

# GAS DETECTORS

## EXPLOSIMETERS/CATHAROMETERS

EX 2000/EX 2000 C/GD 2000/GDP 2000

CH<sub>4</sub>, CO, O<sub>2</sub>, H<sub>2</sub>S  
CO<sub>2</sub>, NH<sub>3</sub>, Cl<sub>2</sub>, O<sub>3</sub>, H<sub>2</sub>, H<sub>2</sub>O, SiH<sub>4</sub>



**Gas Discrimination**

(GD 2000 / GDP 2000)



**Pocket size**



**Long battery life**



**High reliability**



**New design  
for Enhanced  
performance**



# OLDHAM

*Your environment, your safety,  
let's master them together*



# Let's protect your personnel together



Going down a confined space

You work in industrial hazardous areas likely to contain explosive gases and vapors. OLDHAM have designed a new explosimeter range to suit your requirements. We are aware of the potential risks that you face and identify the type of gas to ensure a total safety package.

One of the smallest explosimeters on the market, with the best performance, the EX 2000, EX 2000 C, the GD 2000 and GDP 2000 identify the detected gas and the GDP 2000 displays its concentration level. Even more, they can discriminate between natural gas and other explosive gases. Light, practical and high-performance, the 2000 RANGE of explosimeters are the ideal, compact gas detectors for industry.

## A tremendous efficiency

Smart sensor

### ➊ PRACTICAL AND MODERN DESIGN

The **2000 RANGE** of explosimeters are designed to ensure a total freedom in your personal activity :

- ergonomic keyboard : 3 tactile buttons
- high Visible alarm
- light weight

### ➋ HIGH RELIABILITY

The high quality detection sensor ensures measurement accuracy.

The technique offers several advantages :

- exceptional response time
- 30 battery life hours
- poison resistance

### ➌ STANDARDS

Our explosimeters are in accordance :

- with the European certification :
  - surface : EEx iad IIC T4
  - mine : EEx iad I
- with the North American certification :
  - class I groups A, B, C, and D

Scale 1:1



Toxic products storage room

## The 2000 RANGE of explosimeters are designed to minimize problems.

### LONG BATTERY LIFE

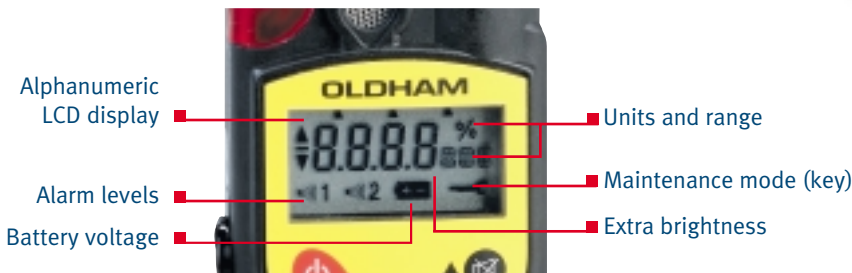
- 12 hours with rechargeable batteries (Ni-Cd or Ni-mH)
- 30 hours with dry cell batteries
- Simple charger
- “Intelligent” two position charger
- 12 VDC charger

### POCKET SIZE

### MAINTENANCE AND CALIBRATION VERY EASY, SIMPLE AND SAFE

### FRIENDLY DISPLAY PANEL

2 position charger CR2002



### VISUAL AND AUDIO ALARMS

- Red light flashing
- Pulsed alarm : 1 beep every 2 seconds for the first alarm threshold
- Pulsed alarm : 1 beep every 1 second for the second alarm threshold
- Adjustable alarm thresholds

### AUTO OPERATION STATUS

- Auto test when switching on
- Auto diagnosis
- Confidence beep
- Battery and sensor faults (audio and visual alarm, continuous + pictograms displayed)



# Main characteristics

## EX 2000

### TO MEASURE THE EXPLOSIVE GAS CONCENTRATION

- Detects all types of explosive gases
- Displays 0-100% LEL
- Can be programmed for a selected gas



## EX 2000 C

### TO MEASURE THE CONCENTRATION OF EXPLOSIVE GASES

- Only one detection sensor
- Detects and displays low concentration (0-100 LEL) and high concentration (0-100 %vol)
- Automatic switch over of range (catalytic or catharometric)



