

# STATUS SCIENTIFIC CONTROLS

Status Mentor PGD3-IR

PORTABLE GAS DETECTION EQUIPMENT

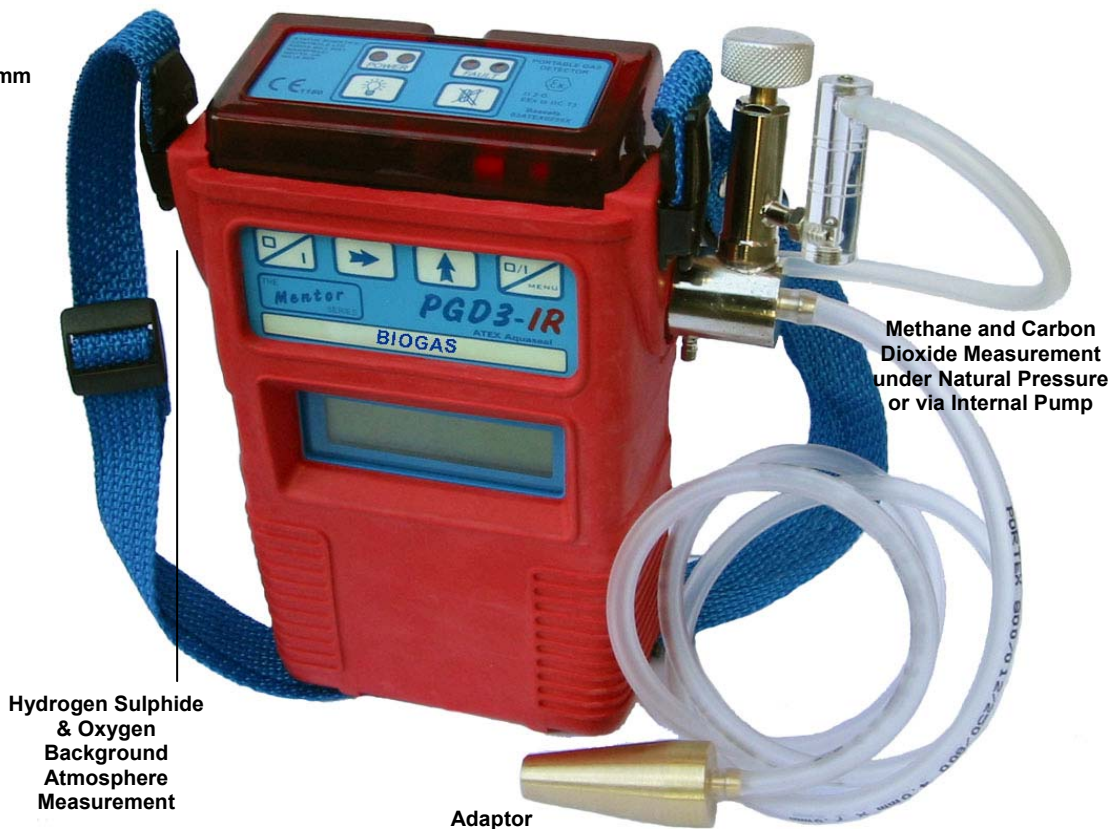


SCIENTIFIC

## **Biogas Measurement and Analysis**

**For the measurement and analysis of methane, carbon dioxide, hydrogen sulphide and oxygen**

Weight: 1Kg  
Size: 185x108x50mm



The Status Mentor PGD3-IR Gas Detector uses the latest miniature infrared technology for the detection of CH<sub>4</sub> and CO<sub>2</sub>. Each of these sensors has a 0-100% Volume range which is necessary for the biogas application.

The use of infrared sensors means that the level of CO<sub>2</sub> can be measured accurately and, the CH<sub>4</sub> sensor cannot become poisoned if high levels of H<sub>2</sub>S are present.

### **The PGD3-IR is fitted with the following sensors**

- 0-100% Volume CH<sub>4</sub>
- 0-100% Volume CO<sub>2</sub>
- 0-25% Volume O<sub>2</sub>
- 0-200ppm H<sub>2</sub>S

### **It is also issued as standard with: -**

- Internal Pump
- Biogas Sampling Kit
- Data Logging
- Charger

### **Features**

- Uses Dual Infrared to accurately measure 0-100% Volume of CH<sub>4</sub> and CO<sub>2</sub>
- Analysis of CH<sub>4</sub> and CO<sub>2</sub> can be carried out independently of H<sub>2</sub>S and O<sub>2</sub>
- Peak Reading Facility
- Sensor Zero Function
- Serial number and calibration due dates stored within instrument
- Calibration via PC using specially designed Windows software
- Display backlighting

## Specification

<b>Size</b>	185mm high x 108mm wide x 50mm deep (excluding rubber case)
<b>Weight</b>	1Kg
<b>No. of Gases</b>	Up to four
<b>Sensor Types</b>	Infrared, electrochemical
<b>Certification Data</b>	Certificate No. Baseefa 03ATEX0235X Code II 2 G EEx ia IIC T3
<b>Power Source</b>	Rechargeable nickel-cadmium battery pack type PGD/BATT
<b>Minimum operating time</b>	12 hours
<b>Visual indications</b>	i) 100 X 32 pixel LCD graphical display with backlight ii) Large flashing red lens section used to indicate alarm conditions.
<b>Audible indication</b>	Electromagnetic alarm in red lens section
<b>Alarm levels</b>	H2S: 3 levels - instant, STEL, LTEL Oxygen : 2 levels - instant low, instant high
<b>COSHH monitoring</b>	Automatic calculation of STEL and LTEL readings.
<b>Data Logging</b>	i) Automatic variable rate according to gas concentrations or ii) Off
<b>Display formats</b>	Chemical units (ppm, %, LEL),
<b>Controls</b>	i) Front panel - on/off, right arrow, left arrow, on/off/menu ii) Top panel - display backlight, alarm mute
<b>Temperature range</b>	i) Operating -5 to +50 °C ii) Storage -20 to +50 °C
<b>Environmental Rating</b>	IP66
<b>Humidity range</b>	15% to 95% relative humidity, non-condensing. Operation is possible in the range 0-100% R.H however; sensor life will be reduced by continuous operation at extremes of humidity and temperature.
<b>Performance</b>	Compliant with BS EN 61779 : 2000
<b>Electromagnetic compatibility</b>	CE Marked, Tested to BS EN 50270:1999
<b>Air Pressure Operating Range</b>	920 mbar to 1150 mbar

When calibrated with a gas mix of 60%v/v CH<sub>4</sub> and 40%v/v CO<sub>2</sub>, the PGD3-IR will read the following: -

Gas Mix	
CO <sub>2</sub> %v/v	CH <sub>4</sub> %v/v
30	70
40	60
50	50
60	40

PGD3-IR Readings	
CO <sub>2</sub> %v/v	CH <sub>4</sub> %v/v
31.6	68.4
40.0	60.0
49.1	51.5
58.3	41.7



Manufactured in the UK

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