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# SERIES CDT | CARBON DIOXIDE/TEMPERATURE TRANSMITTERS




North American style wall mount




DSA* compliant option -S




Duct mount

## FEATURES/BENEFITS

- **Minimize inventory and save time by combining $CO_2$ and temperature measurements into one transmitter**
- **Requires minimal maintenance with Automatic Baseline Correction (ABC) to account for sensor drift**
- **Reduce operation costs using a low energy, reliable, and repeatable $CO_2$ sensor**
- **Simplify installation with backplate electrical connection**

## APPLICATIONS

- Demand control ventilation in schools, office buildings, hospitals, and other indoor environments
- LEED® certification

## DESCRIPTION

The **Series CDT Carbon Dioxide and Temperature Transmitters** accurately monitor the $CO_2$ concentration and temperature in indoor environments to help achieve energy savings. In order to achieve a higher level of accuracy, the Series CDT includes barometric pressure adjustment. The $CO_2$ universal output allows users to select the transmitter output to be 4-20 mA, 0-5 VDC, or 0-10 VDC to work with virtually any building management controller.

For applications that require visual indication, the wall mount configurations of the Series CDT can be ordered with an integral LCD display. To prevent tampering, the action of the buttons can be locked out using an internal dip switch selection.

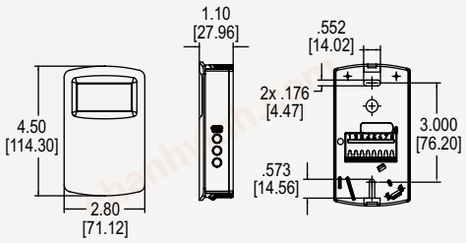
The Series CDT $CO_2$ transmitters are available with a -S option that provides the necessary attributes and parameters to be compliant with DSA requirements for monitoring $CO_2$ levels in schools. There is a front facing LED that illuminates when the $CO_2$ level exceeds 1100 PPM.

## SPECIFICATIONS

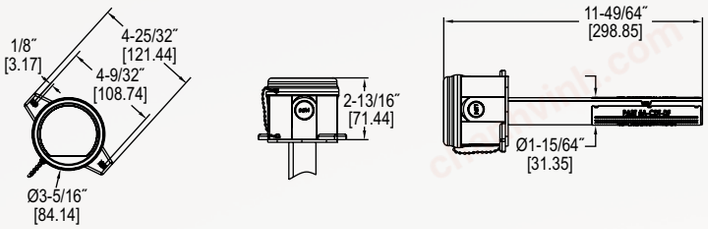
| | |
|---|---|
| **Sensor** | NDIR, 15 year life expectancy. |
| **Range** | $CO_2$: 0 to 2000 or 0 to 5000 PPM (depending on model); Temperature: 32 to 122°F (0 to 50°C). |
| **Accuracy**** | $CO_2$: ±40 PPM + 3% of reading (2000 PPM $CO_2$); ± 50 PPM + 5% of reading (5000 PPM $CO_2$); Temperature: ±1°C @ 25°C. |
| **Response Time** | 2 min for 90% step change. |
| **Temperature Limits** | 32 to 122°F (0 to 50°C). |
| **Humidity Limits** | 0 to 85% (non-condensing). |
| **Power Requirements** | 16-35 VDC or 19-28 VAC. |
| **Power Consumption** | Average: 2 w; Peak: 3.75 w. |
| **Output** | Current: 4-20 mA (max. 500 Ω); Voltage: 0-5 VDC or 0-10 VDC (min. 500 Ω); Relay: SPST NO rated 2A @ 30 VDC; RTD or thermistor per r-t curves on page 4 (depending on model). |
| **Compliance** | CE. |
| **The specified $CO_2$ accuracy is only guaranteed after three weeks of continuous operation in environments which are intermittently occupied. | |

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## DIMENSIONS




**North American style wall mount**




**Duct mount**

## HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

**CDT** **-2** **N** **4** **4** **-LCD**

**SERIES**
**CDT:** Carbon dioxide/temperature transmitter

**RANGE**
**-2:** 0 to 2000 PPM $CO_2$ range
**-5:** 0 to 5000 PPM $CO_2$ range

**CONFIGURATION**
**N:** North American style wall mount
**D:** Duct mount

**$CO_2$**
**4:** 4-20 mA / 0 to (5 or 10) VDC

**OPTIONS**
**-FC:** Factory calibration certificate
**-LCD:** LCD display (wall only)
**-RLY:** Relay
**-S:** School

**TEMPERATURE OUTPUT**
**0:** None
**4:** 4-20 mA / 0 to (5 or 10) VDC
**A:** 10 KΩ NTC thermistor type III
**B:** 10 KΩ NTC thermistor type II
**D:** Pt100 Ω RTD
**E:** Pt1000 Ω RTD
**F:** 20 KΩ NTC thermistor

## ACCESSORIES

| Model | Description |
|---|---|
| **A-449** | Remote LCD display allows remote indication of select Dwyer® wall mount transmitters for validation or certification purposes |
| **A-449A** | Remote LCD display with buttons allows remote indication and calibration of select Dwyer® wall mount and duct mount transmitters for validation and certification purposes |

*Per Public Utilities Code 1625 (Assembly Bill 841), carbon dioxide monitors are required in all classrooms as of January 1, 2021. The Division of the State Architect is providing regulatory requirements in CALGreen so that it can enforce the provisions of statute for K-12 public schools and community colleges. While the provisions of 5.506.3.1 are not enforceable as part of the plan review and construction process, regulatory requirements that address maintenance issues provide clarity to the facility owner and reinforce the additional requirements specified in statute.

LEED® is a registered trademark of the U.S. Green Building Council.

## ORDER ONLINE TODAY!

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