## GD 2000

### TO DISCRIMINATE BETWEEN NATURAL GAS AND OTHER EXPLOSIVE GASES

- Detects all types of explosive gases with discrimination
- Displays simple messages for the user  
ie :  
- "OK" for "no gas detected"  
- "NATURAL GAS" or "FLAMMABLE GAS"



## GDP 2000

### TO DISCRIMINATE BETWEEN NATURAL GAS AND OTHER EXPLOSIVE GASES, AND TO DISPLAY THE GAS CONCENTRATION

- Detects all types of explosive gas with discrimination
- Displays simple messages for the user  
ie :  
- "OK" for "no gas detected"  
- "Nat G" for « NATURAL GAS » or "FLM G" for « FLAMMABLE GAS » with the gas concentration detected in % LEL



# Options available

- ① Protective leather case
- ② Remote sampling kit
- ③ Calibration kit
- ④ Electric pump
- ⑤ Chargers



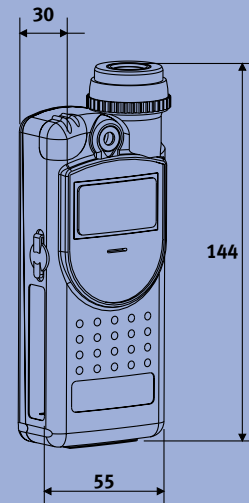
# TECHNICAL CHARACTERISTICS

TYPE	EX 2000	EX 2000 C
MANUFACTURER	• OLDHAM SA	
FUNCTION	• Explosimeter	• Explosimeter and catharometer
DETECTED GASES	• Explosive gas (%LEL)	• Explosive gas 0-100% LEL and 0-100% v/v gas
MODE	• Continuous	
DISPLAY	• Gas detected value displayed	• Gas detected, value displayed • Automatic switch from the catalytic range to the catharometric range
DISPLAY PANEL	• Lighting up of LCD panel on request	
MESSAGE DISPLAYED	• The gas detected value	• The gas detected value
<b>OUT OF ORDER</b>		
SENSOR FAULT	• Both visual and audible continuous alarms + pictograms	
BATTERY FAULT	• Both visual and audible continuous alarms + pictograms	
OPERATING CHECK	• Correct operation "beep" signal that the manufactory can adjust or cancel on request	
<b>ALARMS</b>		
GAS ALARM	• Instantaneous and adjustable threshold • A pre-programmed instantaneous alarm threshold • Over scale alarm	
VISUAL ALARM	• A red flash alarm • Pictograms for each alarm type	
AUDIO ALARM	• Buzzer 85 db at 30 cm	
POWER SUPPLY	• 3 batteries R6 1,5 V • 3 accus Ni-Cd or Ni-mH	• 3 batteries R6 1,5 V • Ni-Cd or Ni-mH
BATTERY LIFETIME	• 12 h with accus Ni-Cd • 22 h with accus Ni-mH • 30 h with batteries	• 12 h with Ni-Cd • 22 h with Ni-mH • 30 h with dry cell batteries
RECHARGING TIME	• 4 h (auto adjusted charger) • 16 h (simple charger)	• 4 h (auto regulated charger) • 16 h (simple charger)
PROTECTION RATING	• IP 66	
HOUSING	• Antistatic polycarbonate	
WEIGHT	• 230 g	
TYPE OF CLIPS	• Anti-slipping metallic clip	
WORKING TEMPERATURE	• -25°C to +55°C	• -15°C to +45°C
DIMENSIONS	• 144 x 55 x 30 mm	
APPROVAL	• EEx iad IIC T4 INERIS 98 D 5022 X Surface • EEx iad I INERIS 98 Y 3001 X Mine • CSA class I groups A, B, C, D	
<b>SENSOR CHARACTERISTICS</b>		
TYPE	• Plug-in catalytic	• Plug-in catalytic-catharometric
STANDARD RANGE	• 0-100 % LEL • 0-5 % CH <sub>4</sub>	• 0-100% LEL or 0-5% CH <sub>4</sub> , 0-100% v/v
ACCURACY	• +/-1 % LEL or +/- 3 %	• +/-1% LEL or +/-3%
MINIMUM DETECTED	• 1 % LEL	• 1 % LEL
ZERO DRIFT	• < 1 % of full scale per month	• 0,5% LEL methane per month
RESPONSE TIME	• < 20 seconds at T90	
AVERAGE LIFETIME	• 4 years (for normal operation)	



