

# RAEGuard PID

4-20 mA PID Transmitter



The RAEGuard PID is a permanently mounted (fixed) Photoionization Detector (PID) transmitter that operates from a 9 to 36 VDC power source and provides an analog (4-20 mA) signal output in three fulls-cale ranges of 20 ppm, 100 ppm, or 1,000 ppm isobutylene equivalent. Housed in an explosion-proof enclosure, the RAEGuard PID is equipped with a local digital display of the gas concentration and functional keys for performing calibration.

## **KEY FEATURES**

## Integrated

- 3 models to choose from
  - -0.01 20 ppm
  - 0.10 100 ppm
  - 1.00 1000 ppm
- Operation at 9 to 36 VDC
- Two dry-contact output (<30V, 2A)

## **Durable**

- Explosion-proof enclosure for hazardous locations
- Long-life 10.6 eV Ultraviolet lamp and 3D Sensor

## Easy to Use

 Magnetic key interface eliminates need to open explosion-proof housing when making calibration or other minor adjustments

- Built-in pump with replaceable in-line filter and patented self-cleaning duty cycle operation
- Local displays with adjustment keys

## **APPLICATIONS**

- Waste water treatment plants
- Marine and off-shore oil wells
- Refineries & petrochemical plants
- Power plants
- Pulp and paper mills
- Air quality

- Non-intrusive calibration via magnetic wand
- Long-life 10.6 eV ultraviolet lamp
- Flow-through version can draw sample from up to 200 feet
- Patented duty cycling of sampling pump for lamp self-cleaning
- Two dry contacts (<30V, 2A) for low and high alarm limits









## **RAEGuard PID**





**SPECIFICATIONS**\*

4-20 mA PID Transmitter

## **Detector Specifications**

Size	5.0" L x 5.0" W x 4.5" H (127mm x 127mm x 115mm)
Weight	5.5 lbs (2.5 kg)
Detector	3D PID sensor std. 10.6 eV lamp
Hazardous Location Classifications	UL Class I, Div. 1, Groups B,C, D Temperature Code T6 cUL Class I, Div. 1, Groups B, C, D Temperature Code T6 ATEX, II 2 G EEx d IIB T6
Power	9-36 VDC, max 125mA at 24V
Output	4-20mA
Sampling	Internal diaphram pump
Display	7-segment, 4-digit LCD with 4 color-coded fault LEDs
Response Time (t90)	30 seconds to 90% of reading using isobutylene, depending on duty cycle
User Interface	Magnetically accessed keys for calibration
Temperature	-4 to 131°F (-20° to 55°C)
Humidity	0 to 95% relative humidity (non-condensing)
Dry Contact	Max 30V, 2A
Mounting	2 holes 5.25" (133 mm) from center to center

<sup>\*</sup>Specifications are subject to change

### **Front View**

## **INSTALLATION DRAWING**





