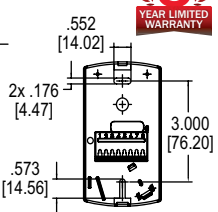
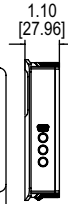
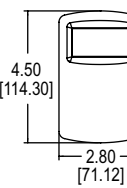
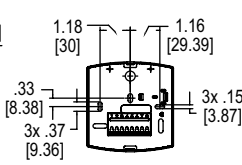
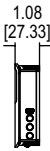
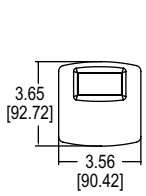


COMMUNICATING CARBON DIOXIDE SENSOR

NDIR CO₂ Sensor, Measures CO₂, Temperature, Temperature Set Point with Override



European style

North American style
(with optional LCD display)

The **Series CDTC Communicating Carbon Dioxide Sensor** combines the function of two room sensors into a single, compact housing. Parameters include carbon dioxide, 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 Series CDTC uses a Single Beam Dual Wavelength Non-Dispersive Infrared (NDIR) sensor to measure the carbon dioxide level allowing for installations that will be occupied 24 hours per day. For improved accuracy, the transmitter can be field calibrated to the environmental conditions of the installation. The barometric pressure can be programmed to correct for altitude.

Optional integral and remote displays are available to display temperature, or temperature set point instead of CO₂.

BENEFITS/FEATURES

- Application/Installation flexibility through network communication via BACnet or Modbus®
- Reliable readings from dual-channel NDIR sensor reduces drift associated with light source aging
- Tamper resistant with physical security hardware lockout
- Easy system setup with optional remote display tool

ACCESSORIES	
Model	Description
A-449	Remote LCD display allows remote indication
A-CDT-KIT	Accessory kit including terminal block and power supply
GCK-200CO-2000CO2	Calibration gas kit for zero and span adjustment

APPLICATIONS

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

SPECIFICATIONS

Range: 0 to 2000 or 5000 PPM CO₂ (depending on model); 32 to 122°F (0 to 50°C) temperature.

Accuracy: ±40 PPM +3% of reading CO₂; Temperature: ± 1°C @ 25°C.

Response Time: <2 minutes, diffusion, carbon dioxide.

Sensor Technology: NDIR (non-dispersive infrared); 15 year light source.

Temperature Limits: 32 to 122°F (0 to 50°C).

Output: 2-wire RS-485, Modbus® RTU or BACnet MS/TP communication protocol.

Temperature Dependence (CO₂): ±8 PPM / °C at 1100 PPM.

Non-Linearity (CO₂): 16 PPM.

Pressure Dependence (CO₂): 0.13% of reading per mm Hg.

Humidity Limits: 10 to 95% RH (non-condensing).

Power Requirements: 10-42 VDC / 10-30 VAC.

Weight: 4.4 oz (125 g).

Agency Approvals: BTL, CE.

MODEL CHART

Model	Max CO ₂ Level	Housing Style	Display
CDTC-2N000	2000 PPM	North American	No
CDTC-2N000-LCD	2000 PPM	North American	Yes
CDTC-2E000	2000 PPM	European	No
CDTC-2E000-LCD	2000 PPM	European	Yes
CDTC-5N000	5000 PPM	North American	No
CDTC-5N000-LCD	5000 PPM	North American	Yes
CDTC-5E000	5000 PPM	European	No
CDTC-5E000-LCD	5000 PPM	European	Yes

OPTIONS

To order add suffix:	Description
-FC	Factory calibration certificate
Example: CDTC-2N000-FC	