

## Analog Transmitter with High Range PID TVOC Sensor

|                                         |                  |                                                                                                                                                         |
|-----------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dimensions:</b>                      | <b>Size</b>      | 5.0 x 5.0 x 3.0 in (127 x 127 x 76 mm) without optional splash guard (Option -S)                                                                        |
|                                         | <b>Weight</b>    | 14 oz / 400 g                                                                                                                                           |
| <b>Construction:</b>                    |                  | Black ABS / Polycarbonate blend, water/dust tight, corrosion resistant                                                                                  |
| <b>Sensor:</b>                          | <b>Type</b>      | PID (10.6eV lamp energy)                                                                                                                                |
|                                         | <b>Life Span</b> | Depends on application and environment                                                                                                                  |
| <b>Gases Detected:</b>                  |                  | TVOCs (Total Volatile Organic Compounds), includes extensive range of gases and chemicals                                                               |
| <b>Sensor Range:</b>                    |                  | 0 – 300 ppm (calibrated with Isobutylene span gas)                                                                                                      |
| <b>System Power:</b>                    |                  | 3-wire: VDC: 16-30 VDC, 3-Watts, Class 2<br>4-wire: VAC: 12-27 VAC, 3-VA, Class 2                                                                       |
| <b>Operating Temperature:</b>           |                  | 0°C to +40°C (32°F to 104°F), -40°C (-40°F) with low temperature Option -LT                                                                             |
| <b>Operating Humidity:</b>              |                  | 15 to 90% non-condensing                                                                                                                                |
| <b>Indicators:</b>                      |                  | LCD digital display, 2 line x 16 character, backlit                                                                                                     |
| <b>Signal:</b>                          |                  | Current: Linear 4-20 mA (maximum 216 ohm load, wiring plus termination resistor @ 12VDC) Maximum 316 ohm load, wiring plus termination resistor @ 12VAC |
| <b>Relay (Option -RLY):</b>             |                  | 1 SPDT relay rated 30 volts, 2 amp max                                                                                                                  |
| <b>Relay and Audible (Option -RBZ):</b> |                  | 1 SPDT dry contact relay rated 30 volts, 2 amp max<br>Internal buzzer, rated 90 dB @ 10 cm / 4 in, enable/disable                                       |
| <b>Minimum Detection:</b>               |                  | 0.1 ppm Isobutylene                                                                                                                                     |
| <b>Accuracy:</b>                        |                  | no data available                                                                                                                                       |
| <b>Repeatability:</b>                   |                  | no data available                                                                                                                                       |
| <b>Sensitivity:</b>                     |                  | >6.0 mV / ppm Isobutylene                                                                                                                               |
| <b>Response Time (T<sub>90</sub>):</b>  |                  | <3 sec (diffusion)                                                                                                                                      |
| <b>Resolution:</b>                      |                  | Display resolution: 1 ppm      Sensor resolution: ±0.1 ppm                                                                                              |
| <b>Warm Up Time:</b>                    |                  | 4 minutes after power-up                                                                                                                                |
| <b>Cross Sensitivity:</b>               |                  | Many other gases, vapours, chemicals                                                                                                                    |
| <b>Safety:</b>                          |                  | Automatic resetting thermal overload fuse (reset capabilities to 500 times)                                                                             |
| <b>Wiring:</b>                          |                  | VDC or ground referenced VAC, 3-conductor shielded 18 awg stranded<br>VAC 4-conductor shielded 18 awg stranded                                          |
| <b>Sensor Mounting:</b>                 |                  | Heavier than air, 6 in / 15 cm from the floor (application dependent)                                                                                   |
| <b>Monitoring Area:</b>                 |                  | 3000 ft <sup>2</sup> / 279 m <sup>2</sup>                                                                                                               |
| <b>Suggested Alarm Points</b>           |                  | Low Alarm: 50 ppm / Mid Alarm: 100 ppm / High Alarm: 200 ppm                                                                                            |
| <b>Certifications:</b>                  |                  | CSA-C22.2 No. 205-12, UL508 (Edition 18):2018                                                                                                           |
| <b>(tested to)</b>                      |                  | EMC Directive 2014/30/EU, EN 50270:2015, Type 1, EN61010<br>RoHS compliant circuit boards<br>This device complies with part 15 of the FCC Rules         |
| <b>Notes:</b>                           |                  | Never install gas detectors in the direct path of moving air.                                                                                           |

**Conditions Affecting Photoionization Detector (PID) Sensors:**

- Dust and dirt can compromise sensor performance lifespan, both during storage and operation.
- When storing, package securely in a sealed container.
- Protect from extreme temperatures and being physically damaged.
- High humidity environments may affect sensor performance.
- Paint fumes, cleaning products, dust, sand, water, insects can compromise performance.
- The presence of interfering compounds may affect sensor accuracy.
- Install gas detector vertically so the display is over top of the sensor vent and device is flat against a wall or column. Never install gas detectors in the direct path of moving air.

In addition to the factors listed above, most sensors will suffer general wear and tear and it may not always be easy to detect the damage caused, making regular maintenance important to help keep the sensors in good working order. Regular maintenance includes inspecting, cleaning if necessary, bump testing and calibration.