

The world's most advanced PID

VOC's from ppb to 10,000 ppm
in one instrument



The upgradeable PID
to meet your detection
requirements

Applications include:

- **Leak detection**
- **Atmosphere monitoring**
- **First response
HazMat/WMD**
- **Confined space entry**
- **Environmental clean-up**
- **Arson Investigation**
- **Petrochemicals**
- **STEL and TWA monitoring**
- **Industrial painting**
- **Landfill surveillance**

PhoCheck 1000

– the simplest handheld PID on the market.

PhoCheck 1000 is an entry level Photo-Ionisation Detector ideal for search and location application with a detecting range of 0.1 – 4,000 ppm. The simple roll over icon menu structure allows quick access to the various selectable features such as the easy to set alarm and the 50 point on screen history.

PhoCheck 2000Ex

– an upgradeable PID to grow with your needs.

PhoCheck 2000Ex is an ATEX approved intrinsically safe instrument for use in Zone 1 flammable areas with a detecting range of 0.1 – 4,000 ppm. The real time graph is a key feature of the 2000Ex allowing the user to view readings in graphical format as they are detected. The user can also set their own upper and lower alarm levels and access the instruments gas table which is pre-programmed for over 250 gases and gas mixtures. The PhoCheck 2000Ex can be upgraded in the field to the 3000Ex or the 5000Ex according to your needs.

PhoCheck 3000Ex

– a PID with download capability for easy data analysis.

PhoCheck 3000Ex, in addition to the capabilities of the 2000Ex, benefits from many other advanced features. The instrument has an expanded operating range of 0.1 – 10,000 ppm and an additional operating mode for personnel health and safety monitoring, with pre-programmed user selectable STEL and TWA values for the protection of workers. The 3000Ex has the capacity to data log up to 20,000 readings with a date and time stamp, which can then be downloaded via an infrared port to a PC and comprehensively analysed with our windows style software. This instrument can also be upgraded to the 5000Ex.

PhoCheck 5000Ex

– the most advanced PID on the market.

PhoCheck 5000Ex, is Ion Science's most sophisticated PID, and is the only instrument available on the market with a dynamic detecting range of low ppb – 10,000 ppm. This versatility allows the instrument to detect a greater range of dangerous toxic gases undetectable by other PIDs, as well as flammable gases at LEL thresholds. The 5000Ex is ideal for the first responder due to its sensitivity coupled with the advanced features of the 3000Ex, making this instrument a potential life saver in many environments

PhoCheck has redesigned handheld VOC and toxic gas detection to meet the industry needs of today and tomorrow.

PhoCheck is a highly sensitive photoionisation detector (PID) with a dynamic detecting range between a few ppb and 10,000 ppm, making it the only instrument on the market able to detect VOC's at low toxic thresholds and lower explosivity limits.

PhoCheck offers instant laboratory indicative measurements from a rugged, lightweight, handheld instrument. Users can make an immediate contamination risk assessment and therefore take early corrective action.

- ppb ~ 10,000 ppm for ultimate detection capability
- Real time graph display for an instant assessment of readings
- Unique 'fence electrode' technology for humidity compensation
- View stored readings graphically on screen for an overview of results
- Rapid response and recovery for faster detection
- Icon driven menu for ease of understanding
- Intrinsically safe for use in flammable areas
- Health and Safety mode for STEL and TWA monitoring
- Data down load via infrared port to a PC for analysis with easy to use software



Easy to use graphical interface

PhoCheck is free from translation difficulties and language barriers experienced by others due to its all new graphical interface and icon driven menu. The user-friendly icons make PhoCheck a truly global product for meeting global needs.

The onscreen graphical display of data logged readings as well as real time results benefits the user enormously by giving an instant overview of developing trends and assists in identifying peak readings.



PhoChecks menu icons allow the user to master the instrument functions and capabilities very quickly, ensuring rapid and effective operator training. The instrument can be easily personalised to the users specific needs through the on-screen menu, with adjustable features including zone references, alarm levels and the date and time.



Effective data analysis made simple

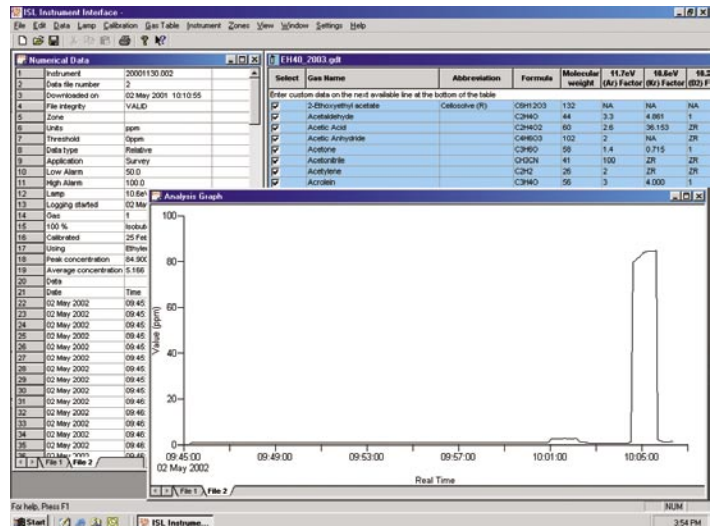
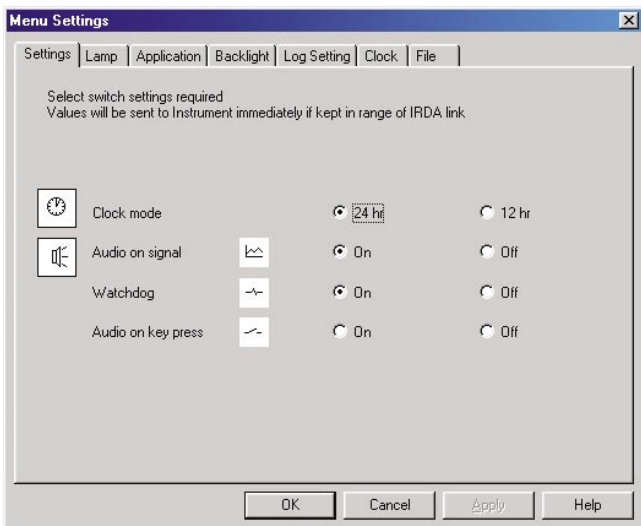
Ion Science Ltd's ISLPC-G software makes analysis of your instrument's logged readings quick, simple and effective (available on the 3000Ex and 5000Ex, upgradable on the 2000Ex). Up to 20,000 readings can be stored in an instrument and downloaded to a PC via the infrared port, which comes as standard on the 5000Ex and is an optional extra on the 3000Ex. The swift download of data gives the user access to all logged readings in a tabular format, which at the click of a button can be transformed into a graph for a simple overview of readings, highlighting trends.

