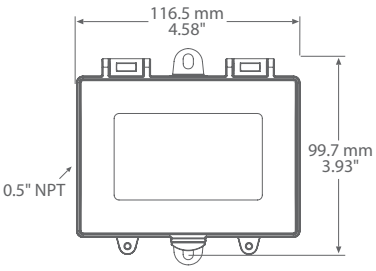
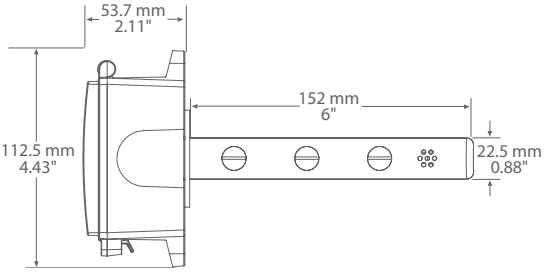
PL-DT-CO2 — Duct Carbon Dioxide Transmitter





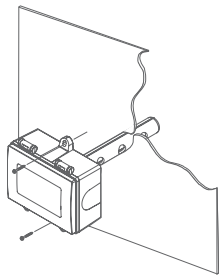
Product Description

The duct CO_2 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 CO_2 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.

Typical Installation

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.

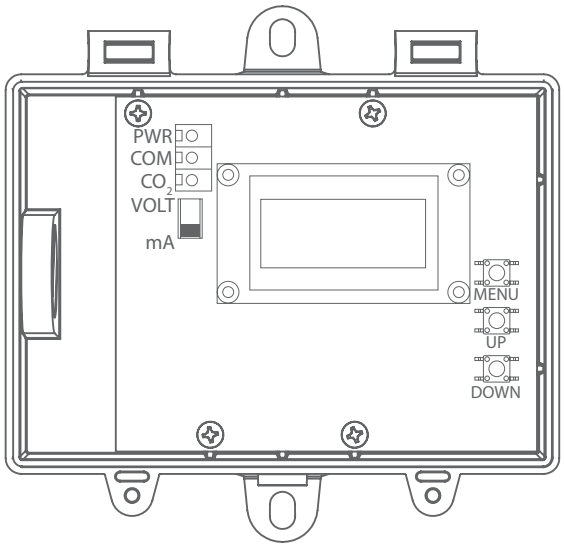


Technical Specifications

GAS TYPE DETECTED	Carbon Dioxide (CO_2)
SENSOR TYPE	Dual channel non-dispersive infrared (NDIR)
SENSOR ACCURACY	± (30ppm + 3% of measured value)
MEASUREMENT RANGE	0-2000ppm, adjustable 1000 - 10000ppm
TEMPERATURE DEPENDENCY	±2.5ppm/°C
RESPONSE TIME	20 seconds (T63)
WARM-UP TIME	1 minute
SENSOR LIFE SPAN	>15 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	32 to 122°F (0 to 50°C), 5 to 90 %RH non-condensing
STORAGE TEMPERATURE	-40 to 158°F (-40 to 70°C)
LCD DISPLAY	**Units**: ppm (CO_2), °C/°F (optional temperature sensor) **Range**: 0 to 10000ppm, **Size**: 1.4" x 0.6" (35mm W x 15mm H), 2 line x 8 character, alpha-numeric **Digit Height**: 2-line x 8 character
ENCLOSURE	**Material**: Polycarbonate, Grey, UL95-V0, IP65, (NEMA 4X) **Dimensions**: 4.6" x 3.9" x 2.1" (116mm W x 100mm H x 54mm D) **Probe**: 0.88" x 6" (22.5mm D x 152mm L)
WIRING	Screw terminal block (14 to 22 AWG)
APPROVALS	CE
COUNTRY OF ORIGIN	Canada

NOTE: This CO_2 sensor incorporates a Self Calibration feature to correct CO_2 sensor drift. This feature is recommended for applications where the CO_2 level will be close to normal (400 ppm) at least one hour per day. If the monitored space is occupied 24 hours or consistently maintains higher or lower levels of CO_2, it is recommended that this feature be turned off, but yearly calibration will be required.

Wiring Information



Terminal	Function
PWR	Supply Voltage
COM	COMMON
CO_2	Analog Output

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