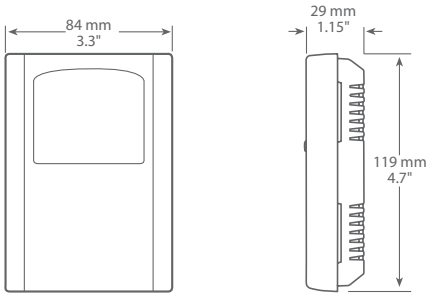
Room Carbon Dioxide Detector — PL-RM-CO2/PL-RM-CO2-LCD





Product Description

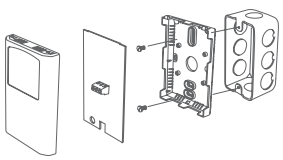
The room CO_2 transmitter device uses a highly accurate and reliable nondispersive infrared (NDIR) sensor in an attractive, low profile enclosure for room applications to monitor CO_2 levels. The sensor uses dual wavelength optics and LTA (long term adjustment) signal processing technology to deliver industry leading long-term accuracy and reliability These technology features ensure optimum measurement stability for both periodic and constant occupancy applications, so the device is equally suitable for a classroom or a hospital room.

Standard features include a field selectable output signal of either 4-20 mA, 0-5 Vdc or 0-10 Vdc for the highest versatility, programmable CO_2 measurement span, a backlit alpha numeric LCD and easy menu operation for configuration.

Typical Installation

The PL-RM-CO2 can be mounted directly to a single gang electrical box or directly to a wall. The backplate includes many mounting hole configurations to allow for mounting on a variety of electrical boxes.

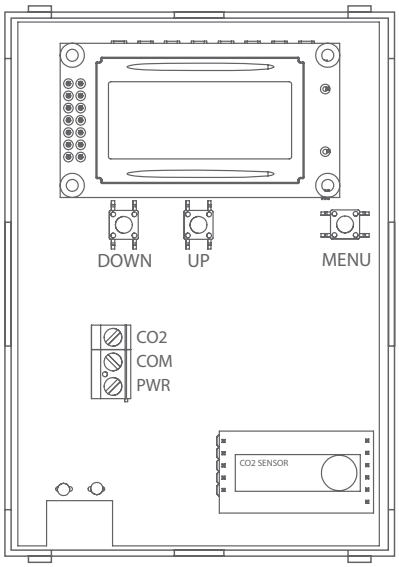
The PL-RM-CO2 has a 3 wire configuration with a screw block terminal provided for connection to the Prolon Building Automation System.



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 COVRAGE AREA	100 m2 (1000ft2) typical
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) **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
ORDERING	**No LCD**: PL-RM-CO2 **LCD**: PL-RM-CO2-LCD
ENCLOSURE	**Material**: ABS, White **Dimensions**: 3.3" x 4.7" x 1.15" (84mm W x 119mm H x 29mm D) **Protection**: IP30 (NEMA 1)

Wiring Information



Terminal	Function
CO_2	Analog Output
COM	COMMON
PWR	Supply Voltage

Technical Specifications (Suite)

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

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