Photoionization Detector (PID)

Ion Science PhoCheck Tiger

PhoCheck 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 PhoCheck Tiger boasts the lowest operating costs on the market.

The PhoCheck 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/m^3 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 30 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 Less Than Two Seconds** - the fastest on the market and as quick to clear down!

- **Response Factors for Over 450 Gases.** The instrument is pre-programmed with over 450 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.** Full warranty against workmanship, design, all electronics and hardware. Moving parts, filters and lamps excluded.

CALL GEOTECH TODAY (800) 833-7958

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KIT & UPGRADE OPTIONS

PhoCheck Tiger Kit 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

Upgrade Options

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 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).

Bluetooth and Wireless Communication
- Future Bluetooth and Wireless communication options will be available.

SPECIFICATIONS

Minimum Resolution*	1 ppb or 0.001 mg/m^3
Maximum Reading**	20,000 ppm or 20,000 mg/m^3
Accuracy*	±5% display reading ±one digit
Linearity*	±5% to 100 ppm
Intrinsically Safe Approvals	ATEX II 2G Ex ia IIC T4 (-15°C ≤Ta ≤+60°C), IECEx and CUL
Battery Life *Li-ion:*	Life up to 30 hours, charge time 6.5 hours
Alkaline:	3 x AA, typically 15 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 450 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) C E 1180 EMC tested to EN61326-1:2006, EN50270:2006, CFR 47:2008 Class A
Weight & Dimensions *Instrument Without Probe:*	340 W x 90 H x 60mm D (13.4" x 3.6" x 2.4")
Standard case:	420 x 320 x 97mm (16.5" x 12.5" x 3.8")
Instrument Weight:	0.72 kg (25 oz)
Packed Weight:	5 kg (176 oz)

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