

Digital Transmitter with High Range PID TVOC Sensor

Dimensions: Size	4.9 x 4.9 x 2 in / 124.9 x 124.9 x 50 mm
Weight	286 g / 10 oz
Construction:	Polycarbonate, white, low profile
Sensor: Type	PID (10.6eV lamp energy)
Life Span	Approximately 5-years (excluding replaceable lamp and electrode stack)
Gases Detected:	TVOCs (Total Volatile Organic Compounds), includes extensive range of gases and chemicals
Sensor Range:	0 – 300 ppm (calibrated with Isobutylene span gas)
System Power:	4-wire: 16-30 VDC, 3W, Class 2 4-wire: 12-27 VAC, 50-60 Hz, 3 VA, Class 2
Temperature:	0°C to +40°C (32°F to 104°F)
Humidity:	15 to 95% non-condensing
Indicators:	LCD digital display, 2 line x 16 character, backlit
Communication	BACnet® MS/TP (version 1 rev 14) RS-485, or Modbus® RTU (version 1.1b3) RS-485
Relay (Option -RLY):	1 SPDT relay rated 30 volts, 2 amp max
Relay and Audible (Option -RBZ):	1 SPDT dry contact relay rated 30 volts, 2 amp max Internal buzzer, rated 90 dB @ 10 cm / 4 in, enable/disable
Audible:	none
Minimum Detection:	0.1 ppm Isobutylene
Accuracy:	no data available
Repeatability:	no data available
Sensitivity:	>6.0 mV / ppm Isobutylene
Response Time (T₉₀):	<3 sec (diffusion)
Resolution:	Display resolution: 1 ppm Sensor resolution: ±0.1 ppm
Warm Up Time:	4 minutes after power-up
Cross Sensitivity:	Many other gases, vapours, chemicals
Safety:	Automatic resetting thermal overload fuse (reset capabilities to 500 times)
Wiring:	VDC or VAC (ground referenced) 4-conductor shielded, 16 AWG stranded within conduit, network wiring (daisy-chain)
Sensor Mounting:	Heavier than air, 6 in / 15 cm from the floor (application dependent)
Monitoring Area:	3000 ft ² / 279 m ²
Suggested Alarm Points	Low Alarm: 50 ppm / Mid Alarm: 100 ppm / High Alarm: 200 ppm
Certifications: (tested to)	CSA: C22.2 NO.205-12 UL: UL508 (Edition 18): 2018 CE: EMC Directive 2014/30/EU, EN50270:2015, Type 1, EN61010 Listed by BTL RoHS compliant circuit boards This device complies with part 15 of the FCC Rules
Notes:	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.