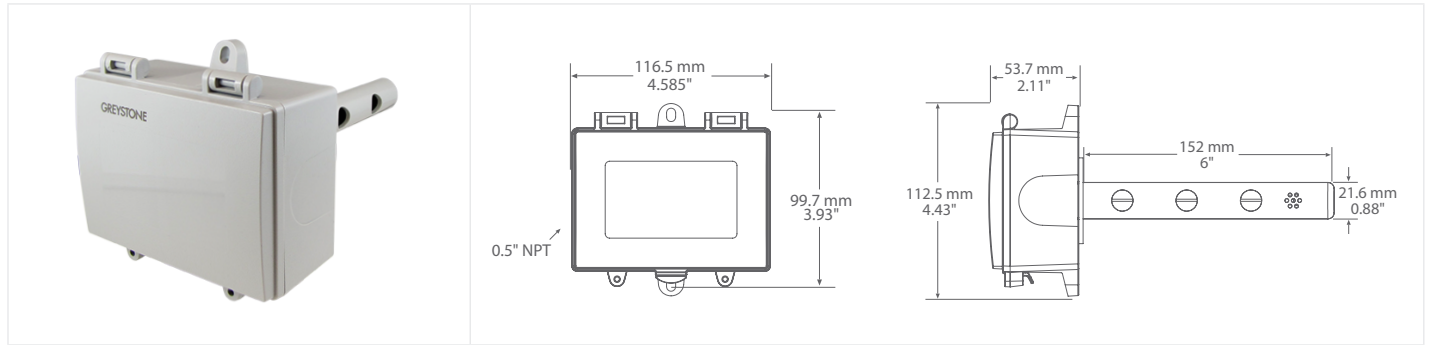




## DUCT CARBON DIOXIDE TRANSMITTER



### CEDT SERIES

#### PRODUCT DESCRIPTION

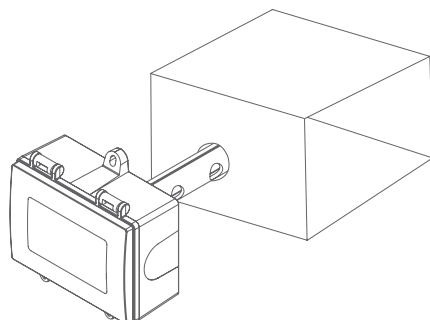
The CEDT series of CO<sub>2</sub> sensor uses a highly accurate and reliable Non-Dispersive Infrared (NDIR) sensor in a duct mount enclosure to monitor return air CO<sub>2</sub> levels for indoor applications. The compact dual wavelength CO<sub>2</sub> sensor achieves excellent performance characteristics, including high accuracy and low power consumption to ensure stable long term operation. The CO<sub>2</sub> sensor features user selectable 4-20 mA or 0-5 Vdc or 0-10 Vdc for simple integration into any building automation system. A polycarbonate enclosure with a hinged and gasketed cover is provided for electrical connections.

#### TYPICAL INSTALLATION

**For complete installation and wiring details, please refer to the product installation instructions.**

The CEDT sensor installs on the outside of a return air duct with the sampling tube inserted into the duct. Mount the sensor in an easily accessible location in a straight section of duct at least five feet from corners and other items that may cause disturbances in the air flow. Avoid areas with vibrations or rapid temperature changes.

The enclosure provides mounting tabs for ease of installation.



#### SPECIFICATIONS

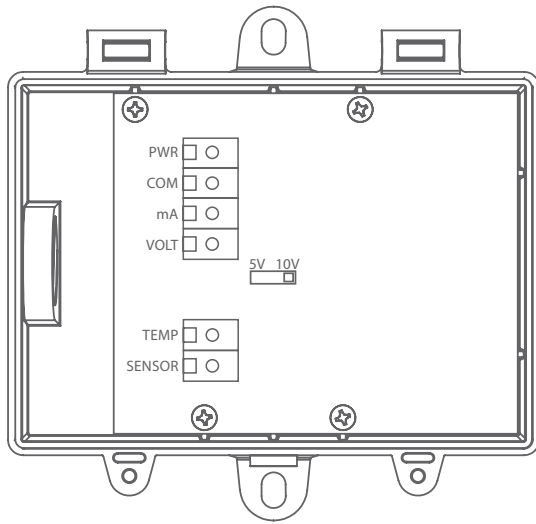
|                             |   |
|-----------------------------|---|
| CO <sub>2</sub> SENSOR      | Dual wavelength non-dispersive infrared (NDIR)  |
| RANGE                       | 0-2000 ppm  |
| ACCURACY                    | ±(50ppm +3% of reading)   |
| PRESSURE DEPENDENCY         | <1% of reading / kPa  |
| RESPONSE TIME               | 2 minutes (T90)   |
| WARM-UP TIME                | 1 minute  |
| SENSOR LIFE SPAN            | >10 years   |
| POWER SUPPLY                | 24 Vac/dc ±20% (non-isolated half-wave rectified)   |
| CONSUMPTION                 | 80 mA max @ 24 Vdc, 160 mA max @ 24 Vac   |
| PROTECTION CIRCUITRY        | Reverse voltage and transient protected   |
| OUTPUT SIGNALS              | 4-20 mA, 0-5 Vdc, 0-10 Vdc (field selectable)   |
| DRIVE CAPABILITY @ 24 VDC   | <b>Current:</b> 600Ω maximum<br><b>Voltage:</b> 10 KΩ minimum   |
| OPERATING CONDITIONS        | 0 to 50°C (32 to 122°F), 0-95 %RH non-condensing  |
| OPTIONAL TEMPERATURE SENSOR | Various thermistors or RTD's as a 2 wire resistance output  |
| WIRING CONNECTIONS          | Screw terminal block (14 to 22 AWG)   |
| ENCLOSURE                   | <b>B:</b> Polycarbonate, UL94-V0, IP65 (NEMA 4X)<br><b>F:</b> Same as B with thread adapter (1/2" NPT to M16) and cable gland fitting |
| PROBE                       | 152mm L x 21.6mm D (6" x 0.85")   |
| APPROVALS                   | CE, RoHS  |
| COUNTRY OF ORIGIN           | Canada  |

#### ACCESSORIES - INCLUDED WITH F ENCLOSURE OPTION





## WIRING INFORMATION



| TERMINAL | FUNCTION          |
|----------|-------------------|
| PWR      | + 24 Vac/dc       |
| COM      | Common            |
| mA       | Current Output    |
| VOLT     | Voltage Output    |
| TEMP     | Resistance Output |
| SENSOR   | Resistance Output |

## ORDERING

| PRODUCT   | CEDT     | DESCRIPTION  |
|-----------|----------|--|
| ENCLOSURE | <b>B</b> | Polycarbonate with hinged and gasketed cover           |
|           | <b>F</b> | Same as B, with thread adapter and cable gland fitting |

## PART NUMBER

| CEDT |
|------|
|      |

NOTE: Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.