FIELD-SELECTABLE 4-20mA/0-10VDC OUTPUT







CO₂ with optional resistive temperature output in a compact wall unit

Economy Wall and Duct CO₂ Sensors

The **CDE/CWE** are non-dispersive infrared (NDIR) analyzers designed for measuring environmental CO₂ concentration in ventilation systems and indoor living spaces. Their measurement range of 0-2000ppm 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 and a unique self-calibration algorithm improves long-term stability and accuracy.

APPLICATIONS

- Controlling ventilation in response to occupancy
- Facilitating compliance with ASHRAE 62.1-2004 standard for air quality
- Office buildings, conference rooms, schools, retail stores, etc.

Microprocessor design increases accuracy and reduces installation time

- Non-dispersive infrared technology repeatable to ±20 ppm ±1% of measured value
- Innovative self-calibration algorithm...easy to maintain
- 5-year calibration interval (recommended)
- Low ambient sensitivity
- Alarm relay with setpoint for direct ventilation control
- Output 4-20mA/0-10V for flexible control system interface
- 3-year factory warranty from date of purchase



SPECIFICATIONS

Input Power	20 to 30VDC/24AC; 100mA Maximum
Analog Output	4-20mA, (clipped and capped)/0-10VDC (selectable)
Operating Temperature Range	0° to 50°C (32° to 122°F)
Housing Material	High impact ABS plastic
Sensor Type	Non-dispersive infrared, diffusion sampling
Measurement Range	0-2000 ppm
Accuracy	± 30 ppm $\pm 5\%$ of measured value
Repeatability	± 20 ppm $\pm 1\%$ of measured value
Response Time	<60 seconds for 90% step change

EMC Conformance: EN 61000-6-3:2001 Class B, EN 61000-6-1:2001, EN 61000-3-2:2000, EN 61000-3-3:2001, EMC Test Methods: CISPR 22:1997 (Amended A1:2000, A2:2002) Class B, IEC 61000-4-2:2002, IEC 61000-4-3:2006, IEC 61000-4-4:2004, IEC 61000-4-5:2001, IEC 61000-4-6:2004, IEC 61000-4-8:2001, IEC 61000-4-11:2004.

EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper SURGE PROTECTION (EN 61000-6-1:2001 specification requirements).

NEW! All Products Meet CE Requirements

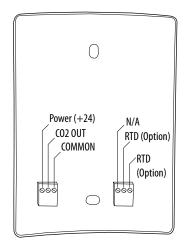


APPLICATION/WIRING DIAGRAMS

CALIBRATION **PUSHBUTTON**

LED

CWE Wall Mount



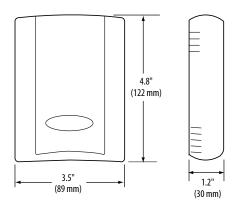
mA Volt V+ CO2-OUT GND

CDE Duct Mount

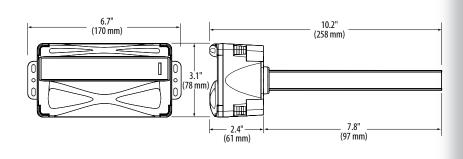
CONDUIT ADAPTER 1/2"NPT MALE/FEMALE

DIMENSIONAL DRAWINGS

CWE Wall Mount



CDE Duct Mount



ORDERING INFORMATION (\(\mathbf{E} \) all models



Duct Mount

CDE (No Options)

Wall Mount



SB = 100R Platinum, RTD

SC = 1k Platinum, RTD **SD** = 10k T2, RTD, Thermistor

 $\mathbf{SE} = 2.2k$, Thermistor

 $\mathbf{SF} = 3\mathbf{k}$, Thermistor

SG = 10k CPC, Thermistor

 $\mathbf{SH} = 10 \text{k T3}$, Thermistor

SJ = 10k Dale, Thermistor

SK = 10k w/11k shunt, Thermistor

SM = 20k NTC, Thermistor **SN** = 1800 ohm, Thermistor

SR = 10k US, Thermistor

SS = 10k 3A221, Thermistor

ST = 100k, Thermistor

ACCESSORIES

Calibration kits and gases...see page 218. Handheld meters...see page 208.



Example:

CW E SH