TVOC 2

FIXED VOC MONITOR

FIXED PID MONITOR FOR VOLATILE ORGANIC COMPOUNDS.

ionscience.com

Pioneering Gas Sensing Technology.

ION

CONTINUOUS DETECTION OF VOLATILE ORGANIC COMPOUNDS (VOCS) WITH MULTIPLE RANGE FROM JUST ONE INSTRUMENT.

Best available photoionisation (PID) detection

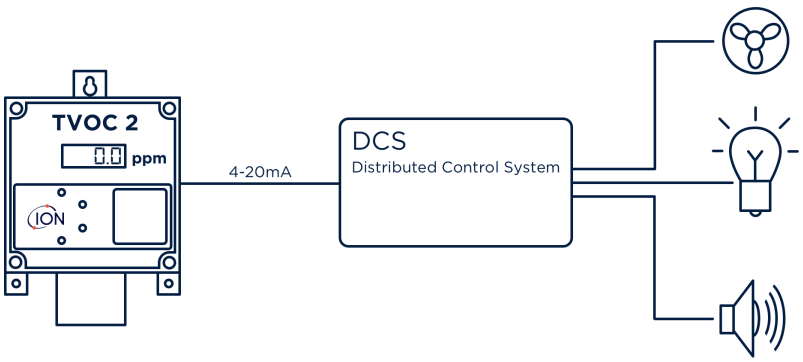
- PID independently verified as best performing on the market
- Range: 0 to 10, 0 to 100 or 0 to 1000 ppm from just one instrument
- In-built humidity resistance with no need to compensate
- Anti-contamination design for extended field operation
- Reliable diffusive monitoring - no pump required
- An optional sensor cap allows a pipe connection

Safety

- Accurate results over all environmental conditions
- Rugged and robust design withstands harsh environments
- Large LCD display for clear readings
- ATEX and IECEx approved

Ease of use

- Simple to use - minimal training required
- Easy access PID sensor for fast, simple servicing
- Simple calibration procedure
- Easily integrated into a control system



Low cost operation

- Inexpensive consumables and parts
- 2 year warranty when instrument is registered online

MiniPID 2 sensor

TVOC 2 is a fixed photoionisation detector (PID) for the continuous measurement of total volatile organic compounds (VOCs). TVOC 2 can accurately measure three detection ranges.

TVOC 2 continually measures and updates the output every second.

TVOC 2 utilises a diffusive sample technique resulting in less contamination issues compared to pumped systems, reducing lamp cleaning and servicing requirements. The 4-20 mA analogue output enables TVOC to be integrated into a DCS control system to give warning or control of high VOC levels in the working environment.

ATEX approvals enable a 3 wire TVOC system to be used in Zone 2 hazardous areas, without safety barriers. ATEX and IECEx approvals allow TVOC to be used in Zone 1 hazardous areas, with safety barriers.

Simple to install, service and calibrate, TVOC 2 requires no hot work permit and the PID sensor is accessible and changeable in a matter of seconds.

Extend your instrument warranty

Your TVOC 2 instrument warranty may be extended by simply registering your product on the Ion Science website within one month of purchase.

Applications include:

- Manufacturing
- Processing
- Offshore
- Refineries & petrochemical
- Chemical
- Waste water treatment
- Pulp & paper
- Pharmaceutical
- Indoor air quality
- Solvent recovery systems
- Industrial painting & coating

Accessories

TVOC 2 is supplied with an exclusive range of accessories

Technical specifications

Approvals
- Ⓔx II 2G Ex ia IIC T4 Gb (-20°C ≤ Ta ≤ +50°C)
- Ⓔx II 3G Ex nA IIC T4 (-40°C ≤ Ta ≤ +50°C)
- Baseefa05ATEX0277X
- IECEx BAS 06.0057X

Ingress protection rating
- Designed to IP65
- Sensor Ingress Protection IP54

Power
- 5-28 VDC Max 130 mA

Output
- 4-20 mA requires a 8-35 VDC power supply
- For IS requirements 8-30 VDC power supply

Range
- 0 to 10 ppm, 0 to 100 ppm, 0 to 1000 ppm (user selectable)

Sampling
- Diffusion (can be pumped if required using an adaptor)

Display
- 7 segment, 4 digit LCD, 4 color LEDs

Response
- Sensor - T90 < 5 sec

Accuracy
- 0 to 100 ppm: ± 5% at calibration point.
  100 to 1000 ppm: ± 10% at calibration points.

Calibration
- Accessed via magnetic switch
- 100 ppm Isobutylene via calibration kit accessory

Temperature
- Operating: -20 °C to 50 °C (-4 °C- 122 °F)
- Humidity: 0-95% RH (non- condensing)

Weight & dimensions
- Instrument: 1.4 kg (3.1 lb) Packed: 1.6 kg (3.5 lb)
- Dimensions: 188 x 126 x 78 mm (7.4 x 4.9 x 3")

4-20 mA alarm levels
- Selectable 2 mA & 3.5 mA options

All specifications quoted are at calibration point and under the same ambient conditions.
Specifications are based on isobutylene calibration at 20 °C and 1000 mBar.

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