive infrared technology (NDIR) for high accuracy and long term stability
- 1-year factory warranty from date of purchase

### ORDERING INFORMATION

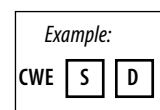
**DUCT MODELS:** (Connection tubing included)

**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  
 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



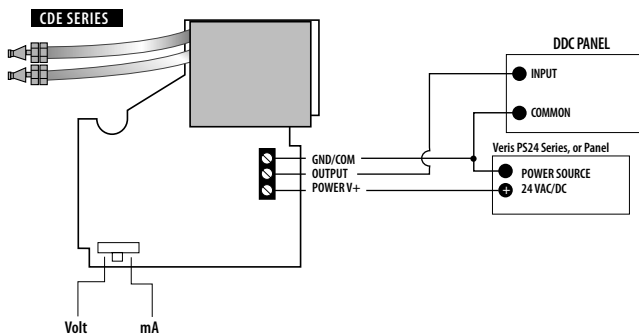
### ACCESSORIES

Calibration kits, disposable gasses, handheld meters...

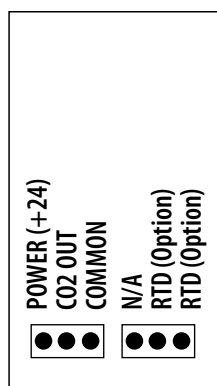
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WIRING DIAGRAMS

CDE Diagram

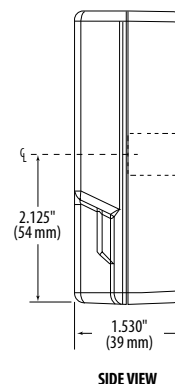
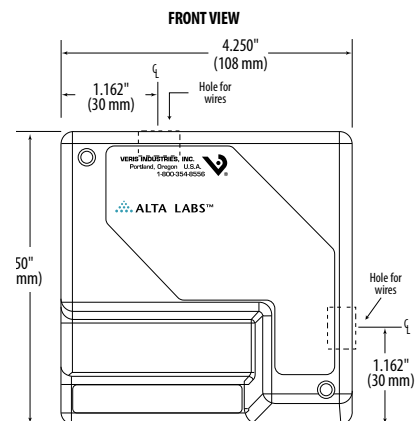


CWE Diagram

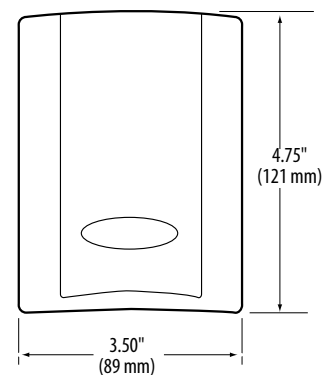


MOUNTING DIMENSIONS

CDE Series



CWE Series



SPECIFICATIONS

Input Voltage	24VAC, or 20 to 30VDC
Analog Output	0-10VDC, or clipped and capped 4-20mA (selectable)
Sensor Current Draw	100mA Maximum
Operating Temperature Range	10°C to 35°C/50°F to 95°F
Case Material	ABS high impact plastic
<i>Carbon Dioxide Sensor</i>	
Sensor Type	Non-dispersive infrared (NDIR), diffusion sampling
Measurement Range	0-2000 ppm
Accuracy	±75 ppm, ±2% of reading
Repeatability	±20 ppm
Response Time	<60 seconds for 90% step change
<i>Duct Pickup Tube</i>	
Type	Velocity pressure pickup