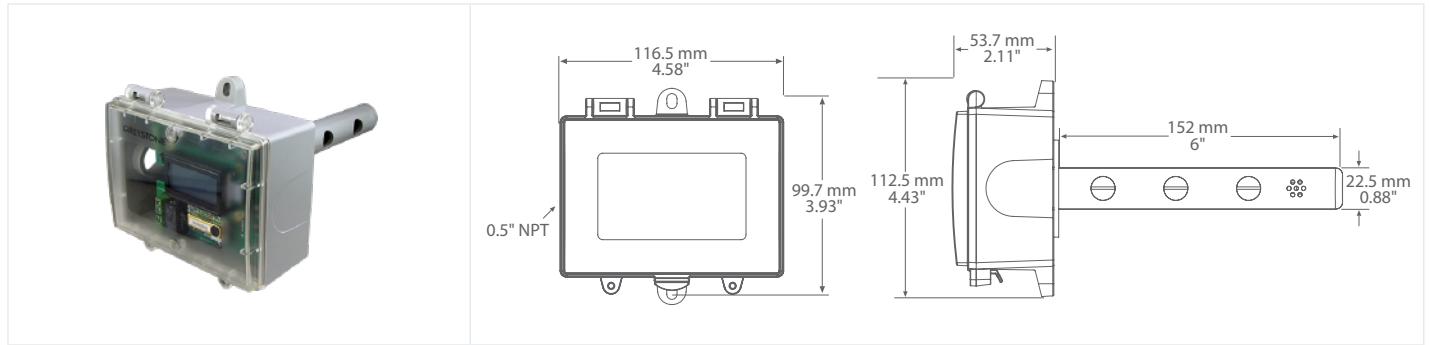




DUCT CARBON DIOXIDE TRANSMITTER



CD2DT SERIES

PRODUCT DESCRIPTION

The duct CO₂ transmitter uses a highly accurate and reliable non-dispersive infrared (NDIR) sensor in an attractive enclosure with a gasketed, hinged cover for duct applications to monitor CO₂ levels. The sensor uses dual wavelength optics and LTA (long term adjustment) signal processing technology to deliver industry leading long term accuracy and reliability. These features ensure optimum measurement stability for continual monitoring of either supply or return air measuring.

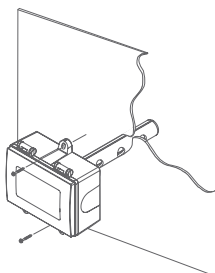
Optional features include a resistive temperature sensor output (with LCD display of temperature in either °C or °F), a control relay with programmable setpoint, hysteresis and time delay, and either a conduit or cable gland connection point.

TYPICAL INSTALLATION

For complete installation and wiring details, please refer to the product installation instructions.

The duct type sensor installs on the outside of a return air duct with the sampling tube inserted into the duct. Mount the sensor in an easily accessible location in a straight section of duct at least five feet from corners and other items that may cause disturbances in the air flow. Avoid areas with vibrations or rapid temperature changes.

The enclosure provides mounting tabs for ease of installation.



SPECIFICATIONS

GAS TYPE DETECTED	Carbon Dioxide (CO ₂)
SENSOR TYPE	Dual wavelength non-dispersive infrared (NDIR)
SENSOR ACCURACY	± 50ppm + 3% of reading
MEASUREMENT RANGE	0-2000ppm (default), adjustable 1000 - 5000ppm
PRESSURE DEPENDENCY	<1% of reading / kPa
RESPONSE TIME	90 seconds (T90)
WARM-UP TIME	1 minute
SENSOR COVERAGE AREA	n/a
SENSOR LIFE SPAN	>10 years
TRANSMITTER ACCURACY	±0.25% of span (including linearity, hysteresis and repeatability)
POWER SUPPLY	24 Vdc ±20% or 24 Vac ±10% (non-isolated half-wave rectified)
PROTECTION CIRCUITRY	Reverse voltage protected and transient protected
INPUT VOLTAGE EFFECT	Negligible over specified operating range
OUTPUT SIGNAL TYPE	4-20 mA (3-wire), 0-5 or 0-10 Vdc (field selectable)
CURRENT CONSUMPTION	Current: 75 mA @ 24 Vdc max, 150 mA @ 24 Vac max Voltage: 50 mA @ 24 Vdc max, 100 mA @ 24 Vac max
OUTPUT DRIVE @ 24 VDC	Current: 550Ω max Voltage: 10,000Ω min
AMBIENT OPERATING RANGE	-10 to 50°C (14 to 122°F), 5 to 90 %RH non-condensing
STORAGE TEMPERATURE	-30 to 70°C (-22 to 158°F), 5 to 90 %RH non-condensing
LCD DISPLAY	Units: ppm (CO ₂), °C/°F for optional temperature sensor Range: 0 to 5000ppm, 0 to 50°C (32 to 122°F) for optional temperature sensor Resolution: 1ppm CO ₂ , (0.1°C/°F for optional temperature sensor Size: 35mm W x 15mm H (1.4" x 0.6"), 2 line x 8 character, alpha-numeric Digit Height: 2-line x 8 character
TEMPERATURE SENSOR (OPTIONAL)	Type: Thermistor and RTD (see ordering chart) Accuracy: See ordering chart Output: 2-wire resistive
RELAY (OPTIONAL) 2-WIRE OUTPUT	Selectable CO ₂ high, CO ₂ low, Temp High or Temp Low Rating: Form A (N.O.), 2 Amps @ 140 Vac / 30 Vdc
ENCLOSURE	Material: Polycarbonate, Grey, UL95-V0, IP65, (NEMA 4X) Dimensions: 116mm W x 100mm H x 54mm D (4.6" x 3.9" x 2.1") Probe: 22.5mm D x 152mm L (0.88" x 6")
WIRING	Screw terminal block (14 to 22 AWG)
APPROVALS	CE
COUNTRY OF ORIGIN	Canada

