

# Photoionization Detector (PID)

## *Ion Science Tiger Select*

The all new Tiger Select gives fast, benzene specific, or Total Aromatic Compound (TAC) detection providing accurate, reliable data.

### FEATURES

#### Optimal Performance

- Immediate results on start-up – no need to wait for readings
- Quickly detects Total Aromatic Compounds (TACs)
- Detects benzene in other compounds with selective tubes for benzene In areas of benzene gas only, no tubes are required
- Detects down to ppb levels
- Continuous readings shown on display until maximum level is reached
- Independently verified as best performing PID technology

#### Key Features

- Exceptionally easy-to-use and intuitive software
- Large, clear backlit display and keypad
- Easy to operate – even when wearing thick gloves
- Lightweight – enabling easy one-handed operation

#### Versatility

- Battery life up to 30 hours
- Rugged design to withstand the harshest environments
- Backlight responds to ambient light conditions

### APPLICATIONS

- **Total Aromatic Compound (TAC) detection at loading docks and barge operations**
- **Confined space entry pre-screening during refinery and plant maintenance**
- **Refinery down-stream monitoring**
- **Hazardous material response**
- **Marine spill response**

### WHAT'S INCLUDED

Ion Science provides a range of Tiger Select kits to suit your requirements, along with an exclusive range of accessories. Further details can be found below.

For more information and prices contact Geotech.

Tiger Select Kit Contains:

- PhoCheck Tiger Select Instrument
- Rechargeable Battery (Li-ion)\*
- Battery Charger and Mains Adaptor\*
- Rubber Boot
- Explorer Case
- USB Memory Stick
- Draeger Benzene Pre-Filter Tubes
- Pellet Pack PPB (use only in non Select applications)
- Tiger Select Manual
- Tiger Select Quick Start Guide
- Draeger Benzene Pre-Filter Tube Opener
- Carbon Filter Assembly
- PTFE Filter Discs
- Removable Tool for MiniPID Stack
- Carbon Filter Adaptor
- Sample Cleaning Compound
- Lanyard
- Calibration Adaptor
- Sensor Seal - Coated
- Tiger Select Calibration Connector
- O-ring
- Electrode Stack

\*Only included with the Rechargeable Tiger Select.



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

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## Ion Science Tiger Select

### SPECIFICATIONS

<b>Resolution</b>	10 ppb or 0.033 mg/m <sup>3</sup> benzene
<b>Maximum Reading</b>	40 ppm or 130 mg/m <sup>3</sup> benzene in tube mode At least 4000 ppm in TAC mode
<b>Accuracy</b>	±10% display reading ±one digit benzene
<b>Linearity</b>	±5% to 40 ppm benzene
<b>Response Time</b>	120 seconds. Progressive indication of benzene breakthrough is displayed in real time
<b>Intrinsically Safe Approvals</b>	ATEX II 2G Ex ib IIC T4 (-15°C ≤Ta ≤+45°C) ITS09 ATEX 26890X IECEX ITS 10.0036X US and Canadian approvals pending
<b>Battery Life</b>	<i>Li-ion:</i> Life up to 30 hours, charge time 6.5 hours <i>Alkaline:</i> 3 x AA, typically 12 hours life
<b>PID Lamps</b>	Kr PID lamp with 10.0 eV filter pellet
<b>Data Logging</b>	>120,000 data log points including date and time stamp
<b>Communication</b>	Direct USB 1.1
<b>Calibration</b>	2 and 3 point calibration (via calibration kit accessory)
<b>Alarm</b>	Flashing LED's Amber (low alarm) Red (high alarm) Sounder 95 dBA at 12" (300mm) Vibration on alarm Pre-programmed TWA and STEL
<b>Flow Rate</b>	220 ml/min (150 cc/min flow alarm)
<b>Temperature</b>	<i>Operating:</i> -20° to 60°C, -4° to 140°F (non Intrinsically Safe) <i>Humidity:</i> 0-99% RH (non condensing)
<b>Protection</b>	Designed to IP65 (heavy rain) CE 1180 EMC tested to EN61326-1:2006, EN50270:2006 & CFR 47:2008 Class A
<b>Weight &amp; Dimensions</b>	<i>Instrument</i> (probe fitted, no tube attached): 18.3 W x 2.4 H x 3.5 D in. (465 W x 61 H x 89 D mm) <i>Standard Case:</i> Packed weight: 176 oz. (5 kg)

### OPERATION

Utilizing the high output Ion Science 10.0 eV detection system, a reading for Total Aromatic Compounds (TACs) is seen immediately on start-up. Should aromatics be detected, a benzene pre-filter tube can be easily attached to ensure rapid detection and selective measurement of benzene without the interference of background VOCs. The unit can also provide 15 minute STEL and 8 hour TWAs for TACs.

Throughout the measurement process, Tiger Select continues to display real-time data, ensuring the final reading represents the full value of actual benzene present. Benzene concentrations are displayed down to ppb levels, giving you accurate, reliable data.

In addition, the unique MiniPID VOC sensor incorporates both anti-contamination technology and Fence Electrode technology for extended operation in difficult working environments.



Note: PhoCheck is a US registered trademark, no. 2880994, and UK registered trademark, no. 2212457. Fence Electrode Technology is produced by Ion Science Ltd, and protected by U.S. Patent No. 7,046,012. EP 1474681, other patents pending.

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