TVOC 2 is a fixed photoionization detector (PID) for the use of continuous measurement of total volatile organic compounds (VOCs). TVOC 2 utilizes a diffusive sample technique resulting in less contamination issues compared to pumped systems, reducing lamp cleaning and servicing requirements. The 4-20 mA analog output enables TVOC to be integrated into a DCS control system to give warning or control of high VOC levels in the working environment.

**FEATURES**

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

*ATEX approvals enable TVOC 2 systems to be used in Zone 2 hazardous areas, without safety barriers. ATEX and IECEx approvals allow TVOC 2 to be used in Zone 1 hazardous areas, with safety barriers.

**APPLICATIONS INCLUDE:**

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

**CALL GEOTECH TODAY (800) 833-7958**

Geotech Environmental Equipment, Inc.  
2650 East 40th Avenue  •  Denver, Colorado  80205  
(303) 320-4764  •  FAX (303) 322-7242  
email: sales@geotechenv.com  •  website: www.geotechenv.com
## SPECIFICATIONS

| **Approvals**            | • II 2G Ex ia IIIC T4 Gb  
|                         | (-20°C ≤ Ta ≤ +50°C)  
|                         | • II 3G Ex nA IIIC T4  
|                         | (-40°C ≤ Ta ≤ +50°C)  
|                         | • Baseefa05ATEX0277X  
|                         | • IECEx BAS 06.0057X  |
| **Ingress Protection**  | • Designed to IP65  
| **Rating**              | • Sensor Ingress Protecting 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  
|                         | • 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

Specifications can change without notice.

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.

*The Fence Electrode technology referred to in this document is produced by Ion Science Ltd, and protected by patents. U.S. Patent No. 7,046,012. EP 1474681, other patents pending. TVOC 2 is a registered trademark of Ion Science Ltd.*

**TVOC 2 tool-kit for general service and calibration.**