SERIES CDTA | COMMUNICATING CARBON DIOXIDE DETECTOR

FEATURES/BENEFITS

- **Minimize inventory and save time by combining CO_2, RH and temperature measurements into one transmitter**
- **Reduce installation time with field selectable Modbus and BACnet communications**
- **Reduces the number of devices mounted in the space with integral humidity and temperature sensors**
- **Requires minimal maintenance with Automatic Baseline Correction (ABC) to account for sensor drift**
- **Prevent tampering with physical hardware lockout**
- **Easily installation with optional remote display tool and simple installation with backplate electrical connection**

APPLICATIONS

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

DESCRIPTION

The **Series CDTA Communicating Carbon Dioxide Detectors** combine the function of three room sensors into a single, compact housing. Parameters include carbon dioxide, humidity, temperature, and temperature set point with override. A 4-wire connection and daisy chaining together reduces installation cost. The RS-485 MAC address is set up using on board DIP switches. Additional DIP switches are used to select Modbus® RTU or BACnet MS/TP and to limit access to the set up menu.

The barometric pressure can be programmed to correct for altitude. The humidity sensor is field replaceable without the need for additional calibration.

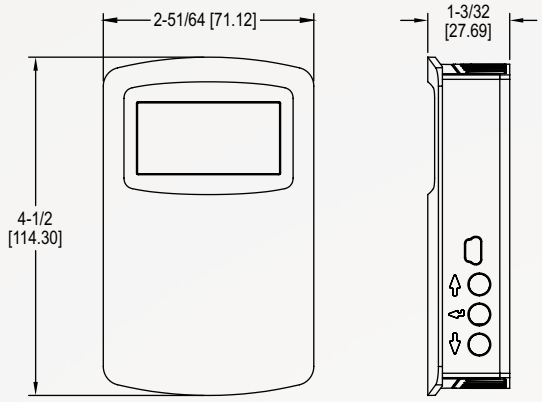
Optional integral and remote displays are available to display temperature, humidity, or temperature set point instead of CO_2.

For environments occupied 24 hours per day it is recommended to periodically expose the CO_2 sensor to outside ambient air.

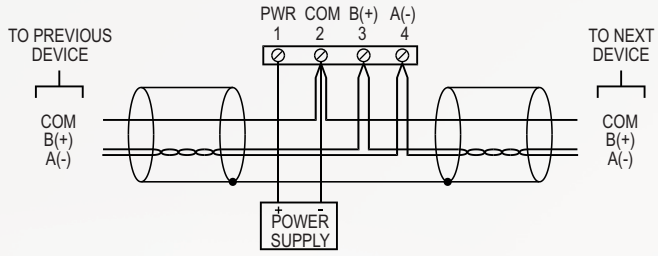
SPECIFICATIONS

Sensor (CO_2)	NDIR, 15 year life expectancy; Humidity: Capacitive polymer; Temperature: Solid state band gap.
Range	CO_2: 0 to 2000 or 5000 PPM CO_2 (depending on model); Humidity: 0 to 100% RH; Temperature: 32 to 122°F (0 to 50°C).
Accuracy*	CO_2: ±40 PPM ±3% of reading 2000 PPM; ±50 PPM + 5% of reading 5000 PPM; RH: ±2% (10 to 90% RH); Temperature: ±1°C @ 25°C.
Response Time (CO_2)	2 min for 90% step change.
Temperature Limits	32 to 122°F (0 to 50°C).
Humidity Limits	0 to 85% RH (non-condensing).
Power Requirements	10-42 VDC / 10-30 VAC.
Output	2-wire RS-485, Modbus® RTU or BACnet MS/TP communication protocol.
Weight	4.4 oz (125 g).
Compliance	BTL, CE.
*The specified CO_2 accuracy is only guaranteed after three weeks of continuous operation in environments which are intermittently occupied.	

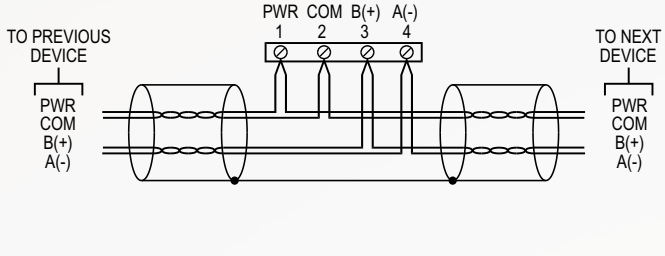
DIMENSIONS



WIRING DIAGRAM



Local power supply



Common power supply

HOW TO ORDER

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

CDTA **-2** **N000** **-LCD**

SERIES
CDTA: Carbon dioxide detector

RANGE
-2: 0 to 2000 PPM
-5: 0 to 5000 PPM

OPTIONS
-LCD: Display
-FC: Factory calibration certificate

HOUSING STYLE
N000: North American

ACCESSORIES

Model	Description
A-449	Remote LCD display allows remote indication
A-CDT-KIT	Accessory kit including terminal block and power supply

ORDER ONLINE TODAY!

dwyer-inst.com/Product/SeriesCDTA

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