



# PHOCHECK® TIGER

**World's Most  
Advanced PID  
Now Even  
Better!**

Independently  
verified as best  
performing PID  
technology

The PhoCheck Tiger hand held VOC detector with revolutionary PID technology provides the best available detection and software features, all ready to use straight out of the box!

## Key Features:

- Patented Fence Electrode Technology
- Dynamic range ppb to 20,000 ppm for specific volatiles
- Fast 2 second response
- Easy change miniPID Detector, Electrode Stack and Lamps
- Exceptionally easy to use and intuitive
- No complex set up procedures required via a PC
- Batteries certified to be changed within hazardous areas
- Fully upgradeable with selectable functions
- Choice of data logging options
- Battery life up to 30 hours
- Intrinsically Safe
- Rugged design with protective, removable rubber boot
- Loud audible sounders 95 dBA
- Bright LED and vibration alarms
- Lowest running costs on the market
- 5 year instrument warranty

Advanced Gas Sensing Technologies  
[www.ionscience.com](http://www.ionscience.com)



PhoCheck Tiger with miniPID technology is the most advanced handheld photoionisation detector (PID) on the market for volatile organic compounds (VOCs). Choose from our full featured base unit, or upgrade your instrument with a number of optional functions.

**Best Proven PID Performance.** Ion Science patented Fence Electrode Technology is independently verified as the best performing PID for fast response and accurate readings, whilst effectively minimising 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/m<sup>3</sup> 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.

**Unique 6 Pin miniPID Detector Cell** with anti-contamination design dramatically extends run time. The easy change low cost filter, lamps and electrode stack can be replaced in seconds.



**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 1.5 hours charge. Dry cell battery options also available.

**Rapid Response in Less Than Two Seconds** - the fastest on the market - and as quick to clear down!

**Response Factors for Over 350 Gases.** The instrument is pre programmed with over 350 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 when the flow drops below 100 cc/min for added safety.

**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.

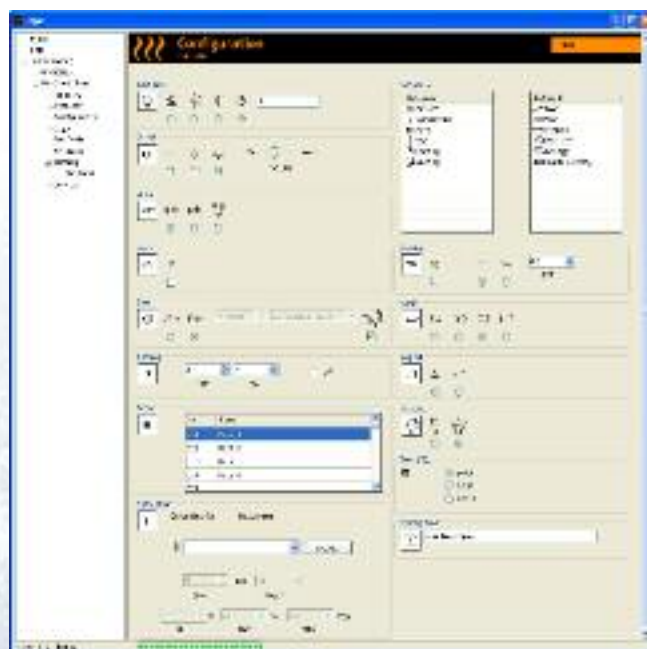
**Easy Key Pad Operation** and icon driven menu for ease of use across global markets. The soft keys are large enough to be easily operated, even when wearing the thickest gloves.

**Large, Clear Back-lit Display** allows for easy viewing in any light condition.

**Integrated Torch** for directing the probe in to dimly lit areas.

**Intuitive PC Tiger Software**

**Supplied on USB Drive.** For users who wish to customise the instrument and download data; settings can be configured for one or multiple units, via one screen.



**Lowest Running Costs on the Market.** Inexpensive disposable parts, lamps and filters.

**Five Year Instrument Warranty.** Full warranty against workmanship, design, all electronics and hardware. Moving parts, filters and lamps excluded.



### Rugged Design

Withstands use within the harshest of environments.

### Robust Rubber Boot

Gives maximum protection to the instrument. Can be easily removed if required.

### Designed to IP65

PhoCheck Tiger provides optimal resistance to moisture, dust and contamination.

## Industries and Applications



## Upgradeability Options

### Fully Upgradeable Directly from Users own Desktop!

PhoCheck Tiger is a fully upgradeable instrument with multiple application driven software modules to choose from. A base unit can be upgraded with data logging, health and safety mode and ppb options remotely, from the users own desktop without even being returned to the factory.

