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.

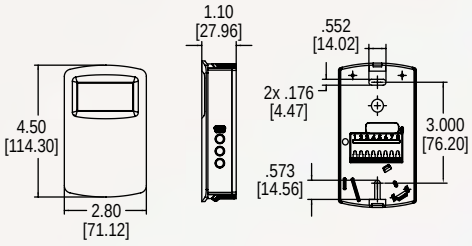
For applications that require visual indication, the wall mount configurations of the Series CDT can be ordered with an integral LCD display. To prevent tampering, the action of the buttons can be locked out using an internal dip switch selection.

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.

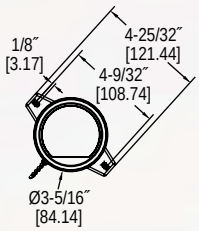
SPECIFICATIONS

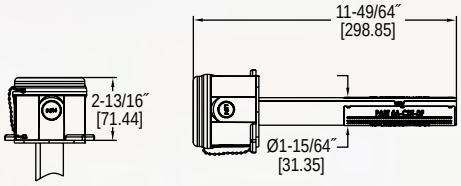
Sensor	NDIR, 15 year life expectancy.
Range	CO_2: 0 to 2000 or 0 to 5000 PPM (depending on model); Temperature: 32 to 122°F (0 to 50°C).
Accuracy**	CO_2: ±40 PPM + 3% of reading (2000 PPM CO_2); ± 50 PPM + 5% of reading (5000 PPM CO_2); Temperature: ±1°C @ 25°C.
Response Time	2 min for 90% step change.
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.	

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.

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