

THE DETECTOR THAT CONTINUOUSLY MONITORS VOLATILE ORGANIC COMPOUNDS (VOCs).

The TVOC 2 is a second-generation fixed gas detector that uses photoionization (PID) technology to measure and control volatile organic compounds (VOCs) down to ppm level.

It consists of a MiniPID 2 sensor – a technology patented by Ion Science, which minimises the effects of humidity and contamination – and a 10.6eV PID lamp, which detects a large range of VOCs. Gas is sampled via diffusion, but can be pumped using an adaptor. It is very accurate, with three detection ranges that can be selected via a switch on the printed circuit: 0-10 ppm (0.01 ppm), 0-100 ppm (0.1 ppm) and 0-1,000 ppm (1 ppm).

It is easy to install, and has a 4-20mA analogue output which means it can be integrated into a number of devices, such as sub-systems, for example. It can be used in Zone 2 (ATEX) and Zone 1 (ATEX and IECEx) hazardous potentially explosive environments.

Applications: oil & gas industry, pharmaceutical industry, hospitals, food & beverage industry, laboratories, micro-electronics and water processing.

SPECIFICATIONS

- Three detection ranges: 0-10 ppm (0.01 ppm), 0-100 ppm (0.1 ppm), 0-1,000 ppm (1 ppm)
- Large LCD screen with four LEDs indicating device status
- Easy to maintain and calibrate: accessible PID sensor
- Robust design, can withstand harsh environments
- ATEX and IECEx approved
- Simple calibration procedure

TECHNICAL DATA

- Size:** 7.4 x 4.9 x 3 in. (18.8 x 12.6 x 7.8 cm)
- Weight:** 3.1 lbs (1.4 kg)
- Protection Class:** IP65
- Connection:** M20
- Display:** 7 segment, 4 digit, LCD, 4 color LEDs
- Output:** 4-20 mA requires a 8-35 VDC power supply
- Operating temperature:** -4 to +122°F (-20 to +50°C)
- Humidity:** 0-95%RH, non condensing
- Power supply:** 5-28 VDC Max 130 mA
- Consumption:** 130 mA max.
- Approvals:**
II 2G Ex ia IIC T4 Gb (-20°C ≤ Ta ≤ +50°C)
II 3G Ex nA IIC T4 (-40°C ≤ Ta ≤ +50°C)
Baseefa05ATEX0277X
IECEx BAS 06.0057X
- Approvals:** 1 year



ACCESSORIES



TVOC 2 hand aspirator

Comprising a hand separator, tubing and a carbon filter. Pumping the aspirator draws clean VOC-free ambient air through to calibrate the sensor (zero).



PID lamp cleaning kit (10.0 and 10.6 eV)

To remove dirt, grease and grime from the lamp window.



TVOC 2 calibration magnet

to adjust calibration settings.



Fixed calibration adaptor to test the TVOC remotely:

Tube connectors are attached via two M5 threaded holes and gas is pushed to the sensor via a gas bottle/flow regulator (sold separately).



Flow adaptor:

Can be installed via two M5 threaded holes as entry and exit points.

IMPORTANT: Maximum pressure 300mBar. Recommended flow 250 to 500ml/min.



TVOC 2 accessory kit

Includes a hand aspirator and the tools required to service and calibrate the sensor.