# TECHNICAL CHARACTERISTICS

GD 2000	OLDHAM SA	GDP 2000
<ul style="list-style-type: none"> <li>Explosimeter</li> <li>Natural gas, explosive gas</li> </ul>	<ul style="list-style-type: none"> <li>Explosimeter</li> <li>Natural gas, explosive gas : 0-100% LEL</li> </ul>	
<ul style="list-style-type: none"> <li>Type of gas detected</li> </ul>	<ul style="list-style-type: none"> <li>Continuous</li> <li>Gas type detected and value displayed</li> </ul>	
<ul style="list-style-type: none"> <li>"OK", "GAS NATURAL", "GAS EXPLOSIVE"</li> </ul>	<ul style="list-style-type: none"> <li>Lighting up of LCD panel on request</li> <li>"GAS NATURAL", "GAS EXPLOSIVE"</li> <li>Gas detected value</li> </ul>	
	<ul style="list-style-type: none"> <li>Both visual and audible continuous alarms + pictograms</li> <li>Both visual and audible continuous alarms + pictograms</li> </ul>	
	<ul style="list-style-type: none"> <li>Correct operation "beep" signal that the manufactory can adjust or cancel on request</li> </ul>	
<ul style="list-style-type: none"> <li>A 5 % LEL gas naturel threshold</li> <li>A 20%LEL natural gas threshold</li> <li>A 20% LEL threshold, butane equivalent</li> <li>Over scale alarm</li> </ul>	<ul style="list-style-type: none"> <li>An early-warning alarm for natural gas</li> <li>A "NATURAL GAS" alarm threshold</li> <li>Over scale alarm</li> </ul>	
	<ul style="list-style-type: none"> <li>A red flash alarm</li> <li>Pictograms for each alarm type                             <ul style="list-style-type: none"> <li>Buzzer 85 db at 30 cm</li> </ul> </li> <li>3 batteries R6 1,5 V</li> <li>Ni-Cd or Ni-mH</li> <li>12 h with accus Ni-Cd</li> <li>22 h with Ni-mH</li> <li>30 h with dry cell batteries</li> <li>4 h (auto regulated charger)</li> <li>16 h (simple charger)                             <ul style="list-style-type: none"> <li>IP 66</li> </ul> </li> <li>Antistatic polycarbonate                             <ul style="list-style-type: none"> <li>230 g</li> </ul> </li> <li>Anti-slipping metallic clip</li> </ul>	
<ul style="list-style-type: none"> <li>-25°C to +55°C</li> </ul>	<ul style="list-style-type: none"> <li>-25°C to +55°C</li> </ul>	
	<ul style="list-style-type: none"> <li>144 x 55 x 30 mm</li> <li>EEx iad IIC T 4 INERIS 98 D 5022 X Surface</li> <li>EEx iad I INERIS 98 Y 3001 X Mine</li> <li>CSA class I groups A, B, C, D</li> </ul>	
<ul style="list-style-type: none"> <li>0-100% LEL natural gas</li> <li>0-100% LEL butane (standard)</li> <li>+/-1% LEL or +/- 3%</li> <li>1 % LEL</li> <li>0,5% LEL methane per month</li> </ul>	<ul style="list-style-type: none"> <li>Precalibrated plug-in catalytic                             <ul style="list-style-type: none"> <li>0-100 % LEL</li> <li>0-100% LEL other gases</li> <li>+/-1% LEL or +/- 3%</li> <li>1 % LEL</li> <li>&lt; 1 % of full scale per month</li> </ul> </li> <li>&lt; 20 seconds at T90</li> <li>4 years (for normal operation)</li> </ul>	



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**OLDHAM**  
 DETECTION GAZ / MESURE A L'EMISSION  
 GAS DETECTION / STACK GAS MONITORING

