

Photoionization Detector (PID) **lon Science Tiger**

The Ion Science Tiger is the most advanced handheld photoionization detector (PID) with the widest measurement range on the market for volatile organic compounds (VOCs).

The unique six pin miniPID detector cell with anti-contamination design dramatically extends run time in the field. Low cost filters and lamps can be easily changed in seconds, minimizing instrument downtime, and the Tiger boasts the lowest operating costs on the market.

Tiger is fully upgradeable with multiple functions from which to choose. The instrument can be used across a wide range of industries and applications including environmental, petrochemical, hazmat and confined space entry.

FEATURES

- **Best Proven PID Performance.** Ion Science's patented Fence Electrode Technology is independently verified as the best performing PID for fast response and accurate readings, minimal humidity and contamination effects. The instrument's exceptional operation in high humidity environments is achieved without impairing other performance features.
- **Dynamic Detection Range of 1 ppb to 20,000 ppm (gas dependant)** offering the widest detection range available. Detect VOCs down to ultra low ppb toxic thresholds levels up to 20,000 ppm. Readings can be displayed as mg/m³ or ppm.
- **Ready to Use Right Out of the Box** with no complicated programming and set up procedures via a PC to perform basic functions.
- Long Life, Field Replaceable Li-ion Batteries with up to 24 hours of use between charges. Batteries can be replaced safely, even in hazardous environments. Fast battery charging allows the instrument to be fully charged in six hours. 8 hours of use can be achieved from a 1.5 hour charge. Dry cell battery options also available.
- Rapid Response in Two Seconds the fastest on the market and as quick to clear down!
- Response Factors for Over 700 Gases. The instrument is pre-programmed with over 700 gas factors.
- Fastest USB Communication on the Market. Directly connects to a PC via USB.
- **Selectable Audible, Visual and Vibrating Alarms.** The instrument has two sounders reaching 95 dBA, two bright flashing LEDs and a vibration alarm for clear indication of gases present. Each function can be selected, switched off or volume turned down as required.
- **Dedicated Flow Fail Sensor.** The instrument's separate flow sensor triggers an alarm for added safety when the flow drops below 100 cc/min. Intrinsically Safe to European approvals for safe use in flammable areas.
- **Simple, One-Handed Operation.** The PhoCheck Tiger is light, well balanced, comfortable to hold and comes with a convenient wrist strap as standard.
- **Easy Key Pad Operation** and icon-driven menu for ease of use across global markets. The soft keys are large enough to be easily operated, even when wearing the thickest gloves.
- Large, Clear Back-lit Display allows for easy viewing in any light condition.
- Integrated Torch for directing the probe into dimly lit areas.
- Intuitive PC Tiger Software Supplied on USB Drive. For users who wish to customize the instrument and download data; settings can be configured for one or multiple units, via one screen.
- Five Year Instrument Warranty when instrument is registered online.



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



Photoionization Detector (PID)

Ion Science Tiger

KIT & UPGRADE OPTIONS

Tiger Kit Contains:

- Tiger Instrument
- Rechargeable Battery (Li-ion)
- Battery Charger and Mains Adaptor
- Rubber Boot
- Carbon Filter Assembly
- PTFE Filter Disc (dust filter)
- · Removal Tool miniPID Stack
- Probe Tube (60mm)
- · Sample Cleaning Compound Assembly
- USB Cable
- Instrument Manual
- Calibration Adapter
- · Sensor Seal Coated
- Tiger Quick Start Guide

Upgrade Options

The following features can be purchased either during inital sale, or via remote upgrade post-sale:

ppb Sensitivity

Add ppb for the widest detection range available on the market:

Detect VOCs from 1 ppb to 20,000 ppm (Note: a base unit detects VOCs from 0.1 ppm to 20,000 ppm).

Health and Safety

Add Health and Safety mode to include:

Time Weighted Average and Short Term Exposure Limit alarms using preset tables Selectable national standards NIOSH, OSHA and EH40

- · Single-Log Data Logging
- Multi-Log Data Logging
- Full Data Logging

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SPECIFICATIONS

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Lamps	10.6 eV Krypton PID lamp (standard) 10.0 eV and 11.7 eV lamps available
Data Logging*	>120,000 points including date/time stamp
Communication	Direct USB 1.1 connection
Calibration	2 and 3 point calibration (Via calibration kit accessory)
Battery Life	
Li-ion: Alkaline:	Life up to 24 hours, charge time 6.5 hours 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 of
Alarm	Flashing LEDs Amber (Low alarm) Red (High Alarm) Sounder 95 dBA at 300mm (12") Vibration on alarm Pre-programmed TWA and STEL*
Intrinsically Safe Approvals	Ex II 1G Ex ia IIC T4 Ga Tamb = -15°C ≤Ta ≤+45°C (with lithium ion or 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 Divison 1. Approval for Groups A, B, C & D, T4
Minimum Sensitivity*	
10.6 eV	1 ppb or 0.001 mg/m3***
11.7 eV	0.6 ppm (600 ppb)***
Max. Reading (Range)** 10.6 eV	20,000 ppm or 20,000 mg/m ^{3***}
11.7 eV	9,000 ppm***#
Accuracy*	77771
10.6 eV	±5% or ±one digit***
11.7 eV	±12% display reading***
Response Time T90 (s)*	
10.6 eV	< 2 seconds
11.7 eV	< 6 seconds
Lamp Lifetime*	
10.6 eV	10,000 hours
11.7 eV	≥500 hours****
Temperature Range*	20% +0 160%
10.6 eV:	-20°C to +60°C 0°C to +60°C
Humidity	0-99% RH (non condensing)
•	o >>,o min (non-condensing)
Weight & Dimensions Instrument with Probe: Standard Case: Instrument Weight: Packed Weight:	340 W x 90 H x 60mm D (13.4" x 3.6" x 2.4") 367mm x 89mm x 90mm (14.45" x 3.54" x 2.36") 0.72 kg (1.56 lb.) 5.5 kg (12 lb.)
i achea weight.	3.5 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.

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

Specifications can change without notice.