Series CDT Carbon Dioxide and Temperature Transmitters accurately monitor the CO₂ concentration and temperature in schools, office buildings, and other indoor environments to help achieve LEED® certification. For increased sensor accuracy, a single-beam dual-wavelength non-dispersive infrared (NDIR) sensor is used to automatically correct the measurement in both occupied and unoccupied buildings against light source aging effects. The single-beam dual-wavelength sensor technology provides the highest level of accuracy compared to Automatic Baseline Correction methods which can unintentionally shift the calibration based on CO₂ levels and barometric pressure conditions. In order to achieve a higher level of accuracy, the Series CDT includes digital barometric pressure adjustment and the ability to field-calibrate the sensor.

Universal outputs for both carbon dioxide and temperature allow users to select the transmitter output to be 4 to 20 mA, 0 to 5 VDC, or 0 to 10 VDC to work with virtually any building management controller. Additionally, passive thermistor or RTD sensor can be ordered for a temperature output. An optional relay with user adjustable set points can be used to control exhaust fans, open actuated windows or dampers, or signal a light or horn. For applications that require visual indication, the wall mount configurations of the Series CDT can be ordered with an integral LCD display. When ordering a duct mount configuration or a wall mount configuration without the display, the Model A-449 remote LCD display can plug into the miniature connector port on the transmitter. The display can be configured to display temperature only, CO₂ only, or CO₂ and temperature together.

Accuracy: ±40 ppm + 3% of reading.
Temperature Dependence: ±8 ppm°C at 1100 ppm.
Non-Linearity: 16 ppm.
Pressure Dependence: 0.13% of reading per mm of Hg.
Response Time: 2 min for 99% step change.
Temperature Limits: 32 to 122°F (0 to 50°C).
Humidity Limits: 10 to 95% RH (non-condensing).

Power Requirements: 16 to 35 VDC or 19 to 28 VAC.
Power Consumption: Average: 2 w; Peak: 3.75 w.
Output: Current: 4 to 20 mA (max. 500 Ω); Voltage: 0 to 5 VDC or 0 to 10 VDC (min. 500 Ω); Relay: SPST NO rated 2A @ 30 VDC; RTD or thermistor per r-t curves on page 299 (depending on model).

Weight: 5.6 oz (158.8 g).
Agency Approvals: CE, RoHS.

**Options**
- LCD display (wall only)
- RLY Relay
- NBC No buttons (wall only)

**ACCESSORIES**
A-449, Remote LCD Display allows remote indication of select Dwyer Wall Mount Transmitters for validation or certification purposes.

GCK-200CO-2000CO2, Calibration Gas Kit includes a 99.99% Nitrogen gas cylinder for calibrating the zero point and a 200 PPM CO / 2000 PPM CO₂ gas cylinder for calibrating the span point on Dwyer’s gas sensing transmitters.

**SPECIFICATIONS**
- Sensor: Single beam, dual-wavelength NDIR.
- Range:
  - CO₂: 0 to 2000 or 0 to 5000 ppm (depending on model);
  - Temperature: 32 to 122°F (0 to 50°C).
- Accuracy: ±40 ppm + 3% of reading.
- Temperature Dependence: ±8 ppm°C at 1100 ppm.
- Non-Linearity: 16 ppm.
- Pressure Dependence: 0.13% of reading per mm of Hg.
- Response Time: 2 min for 99% step change.
- Temperature Limits: 32 to 122°F (0 to 50°C).
- Humidity Limits: 10 to 95% RH (non-condensing).
- Power Requirements: 16 to 35 VDC or 19 to 28 VAC.
- Power Consumption: Average: 2 w; Peak: 3.75 w.
- Output: Current: 4 to 20 mA (max. 500 Ω); Voltage: 0 to 5 VDC or 0 to 10 VDC (min. 500 Ω); Relay: SPST NO rated 2A @ 30 VDC; RTD or thermistor per r-t curves on page 299 (depending on model).
- Weight: 5.6 oz (158.8 g).
- Agency Approvals: CE, RoHS.

**Options**
- LCD display (wall only)
- RLY Relay
- NBC No buttons (wall only)