

Features and upgradeability options

Key: Standard feature = ■ Upgradeable = □

Feature	1000	1000Ex	2000Ex	3000Ex	5000Ex
Detection range 0.1 – 4000 ppm	■	■	■		
Detection range 0.1 – 10,000 ppm				■	
Detection range 1 ppb – 10,000 ppm					■
Intrinsically safe		■	■	■	■
Health & Safety mode for STEL & TWA monitoring		□	□	■	■
IRDA for wireless communications with a PC			■	■	■
Auto range ppm/ppb		□	□	□	■
Real-time graph display on screen		■	■	■	■
Simple data store	■				
Data logging		□	■	■	■
Date and Time stamp		□	■	■	■
Interactive Ion PC software for instrument configuration and data handling			■	■	■
Easy-to-use graphical icon based interface	■	■	■	■	■
Zone name creator		□	■	■	■
Audible alarm 90 dBA	■	■	■	■	■
Visual alarm (LED)	■	■	■	■	■
Gas table of 250+ gases and their individual response factors			■	■	■
Selectable mg/m3 or ppm/ppb		■	■	■	■
Upgradeable to FirstCheck+ range to include O2, CO, H2S and LEL		□	□	□	□

Note: Ion PC software runs on Windows XP and Vista

Accessories

Ion Science and their Agents provide an exclusive range of accessories to compliment the PhoCheck+.

EMC tested to EN61000-6-3 & EN61000-6-1 2001

*model and gas dependant
All specifications are against isobutylene calibration at 20 °C, 90% RH and up to 3000 ppm
Note: Fence Electrode Technology is produced by Ion Science Ltd, and protected by U.S. Patent No. 7,046,012. EP 1474681, other patents pending.

TECHNICAL SPECIFICATION

DETECTOR

Ion Science photoionisation cell fitted with patented 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 refer to accessories for details)

INTRINSICALLY SAFE APPROVALS

II 2 G Baseefa 03ATEX0742
EEx ia II T4
IECEx BAS 04.0033 (world standard)

ACCURACY*

± 5% display reading ± one digit

LINEARITY*

± 5%

DATA LOGGING*

Automatically recording readings every second including date and time stamp
8 Mb memory
Incorporates a secure storage algorithm to reduce stored data corruption

CALIBRATION

Via calibration kit accessory

OPERATION

Rechargeable NiMH (20 Hour) or Dry Cell (4 x AA – 20 hour

ALARM

Flashing LED and 90 dBA (10cm) audible sounder
Pre-programmed TWA and STEL*
Pre-programmed 450 gas and gas cocktails*

INSTRUMENT RANGE*

Maximum range: 1 ppb to 10,000 ppm
Maximum range: 0.001 to 10,000 mg/m3

FLOW RATE

220 ml/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 x 60 x 49 mm (13.5 x 2.3 x 1.9")
Standard case
420 x 320 x 97 mm (16.5 x 12.5 x 3.8")
Instrument 0.58 kg – 1.3 Lb. Packed 3.0 kg – 6.6 Lb
Packed 3.045 kg (6.7 Lb)



+



PHOCHECK+

World’s Most Advanced, Humidity Resistant PID for VOCs



Highly sensitive and humidity resistant, PhoCheck+ incorporates advanced patented Fence Electrode Technology, detecting VOCs at very low ppb toxic thresholds.

Features:

- Patented Fence Electrode Technology for high sensitivity, humidity and contamination resistant operation
- Detects VOCs from 1ppb - 10,000 ppm
- Detects major industrial VOCs - data available for over 450 gases
- Intrinsically safe for use in flammable areas
- Health & Safety mode for STEL and TWA
- Choice of readouts - numbers or real-time graph
- Universal graphical interface and icon menu
- Continuous data logging (stores over 130,000 individual readings)
- Traceable results and data download via IRDA link
- Fully interactive Ion PC software
- Upgradeable throughout PhoCheck+ and FirstCheck+ range



Proven PID Technology

PhoCheck+ is the most advanced handheld humidity resistant photoionisation detector (PID) for volatile organic compounds (VOCs), providing rapid response and accurate detection. Its unique patented Fence Electrode Technology incorporates a three-electrode format enabling proven resistance to humidity and contamination, giving optimal user performance in the field.

Dynamic Detection Range

The only instrument on the market capable of detecting VOCs at very low ppb toxic thresholds, the PhoCheck+ 5000Ex can accurately detect VOCs from 1 ppb up to 10,000 ppm.



PhoCheck 1000

A basic, low-cost unit, PhoCheck 1000 has a detection range of 0.1 - 4,000 ppm and is ideal for use in non-hazardous environments including indoor air quality and soil contamination assessment.

PhoCheck+ 1000Ex (upgradeable)

Intrinsically safe with a detection range of 0.1 - 4,000 ppm, the 1000Ex has user set single point alarms and gas table of over 450 gases (including their unique response factors.)

