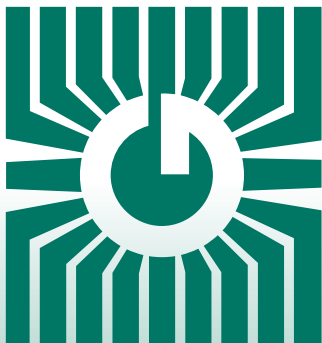
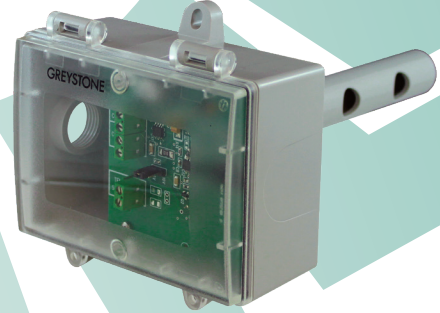


# GREYSTONE ENERGY SYSTEMS INC



## CARBON DIOXIDE TRANSMITTER CE Series



### Precision Carbon Dioxide Sensing

#### FEATURES:

- Room or Duct models available
- Dual wavelength NDIR
- Selectable analog outputs
- Optional temperature sensor

*Peace of mind  
through reliable  
air quality monitoring*

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM

# CE - CARBON DIOXIDE SENSOR

## FEATURES:

The CE series uses a highly accurate and reliable non-dispersive infrared (NDIR) sensor in an attractive, wall or duct mount enclosure to monitor return air CO2 levels for indoor applications. The compact dual wavelength CO2 sensor achieves excellent performance characteristics, including high accuracy and low power consumption to ensure stable long term operation. The CE features both 4-20 mA and voltage outputs (0-5 / 0-10 Vdc) for simple integration into any building automation system for the improvement of energy savings and to assure good indoor air quality. The device is also available with an optional resistive temperature sensor.

## SPECIFICATIONS:

CO2 Sensor ..... Dual wavelength non-dispersive infrared (NDIR)  
 Range ..... 0-2000 ppm  
 Accuracy .....  $\pm 50$  ppm + 3% of reading  
 Pressure Dependency ..... <1% of reading / kPa  
 Response Time ..... 2 minutes (T90)  
 Warm-up Time ..... 1 minute  
 Sensor Coverage Area ..... **Room:** 100 m<sup>2</sup> (1000 ft<sup>2</sup>) typical  
 Sensor Life Span ..... >10 years  
 Power Supply ..... 24 Vac/dc  $\pm 20\%$   
 (non-isolated half-wave rectified)  
 Consumption ..... 80 mA max @ 24 Vac, 160 mA max @ 24 Vac  
 Protection ..... Reverse voltage and transient protected  
 Output Signals ..... 4-20 mA, 0-5 Vdc, 0-10 Vdc  
 (field selectable)  
 Drive Capability ..... **Current:** 600 ohms max @ 24 Vdc  
**Voltage:** 10 Kohms min

Operating Conditions ..... -10 to 50°C (14 to 122°F),  
 0-90 %RH non-condensing  
 Storage Conditions ..... -30 to 70°C (-22 to 158°F),  
 0-85 %RH non-condensing  
 Wiring Conditions ..... Screw terminal block (14-22 AWG)  
 Enclosures ..... **Room:** ABS, UL94-V0, IP30 (NEMA 1)  
 84 mm W x 119 mm H x 29 mm D  
 (3.3" x 4.6" x 1.1")  
**Duct:** Polycarbonate, UL94-V0, IP65(NEMA 4X)  
 112 mm W x 117 mm H x 53 mm D  
 (4.4" x 4.6" x 2.1")  
**Duct Probe:** 152 mm L x 21.5 mm Diameter  
 (6" x 0.88")  
 Optional Temperature Sensor ..... Various RTDs or thermistors as a  
 2-wire resistance output  
 Approvals ..... CE, RoHS  
 Country of Origin ..... Canada

## PRODUCT SELECTION INFORMATION: DIMENSIONS:

MODEL	Product Description
<b>CERMC</b>	Room - Carbon Dioxide Sensor, Continental Enclosure
<b>CEDT</b>	Duct - Carbon Dioxide Sensor

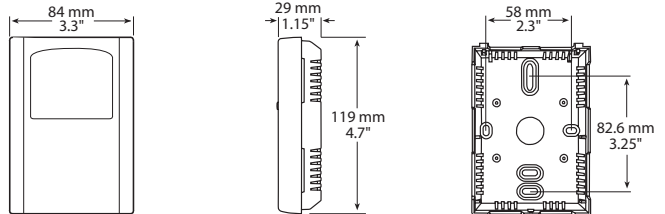
CODE	Enclosure (Not Available with Room Option)
<b>B</b>	Polycarbonate, with hinged & gasketed cover
<b>F</b>	Same as B, with thread adapter & cable gland fitting

CODE	Temperature Option
<b>00</b>	No Temperature Selected
<b>02</b>	100 $\Omega$ Platinum RTD
<b>05</b>	1801 $\Omega$ Thermistor
<b>06</b>	3000 $\Omega$ Thermistor
<b>07</b>	10,000 $\Omega$ Thermistor, Type 3
<b>08</b>	2.252 K $\Omega$ Thermistor
<b>12</b>	1000 $\Omega$ Platinum RTD
<b>13</b>	1000 $\Omega$ Nickel RTD
<b>14</b>	10,000 $\Omega$ Thermistor, Type 3 with 11K Shunt
<b>20</b>	20,000 $\Omega$ Thermistor
<b>24</b>	10,000 $\Omega$ Thermistor, Type 2
<b>59</b>	10,000 $\Omega$ @ 25°C, $\pm 1\%$ , B = 3435 $\pm 1\%$ (25/85)

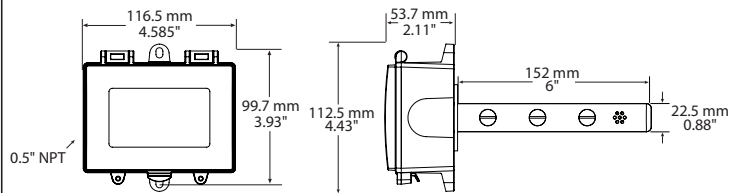
CEDT	B	00
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Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

### ROOM



### DUCT



Included with F style enclosure

Thread Adapter

Cable Gland Fitting

