

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

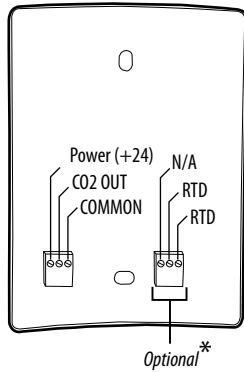
DESCRIPTION

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

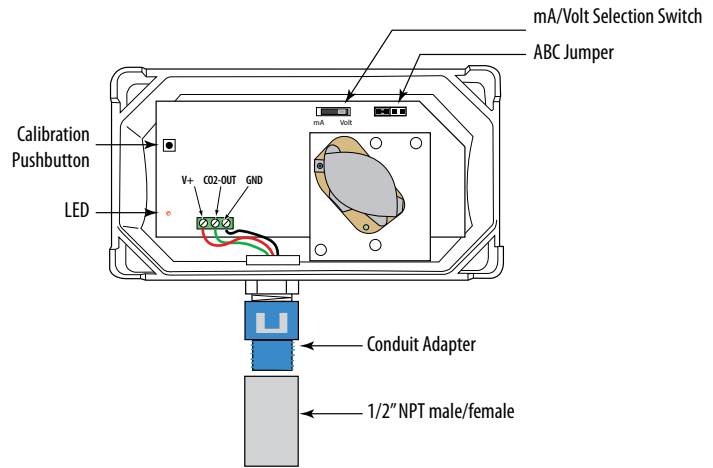
The **CWE/CDE Series** provides a user-selectable 4-20mA or 0-10VDC output for versatility. Microprocessor-based digital electronics & a unique self-calibration algorithm improves long-term stability & accuracy.

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.

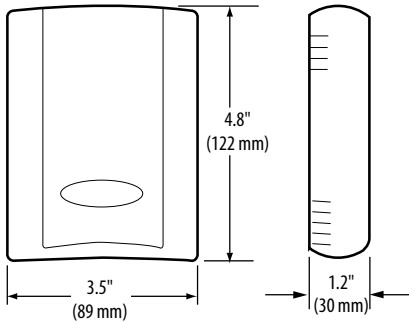


* Note: Connector blocks and headers for optional features are not included with non-option models.

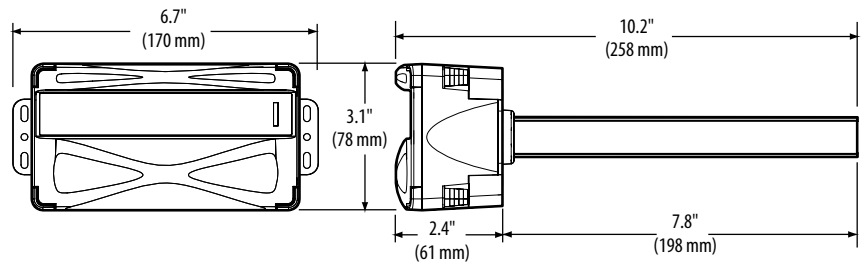


DIMENSIONAL DRAWINGS

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