PhoCheck+ 2000Ex (upgradeable)

In addition to the 1000Ex features the 2000Ex has added data logging capability. The 2000Ex allows storage of over 37 hours of data logged readings taken every second (over 130,000 individual readings!) 2000Ex has a date and time stamp for download to a PC via an IRDA link for detailed analysis.

PhoCheck+ 3000Ex (upgradeable)

In addition to the features of the 2000Ex, PhoCheck 3000Ex has an extended detection range of 0.1 to 10,000 ppm, and operating mode for health and safety monitoring with pre-programmed STEL and TWA values.

PhoCheck+ 5000Ex (upgradeable to FirstCheck+)

The most sophisticated PID, the 5000Ex provides full features and a dynamic detection range of 1 ppb to 10,000 ppm. Dangerous toxic gases can be detected at low ppb levels where hazardous to health, as well as flammable gases at LEL thresholds. Ideal for the First Responder, the sensitivity of the 5000Ex is a potential life saving instrument in the most hazardous environments.

(Full PhoCheck features and upgradeability options can be found on page 4).

Flexible Upgradeability Options

A highly flexible instrument, PhoCheck+ is available in a number of versions from the basic, low-cost 1000, to the sophisticated 5000Ex with advanced features and extended detection range.

The versatile PhoCheck+ can be upgraded from the 1000Ex right up to the revolutionary FirstCheck+ multi-gas PID range of instruments.

PhoCheck+ Applications

The Ion Science range of PhoCheck+ instruments provide the ideal choice across a vast array of industries and applications in both non-hazardous and hazardous environments.

Applications include	
• Soil contamination	• Confined space entry
• Indoor air quality	• First response HazMat/WMD
• STEL and TWA monitoring	• Arson investigation
• Atmosphere monitoring	• Leak detection
• Environmental clean-up	
• Petrochemical	

"Other PID's would only work for a few hours with the high humidity and 95 degree heat. The PhoCheck+ 2000Ex worked for 3 days continuously without any problem. Customer's will now be buying and renting no other instrument."

(An ION Science US reseller)

Universal graphical interface and icon menu

Free from translation difficulties and language barriers, PhoCheck+ incorporates a unique graphical interface and icon driven menu for use within global markets.



Choice of user readouts

The choice of read-outs allows the operator to select between a large numerical display or real-time graph for an instant overview of readings.



Easy operation

The instrument's simplicity and easy-to-use menu icons allow for fast, effective operator use without the need for extensive training.



Personalised adjustable features

PhoCheck+ can be easily personalised to accommodate user specific needs through the on-screen menu or via a PC using the Ion PC software. Adjustable features include zone references, alarm levels, custom calibration settings and the ability to add gases to the instrument's gas table.



Continuous data logging and fully interactive software

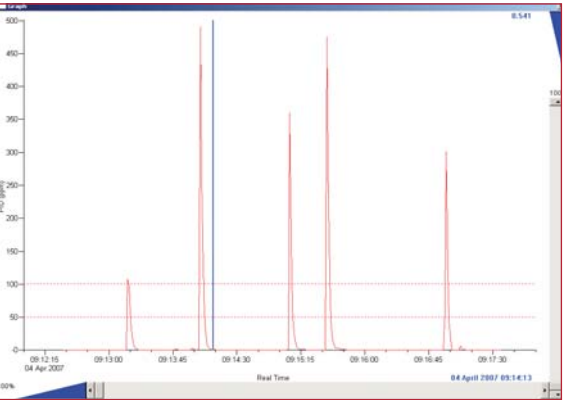
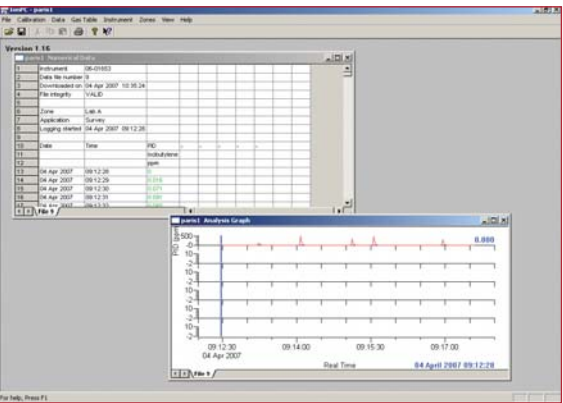
The enhanced 8Mb memory capacity of PhoCheck+ (2000+, 3000+ and 5000+) allows for continuous data logging of readings every second with the ability to store over 130,000 individual readings. The unique memory saving feature only logs a value if the detector senses a changes in the detected level of gas.

IRDA communication

Stored data can be viewed on-screen for an instant overview of results, or easily downloaded to a PC via an IRDA link using Ion PC software for detailed analysis. (Ion PC software is compatible with Windows XP or VISTA.)

Security setting

The security setting allows the instrument to have its features set by a PC and 'locked' so they cannot be adjusted manually. This feature gives control over specific user settings. Settings can also be stored on a PC and later downloaded to any number of instruments giving identical features to all, saving time.





Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.