



# PORTABLE GAS DETECTOR ECOTOX PLUS

ART.NR. 1224000-12244020

DETECTION OF TOXIC GASES, OXYGEN AND HYDROGEN

## GENERAL INFORMATION

- Detection of toxic gases and oxygen
- ATEX / IECEx certified
- Compact and light weight
- Dual alarm function
- Graphic display for direct read out
- Continuous data logging, read out via Bluetooth

The **ECOTOXPLUS** is a compact and extremely reliable single-gas detector. The **ECOTOXPLUS** with its robust construction is designed for harsh conditions such as refineries and the chemical industry. The very simple one-button operation offers optimal user convenience. The single control button switches the detector on and off and offers the possibility to easily perform a ZERO and SPAN calibration. The **ECOTOXPLUS** has an extra long lifetime as the sensor and the battery can be replaced after their life span. The Ecotox plus is available for various types of gas such as O<sub>2</sub>, H<sub>2</sub>S, CO, Cl<sub>2</sub>, ClO<sub>2</sub>, HCN.

Every type of **ECOTOXPLUS** has a clearly identifiable colour coding on the front label, making it easy for a user to recognize whether the right type of gas detector is being used.

The **ECOTOXPLUS** offers the ultimate safety through accurate gas measurement. The clear graphic display continuously displays the current measured value (in ppb, ppm or Vol.%) and in the event of a dangerous situation the user is immediately alerted by the dual alarm functions (LED/Acoustic). The graphic display shows which alarm situation has occurred (LOW alarm, HIGH alarm, TWA alarm or STEL alarm).

In addition, the graphical display shows various additional information, such as the length of time until the next calibration, status of the last calibration, currently measured STEL and TWA values, serial number

and unique features can be programmed (3x12 characters) such as user name, location, department or company name

The **ECOTOXPLUS** has both a full data logger, where measured values are stored continuously, and an event data logger. The data log memory can be read via Bluetooth via a USB BLE dongle and a PC.

Optionally, a **GAS TESTSTATION** is available with which a bump test can be performed every day. The **GAS TESTSTATION** performs a complete bump test in about 15 ~ 30 seconds. During the test the operation and functionality of the **ECOTOXPLUS** detector is checked by using test gas. A test is quick and easy to perform. During the test, the test station indicates which function is being checked and whether it has passed correctly.

## APPLICATIONS:




- + Chemical Industry
- + Refineries
- + Water Industry
- + Enclosed and void spaced
- + Steel Industry
- + Laboratories / Universities
- + Government and Utilities
- + Food Industry

## WE OFFER MORE THAN A PRODUCT!

- + Tailored advice
- + Project advice
- + Technical support
- + Training and education
- + Commissioning
- + Onsite service / maintenance / calibration

## ORDERING INFORMATION

PORTABLE GAS DETECTOR							
TYPE	GAS	RANGE	PART NO.	LOW ALARM	HIGH ALARM	OPERATING TEMP.	HUMIDITY (N.C.)
ECOTOX <sub>PLUS</sub> H <sub>2</sub> S	Hydrogen Sulphide	0 – 20 ppm	I224000	1,6	2,4	-20 tot +50 °C	15-90%
ECOTOX <sub>PLUS</sub> H <sub>2</sub> S	Hydrogen Sulphide	0 – 100 ppm	I224001	10	15	-20 tot +50 °C	15-90%
ECOTOX <sub>PLUS</sub> O <sub>2</sub>	Oxygen	0 – 25 Vol%	I224003	19,5	22,5	-20 tot +55 °C	5-95%
ECOTOX <sub>PLUS</sub> CO	Carbon Monoxide	0 – 500 ppm	I224002	25	50	-20 tot +50 °C	15-90%
EOTOX <sub>PLUS</sub> Cl <sub>2</sub>	Chlorine	0 – 50 ppm	I224004	0,5	1	-20 tot +40 °C	15-90%
EOTOX <sub>PLUS</sub> ClO <sub>2</sub>	Chlorine dioxide	0 – 1.00 ppm	I224005	0,1	0,2	-20 tot +40 °C	15-90%
EOTOX <sub>PLUS</sub> COCl <sub>2</sub>	Phosgene	0 – 1.00 ppm	I224006	0,1	0,2	-20 tot +40 °C	15-90%
ECOTOX <sub>PLUS</sub> HCN	Hydrogen cyanide	0 – 30 ppm	I224011	0,9	9	-20 tot +40 °C	15-90%
ECOTOX <sub>PLUS</sub> NH <sub>3</sub>	Ammonia	0 – 100 ppm	I224016	20	40	-20 tot +40 °C	15-90%
ECOTOX <sub>PLUS</sub> SO <sub>2</sub>	Sulphur dioxide	0 – 10 ppm	I224019	2	4	-20 tot +50 °C	15-90%
ECOTOX <sub>PLUS</sub> H <sub>2</sub>	Hydrogen	0 – 1000 ppm	I224009	400	800	-20 tot +40 °C	15-90%