The infra red link allows the adjustable features of a PhoCheck to be changed via a software enabled PC in addition to manually changing these on the instrument. This allows the user to enter numerous zone references

under which readings can be logged; saving the time it would take to enter these manually. Other adjustable functions include the alarm settings, the backlight and clock.

The software has a useful security setting which once chosen and downloaded locks the instrument, so that none of the functions can be changed manually. This can be particularly useful when setting health and safety alarm levels.

Settings selected via your PC can be saved and later downloaded to any number of instruments giving them identical functions such as alarm settings and zone references.



Technical Specification

DETECTOR

Ion Science Photoionisation Cell**

Fitted with unique 'Fence Electrode' technology**

- Greater measurement stability, accuracy and linearity
- Improved resistance of relative humidity effects
- T90 ~ 1 second rise and clear-down

LAMPS

10.6 eV Krypton PID lamp supplied as standard

Other lamps available please see accessories for details

INTRINSICALLY SAFE APPROVALS

⊕ II 2 G EEx ia II T4 Baseefa 02ATEX0093

CSA Type Tested Approval to: Exia IIB T4, Cl. I,

Div1, B, D T4 and Certified to UL 913-2002

ACCURACY

± 5% displayed reading ± one digit

LINEARITY

± 5%

DATA LOGGING*

20,000 points including date and time stamp

CALIBRATION

Via calibration kit accessory

OPERATION

Dry Cell: Alkaline 4 x AA: 16 hours.

Rechargeable NIMH: 14 hours

ALARM

Flashing LED and 90 dBA (10 cm) audible sounder

Pre-programmed TWA and STEL*

Pre-programmed 250 gas and gas cocktails*

INSTRUMENT RANGE*

Maximum range: 1 ppb to 10,000 ppm

Maximum range: 0.01 to 10,000 mg/m³

FLOW RATE

220 ml/min or 220 cc/min with flow fail alarm

TEMPERATURE

Operating: -20 to 60 °C, -4 to 140 °F

Humidity: 0-99% RH (non condensing)

WEIGHT & DIMENSIONS

Instrument without probe

340 mm (13.5") L x 60 mm (2.3") W x 49 mm (1.9") H

Standard case

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

Instrument 0.57 kg – 1.3 lb. Packed 3.0 kg – 6.6 lb

EMC tested to EN50081-1 & EN50082-1 July 98

ION SCIENCE is

ISO9001:2000 certified

(December 2003)



All specifications are against isobutylene calibration at 20 °C, 90% RH and up to 3000 ppm

* model and gas dependent ** patent pending

PhoCheck features and upgrade options

Key

Standard feature = ■

Upgradeable = □

Feature	1000	2000Ex	3000Ex	5000Ex
Intrinsically safe Atex approval		■	■	■
Infrared link for data output to a PC		□	□	■
Auto-range ppm / ppb		□	□	■
Real-time graph display on screen		■	■	■
History indicator	■			
20,000 data log points		□	■	■
Date/Time stamp		□	■	■
ISLPC-G software program for data handling		□	■	■
Easy to use icon based graphical interface	■	■	■	■
Zone name creator		□	■	■
Audible alarm 90 dBA	■	■	■	■
Visual alarm (LED)	■	■	■	■
Quick access gas table facility 250+		■	■	■
Selectable mg/m ³ or ppm/ppb units		■	■	■

Accessories

Ion Science has developed an exclusive range of high quality accessories to compliment all the PhoCheck models. Please see a selection of these below, for a full list see a member of our sales team.

Part No.	Accessories
A-31064	25 mm (1 in) diameter 0.5 micron probe filters PK of 5
A-31066	Std probes attachment PK of 5
30618	Photec lamp, type 8.4 eV Xenon
30619	Photec lamp, type 10.2 eV Deuterium
30620	Photec lamp, type 10.6 eV Krypton
30621	Photec lamp, type 11.7 eV Argon
31052	Leather instrument jacket
40052	Leather instrument jacket with magnetic attachment
31163	Luxury carry case includes space for Cal kit and IR link
A-30555	5 m (16 ft) flexible extension hose
A-30556	10 m (33 ft) flexible extension hose
A-31153	Exhaust barb, Teldlar Bag Connector
A-31057	Carbon Filter fitted with Luer connector to fit MkII Nozzle
5/BA-07	5 litre 100 ppm isobutylene calibration gas
1/VD-02	In-Car Charger 6 V
A-31063	IPA Wipes PK of 5
820209	Lanyard
820206	Disposable cover PK of 10
A-70023	100:1 Sample diluter