

CDE & CWE Series



SPECIFICATIONS

| | |
|---------------------------------|--|
| Input Power | Class 2; 20 to 30VDC/24AC 50/60Hz; 100mA max. |
| Analog Output | 4-20mA (clipped & capped)/0-10VDC (selectable) |
| Operating Temp Range | 0° to 50°C (32° to 122°F) |
| Operating Humidity Range | 0 to 95% RH noncondensing |
| Housing Material | High impact ABS plastic |
| Terminal Block Torque | CDE 0.5-0.6N-m (4.4-5.3 in-lbf) max. CWE 0.2N-m (2.0 in-lbf) max. |
| Terminal Block Wire Size | CDE 24-12 AWG (0.25-2.5mm ²) CWE 28-20 AWG (0.08-0.5mm ²) |
| Sensor Type | Non-dispersive infrared, diffusion sampling |
| Output Range | 0-2000 ppm |
| Accuracy | ±30 ppm ±2% of measured value* |
| Repeatability | ±20 ppm ±1% of measured value |
| Response Time | <60 seconds for 90% step change |

RTD/Thermistors in wall housings are not compensated for internal heating of product.
EMC Conformance: Low voltage directive 2006/95/EC & EMC directive 2004/108/EC.
EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper surge protection (EN 61000-6-1:2007 specification requirements).

* Measured at NTP

Note: Rough handling and transportation may cause a temporary reduction of CO₂ sensor accuracy. With time, the ABC function will tune the readings back to the correct accuracy range. The default tuning speed is limited to 30 ppm per week.

Field-Selectable 4-20mA/0-10VDC Output

FEATURES

- Microprocessor-based design increases accuracy and reduces installation time
- Non-dispersive infrared technology repeatable to ±20 ppm ±1% of measured value...high accuracy measurements
- Innovative self-calibration algorithm...easy to maintain
- 5-year calibration interval (recommended)
- Low ambient sensitivity
- Output 4-20mA/0-10V for flexible control system interface
- 3-year factory warranty from date of purchase

DESCRIPTION

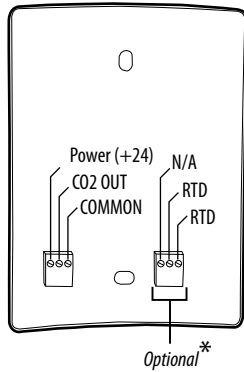
The **CDE** and **CWE** are non-dispersive infrared (NDIR) sensors designed for measuring environmental CO₂ concentration in ventilation systems and indoor living spaces. Their measurement range of 0-2000 ppm makes them compliant with ASHRAE and other standards for ventilation control

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

APPLICATIONS

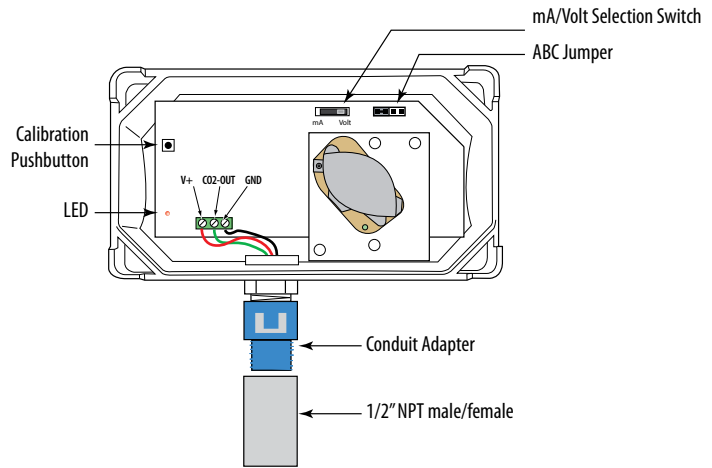
- Controlling ventilation in response to occupancy
- Facilitating compliance with ASHRAE 62.1 standard for air quality
- Office buildings, conference rooms, schools, retail stores, etc.

CWE Wall Mount



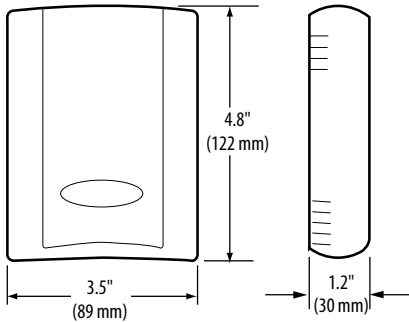
* Note: Connector blocks and headers for optional features are not included with non-option models.

CDE Duct Mount

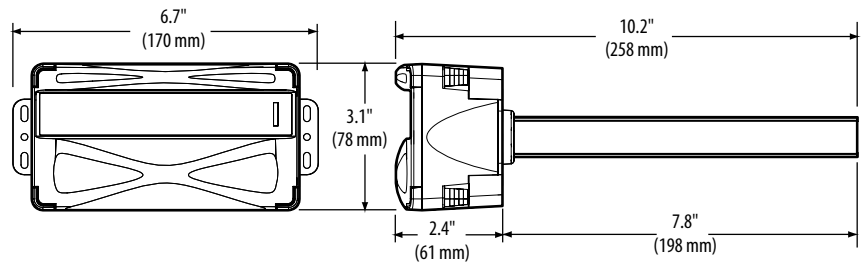


DIMENSIONAL DRAWINGS

CWE Wall Mount



CDE Duct Mount



ORDERING INFORMATION



Duct Mount

CDE (No Options)

Wall Mount, Temp. Option

Sensor Type

CWE



- SB = 100R Platinum, RTD
- SC = 1k Platinum, RTD
- SD = 10k T2, RTD, Thermistor
- SE = 2.2k, Thermistor
- SF = 3k, Thermistor
- SG = 10k CPC, Thermistor
- SH = 10k T3, Thermistor
- SJ = 10k Dale, Thermistor
- SK = 10k w/1k shunt, Thermistor
- SM = 20k NTC, Thermistor
- SN = 1800 ohm, Thermistor
- SR = 10k US, Thermistor
- SS = 10k 3A221, Thermistor
- ST = 100k, Thermistor
- SU = 20k "D" Thermistor
- SW = 10k T2 high accuracy, Thermistor
- SY = 10k T3 high accuracy, Thermistor
- SZ = 10k E1, Thermistor

Housing



- Blank = Cloud white
- B = Black

Example:

CWE SH B

Wall Mount, No Temp. Option

Housing

CWE



- Blank = Cloud white
- B = Black

Example:

CWE B

ACCESSORIES

Calibration kits and gases (AA01, AA26, AA27, AA28, AA29)
 Handheld air quality testers (1010, 1008, 770)
 Replacement covers for wall units (AA51, AA51B)
 Replacement cloud white wall housing (AA55)



1010



AA01



AA55



AA51/AA51B