### Data Logging

Add data logging to your instrument for the following features:

- Store up to 120,000 data points with date and time stamp
- Event logging
- Push to log (single point)
- Timed logging
- Continuous logging
- Log on alarm
- Zone logging

### Health and Safety Mode

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

### ppb Capability

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).

PhoCheck Tiger provides the most reliable and up to date VOC detector on the market. The instrument can be used across a wide range of industries and applications including; Environmental, Petrochemical, HazMat and Confined Space Entry.

## Applications Include:

- Environmental Monitoring
- Soil Contamination Detection
- VOCs in Landfill Sites
- Indoor Air Quality Measuring Industrial Volatiles
- Health & Safety, STEL & TWA Monitoring in Confined Spaces
- General Leakage in Fuel and Chemical Storage
- General Atmosphere Monitoring for Tracing Chemicals
- Screening Tool for First Responders
- Fence Line Monitoring for Plume Detection
- Filter Monitoring in Clean Rooms and Air Conditioning
- VOC Leak Detection
- Early Screening of WMDs
- Testing for Accelerant Use
- Fuel Leakage in Automotive Manufacture
- Monitoring Tracer Gases for Fume / Glove Box Testing
- Medical Gases Within Hospitals
- Gas Line Leakage in Laboratories
- Fumigation Gases (such as Formaldehyde)
- Detecting Fugitive Emissions
- Environmental Clean Up After Spillage
- Filling Station Leakages
- Wing Tank Entry Detecting Low Levels of Jet Fuel
- Illegal Dumping of Chemicals

## Kit and Accessories



Ion Science provides a range of PhoCheck Tiger kits to suit your requirements, along with an exclusive range of accessories. Further details can be found below. For more information and prices contact Ion Science or your local Distributor.

### PhoCheck Tiger Kit (part no. PTXSLBME-0000) Contains:

- PhoCheck Tiger
- Rechargeable Battery (Li-ion)
- Battery Charger and Mains Adaptor
- Rubber Boot
- Explorer Case
- USB Memory Stick
- Zero Filter Assembly
- PTFE Filter Disc (dust filter)
- Removal Tool miniPID Stack
- Probe Tube (60mm)
- Sample Cleaning Compound Assembly
- Cleaning buds
- Lanyard (wrist strap)
- USB Cable
- Instrument Manual

### Instrument Accessories Include:

- Rechargeable Battery (Li-ion)
- Alkaline Battery
- 2.1mm DC jack - Cigar Lighter Plug Car Charger Lead
- Leather Instrument Holster
- Leather Instrument Harness
- Drager Tube Holder for Selective Detection of Benzene
- Flexible Probe Assembly
- 5m & 10m Extension Hose
- 9.8eV, 10.6eV and 11.7eV PID lamps

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. PhoCheck is a registered trademark of Ion Science Ltd.

## TECHNICAL SPECIFICATION

### 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>

### ACCURACY \*

± 5% display reading ± one digit

### LINEARITY \*

± 5% to 100 ppm

### INTRINSICALLY SAFE APPROVALS

ATEX II 2G Ex ib IIC T4 (-15 °C ≤ Ta ≤ +45 °C)

IECEX ITS 10.0036X

US and Canadian approved

### BATTERY LIFE

Li-ion: life up to 24 hours, charge time 6.5 hours

Alkaline: 3 x AA, up to 8.5 hours life

### LAMPS

10.6 eV Krypton PID lamp (standard) 9.8eV and 11.7eV lamps available

### DATA LOGGING \*

> 120,000 data log points including date and time stamp (33 hours at 1 log per second)

### COMMUNICATION

USB 1.1

### CALIBRATION

Via calibration kit accessory

### ALARM

Flashing LED and 95 dBA at 300mm (12") audible sounder

Selectable vibrating alarm

Pre-programmed TWA and STEL\*

Pre-programmed with 350 gases\*

### FLOW RATE

220 ml/min with flow fail 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 without probe

Width: 340 x Height: 90 x Depth: 60 mm (13.4 x 3.6 x 2.4")

#### Standard case

420 x 320 x 97 mm (16.5 x 12.5 x 3.8")

Instrument weight: 0.72 kg (25 oz)

Packed weight: 5 kg (176 oz)

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.

Part number PCV1.6 This publication is not intended to form the basis of a contract and specifications can change without notice.



ION SCIENCE is ISO9001:2008 certified

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