



# TIGER

HANDHELD VOC DETECTOR

HUMIDITY RESISTANT PID TECHNOLOGY  
WITH ANTI-CONTAMINATION DESIGN

[ionscience.com](http://ionscience.com)

Unrivalled Gas Detection.





# TIGER PROVIDES RAPID, ACCURATE DETECTION OF VOCs WITH EXCEPTIONAL RESISTANCE TO HUMIDITY AND CONTAMINATION.

## Best available photoionisation (PID) detection

- PID independently verified as best performing on the market
- Humidity resistant and anti-contamination design
- Dynamic range ppb to 20,000 ppm
- Fast response time and clear down
- Internal gas table with over 700 VOCs & toxic compounds

## Minimise downtime

- Fast start up with no complicated set up
- Battery life up to 24 hours continual use
- Simple icon driven menu requires minimal user training
- Direct USB connectivity for fast data download
- Instrument easily upgradeable via Ion Science website

## Ease of use

- Intuitive, easy to use software
- Easy access sensor, electrode stack and lamps
- Large clear keypad and slim design allows one handed operation
- Keypad backlit in low light conditions

## Safety

- Accurate results in all environmental conditions
- Intrinsically safe; meets ATEX, IECEx, North American and Canadian standards

## Low cost operation

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

\*Terms and conditions apply





Tiger is the most advanced hand held VOC detector on the market with the widest measurement range, accurately detecting gases down to ultra low ppb levels up to 20,000 ppm. Tiger has the fastest response time of just two seconds, and is as quick to clear down. Its internal gas table contains over 700 response factors.

The instrument's photoionisation detection (PID) technology has been independently verified as best performing on the market for speed, accuracy, resistance to humidity and contamination, thanks to its patented Fence Electrode Technology. Its patented Fence Electrode Technology with three electrode format and anti-contamination design ensures optimal performance within humid and heavily contaminated atmospheres, extending run time in the field.

Tiger is ready to use with no complicated programming. The set up procedure can be done via a PC to perform basic functions. Direct connection from

the instrument to the computer via a standard USB cable offers the fastest communication and data download available.

Batteries can be replaced in potentially explosive environments due to the innovative intrinsic safe design. Low cost filters and lamps can be easily changed in seconds, minimising instrument downtime. Fast battery charging allows the instrument to be fully charged in 6.5 hours.

Tiger offers simple, one handed operation. Its rugged design and protective, removable rubber boot withstand the harshest environments. The large, clear back-lit display allows for easy viewing in any light condition. An integrated torch is designed for directing the instrument's probe into dimly lit areas. The illuminated keypad comes on when light is low.

Tiger is fully upgradeable. This allows lower cost instruments to be purchased with the option of adding functionality if needed, without having to return it to the factory for modification.

### **Extend your instrument warranty**

Tiger has the lowest running costs on the market with inexpensive disposable parts, lamps and filters. Warranty can be extended from two to five years if the instrument is registered online within one month of purchase. Visit [www.ionscience.com/instrument-registration](http://www.ionscience.com/instrument-registration)

### **Applications include**

- Environmental monitoring
- Soil contamination detection
- VOCs in landfill
- IAQ measuring industrial volatiles
- Leakage in fuel and chemical storage
- Health & Safety
- STEL & TWA monitoring
- Confined space entry
- Screening tool for First Responders
- VOC leak detection
- Wing tank entry
- Medical gases within Hospitals
- Fumigation gases
- Fugitive emissions

### **Accessories**

Tiger is supplied with an exclusive range of accessories. For more info visit: [www.ionscience.com/tiger](http://www.ionscience.com/tiger)



## Technical specifications

### Minimum resolution\*

- 1 ppb or 0.001 mg/m<sup>3</sup>

### Maximum reading\*\*

- 20,000 ppm or 20,000 mg/m<sup>3</sup> (gas dependent)

### Response time

- T90 < 2 seconds

### Accuracy\*

- 5% display reading one digit

### Linearity\*

- 5% display reading one digit

### Intrinsically safe approvals

- II 1G Ex ia IIC T4 Ga
- 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 continual use
- Alkaline: (Duracell Procell MN 1500) life up to 8.5 hours continual use

### Lamps

- 10.6 eV Krypton PID lamp (standard.) 10.0 eV and 11.7 eV lamps available

### Data logging\*

- Including date / time: 120,000 points

### Communication

- Direct USB 1.1 connection

### Alarm

- Flashing LED and 95 dBA at 300mm (12") audible sounder
- Selectable vibrating alarm
- Pre-programmed TWA and STEL\*
- Pre-programmed with over 700 gases\*

### Flow rate

- 220 ml/min in ambient conditions (with blocked 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)
- 1180
- EMC tested to EN61326-1:2006, EN50270:2006 & CFR 47:2008 Class A

### Weight & dimensions

- Instrument with probe
- Width: 340 x Height: 90 x Depth: 60 mm (13.4 x 3.6 x 2.4")
- Standard case
- 367 x 89 x 90 mm (14.45 x 3.54 x 2.36")
- Instrument weight 0.72 kg (1.56lb)
- Packed weight: 5 .5kg (12lb)

Tiger V1.2. This publication is not intended to form the basis of a contract and specifications can change without

All specifications are against isobutylene calibration at 20 °C, 90% RH and up to 3000 ppm unless otherwise stated. \*Model and gas dependent. \*\*Maximum reading is achieved with certain analytes such as ethanol.

## Manufactured by:

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"The Tiger is an easy to use, rugged and lightweight instrument that you can truly depend on. We have been dealing with Ion Science for a number of years and have always received good customer service, finding the team to be both pleasant and efficient."

**Allen Garner, General Manager, Finley Environmental Group**