

# 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
- Easily upgrade your instrument via the web 24/7

## 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 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 one to five years if the instrument is registered online within one month of purchase.

### **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 the ION Science website.



# Technical specifications

## Intrinsically safe approvals

- Ex 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
- Class 1 Division 1. Approval for Groups A, B, C & D, T4

## Humidity

- 0-99% RH (non condensing)

## Lamps

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

## Data logging\*

- 120,000 points including date and time stamp

## Communication

- Direct USB 1.1 connection

## Calibration

- 2 and 3 point calibration (via calibration kit accessory)

## Battery life

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

## Flow rate

- ≥ 220 ml/min (with blocked flow alarm)

## Protection

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

## Alarm

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

PERFORMANCE *	10.6 eV	11.7 eV
Minimum Sensitivity	1 ppb or 0.001 mg/m <sup>3</sup> ***	0.6 ppm (600 ppb) ***
Maximum Reading (Range)**	20,000 ppm or 20,000 mg/m <sup>3</sup> ***	9,000 ppm ***#
Accuracy	± 5% or ± one digit***	± 12% display reading***
Response Time T90 (s)	< 2 seconds	< 6 seconds
Lamp Lifetime	10,000 hours	≥500 hours****
Temperature Range	-20°C to +60°C	0°C to +60°C

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 (1.56 lb)
Packed Weight	5.5 kg (12 lb)

\*Model and gas dependent.

\*\*Maximum reading is achieved with certain analytes such as ethanol.

\*\*\*Specifications are based on isobutylene calibrations at 20 °C and 1000mBar.

All specifications quoted are at calibration point and under the same ambient conditions.

\*\*\*\* Based on continuous running.

#For indicative measurement only. Quoted accuracy achievable up to 2,000 ppm. For more accurate detection, calibration around concentration of interest is recommended.

Tiger V2.2. This publication is not intended to form the basis of a contract and specifications can change without notice.

## 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**