



# Tiger Select

## Benzene & Total Aromatic Compound (TAC) detector.



Units  
Available  
for Rent



Rapidly detects benzene and total aromatic compounds (TACs) providing the most accurate, reliable data available.

### Best proven photoionisation (PID) detection

- PID independently verified as best performing on the market
- Unrivalled sensitivity detects down to ppb levels
- Selectively detects benzene with Draeger pre-filter tube
- Continuous readings shown as max level reached
- In-built humidity resistance with no need to compensate
- Anti-contamination design for extended field operation

### Minimise downtime

- Ready to use instantly with no complicated set up
- Large battery capacity gives several days of use
- Fast charge capability gets you up and running quickly
- Simple icon driven menu requires no user training
- Fastest data download via true USB connection
- Easily upgrade your instrument via the web 24/7

### Ease of use

- Self explanatory software and calibration routine
- Easy change sensor, electrode stack and lamps
- Large user friendly key pad
- Simple, one-handed operation

### Low cost operation

- Inexpensive parts and consumables
- 5 year warranty when instrument registered online

A revolutionary hand-held detector, TigerSelect can be operated in one of two modes: either with a Draeger pre-filter tube, to detect benzene selectively, or without, to detect total aromatic compounds (TAC).

Utilising 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 Draeger benzene pre-filter tube can be easily attached to ensure rapid detection and selective measurement of benzene. Tiger Select can also provide 15 minute short term exposure limits (STELs) and 8 hour time weighted averages (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 the most accurate, reliable data you can count on.

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

Tiger Select can also be used in standard PhoCheck Tiger operational mode without the use of a benzene pre-filter tube to deliver active indications of volatile organic compounds (VOCs), including benzene at concentrations as low as 1 ppb benzene equivalent. For further details on PhoCheck Tiger, please visit [www.ionscience.com/tiger](http://www.ionscience.com/tiger)

Additionally, Tiger Select may be used alongside the Cub<sup>TAC</sup> personal PID monitor to provide the ultimate solution for benzene detection. Visit [www.ionscience.com/cub](http://www.ionscience.com/cub) for more details.

### Applications

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

### Accessories

Tiger Select is available with an exclusive range of accessories. Visit [www.ionscience.com/select](http://www.ionscience.com/select) or contact Ion Science for more information.

## TECHNICAL SPECIFICATION

### RESOLUTION

10 ppb or 0.033 mg/m<sup>3</sup> benzene

### MAXIMUM READING

0 to 40 ppm or 0 to 130 mg/m<sup>3</sup> benzene in tube mode  
0 to 20,000 ppm in TAC mode (gas dependent)

### ACCURACY\*

±10% display reading ± one digit benzene

### LINEARITY\*

± 5% to 40 ppm benzene

### RESPONSE TIME

120 seconds. Progressive indication of benzene breakthrough is displayed in real time

### INTRINSICALLY SAFE APPROVALS

II 1G Ex ia IIC T4 Gc  
Tamb = -15 °C ≤ Ta ≤ +45 °C (with lithium ion battery pack)  
Tamb = -15 °C ≤ Ta ≤ +45 °C (with alkaline battery pack)  
ITS09ATEX26890X IECEx ITS 10.0036X  
3193491 conforms to UL Std. 913, 61010-1 &  
Certified to CAN/CSA Std. C22.2 No. 61010-1

### BATTERY LIFE

Li-ion: life up to 24 hours, charge time 6.5 hours  
Alkaline: 3 x AA, typically 8.5 hours life

### PID LAMPS

Kr PID lamp with 10.0 eV filter pellet

### DATA LOGGING

> 120,000 data log points including date and time stamp

### COMMUNICATION

Direct USB 1.1

### CALIBRATION

2 and 3 point calibration (via calibration kit accessory)

### ALARM

Flashing LED's Amber (low alarm) Red (high alarm)  
Sounder 95 dBA at 300mm (12") Vibration on alarm  
Pre-programmed TWA and STEL\*

### FLOW RATE

220 ml/min (150 cc/min flow alarm)

### TEMPERATURE

Operating: -20 to 60 °C, -4 to 140 °F (non Intrinsically Safe)  
Humidity: 0-99% RH (non condensing)

### PROTECTION

Designed to IP65 (heavy rain)  
CE 1180  
EMC tested to EN61326-1:2006, EN50270:2006 & CFR 47:2008 Class A

### WEIGHT & DIMENSIONS

Instrument (probe fitted, no tube attached)  
Length: 465 x Height: 89 x Depth: 61 mm (18.3 x 3.5 x 2.4")  
Standard case  
Packed weight: 5 kg (176 oz)

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.

Select V1.5. This publication is not intended to form the basis of a contract and specifications can change without notice.

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