ACCESSORIES			
OPTION	IMAGE	PART NO.	DESCRIPTION
USB Bluetooth Dongle		I224150	For read out and settings of the ECOTOX <sub>PLUS</sub>
GasTest-station		I225811	Full automatic test and calibration of the ECOTOX <sub>PLUS</sub>
Calibratie adapter		I225114	Flow / calibration adapter for the ECOTOX <sub>PLUS</sub>

SPARE PARTS		
TYPE	PART NO.	DESCRIPTION
Sensor filter	I224100	Spare filter; sensor protection
Lithium battery 3,6 volt	I225616	ATEX/IECEx certified battery for the ECOTOX <sub>PLUS</sub>
Crocodile clip	I225603	Stainless Steel crocodile clip
Spare sensor H <sub>2</sub> S	I225050	H <sub>2</sub> S sensor; 20 / 100 ppm
Spare sensor O <sub>2</sub>	I215329	O <sub>2</sub> sensor; 0-25 Vol.%
Spare sensor CO	I225052	CO sensor; 0-500 ppm
Spare sensor Cl <sub>2</sub>	I215335	Cl <sub>2</sub> sensor; 0-50 ppm
Spare sensor ClO <sub>2</sub>	I160550	ClO <sub>2</sub> sensor; 0-1 ppm
Spare sensor COCl <sub>2</sub>	I215600	COCl <sub>2</sub> sensor; 0-1 ppm
Spare sensor HCN	I160580	HCN sensor; 0-30 ppm
Spare sensor NH <sub>3</sub>	I160560	NH <sub>3</sub> sensor; 0-100 ppm
Spare sensor SO <sub>2</sub>	I160530	SO <sub>2</sub> sensor; 0-10 ppm
Spare sensor H <sub>2</sub>	I215321	H <sub>2</sub> sensor; 0-1000 ppm

TEST GAS & CALIBRATION PART		
TYPE	PART NO.	DESCRIPTION
BUGAS, 100 Vol.% N <sub>2</sub>	9990524	Nitrogen, 100 Vol.%, 1 l 10 gas litre
BUGAS, 20,9% O <sub>2</sub> / N <sub>2</sub>	9990537	Synthetic air; 20,9% O <sub>2</sub> / 79% N <sub>2</sub> , 1 l 10 gas litre
BUGAS, 10 ppm H <sub>2</sub> S	9990540	Hydrogen sulphide, 10 ppm in air 58 gas litre
BUGAS, 25 ppm H <sub>2</sub> S	9990507	Hydrogen sulphide, 25 ppm in air; 58 gas litre
BUGAS, 100 ppm CO	9990522	Carbon Monoxide, 100 ppm in air 1 l 10 gas litre
BUGAS, 200 ppm H <sub>2</sub>	9990542	Hydrogen, 200 ppm in air, 1 l 10 gas litre
On Demand Flow Regulator	1225817	On Demand Flow Regulator; Brass (adjustment of the gas flow)
	1225818	On Demand Flow Regulator; Stainless Steel (adjustment of the gas flow)

## SPECIFICATIONS

PRODUCT	ECOTOX PLUS
Gas types	Toxic gasses, Oxygen and Hydrogen
Sensor type	Electrochemical sensor (EC-sensors)
Display	Graphic LCD (Liquid Crystal Display)
Battery	Replaceable Lithium-Thionyl Chloride (Li-SOCl <sub>2</sub> ) cell, type 3.6V (not rechargeable)
Battery lifetime	> 6 Months
Triple Alarm function	Visual, 2 clear LED's and acoustic (> 90 dB/30cm)
Alarm types	LOW alarm, HIGH alarm, Overload alarm, TWA alarm & STEL alarm
Logging	Full datalog & event log (fifo)
Self-test	During start-up and operation
Calibration	Manual; one button operation or by use of the GASTESTSTATION
Communication	Bluetooth; for communication with GASTESTSTATION and read out of the memory
Personal Identification	3x12 characters
Operating temperature	See ordering information
Storage temperature	0° to +20°C
Relative humidity	See ordering information
Pressure	Toxic: Atmospheric $\pm$ 10%, Oxygen: 80 to 120 kPa
Housing	ABS/PC with Stainless Steel-fibres / EMI-shielding
Carrying clip	Crocodile carrying clip, Stainless Steel
Dimensions	82 x 56 x 42 mm (H x W x D, excl. carrying clip)
Weight	Approximately 110 gram (incl. carrying clip)
CE marking	ATEX (Directive 2014/34/EU) Radio Equipment Directive (Directive 2014/53/EU)
Approvals	ATEX II 2 G Ex ia IIC T4 Gb IECEX Ex ia IIC T4 Gb (Tamb -20° tot +60°C)
Manufacturer	BUVECO Gasdetection BV, a Consilium Group Company

