

STATUS SCIENTIFIC CONTROLS

Status Mentor PGD3-IR

PORTABLE GAS DETECTION EQUIPMENT

STATUS

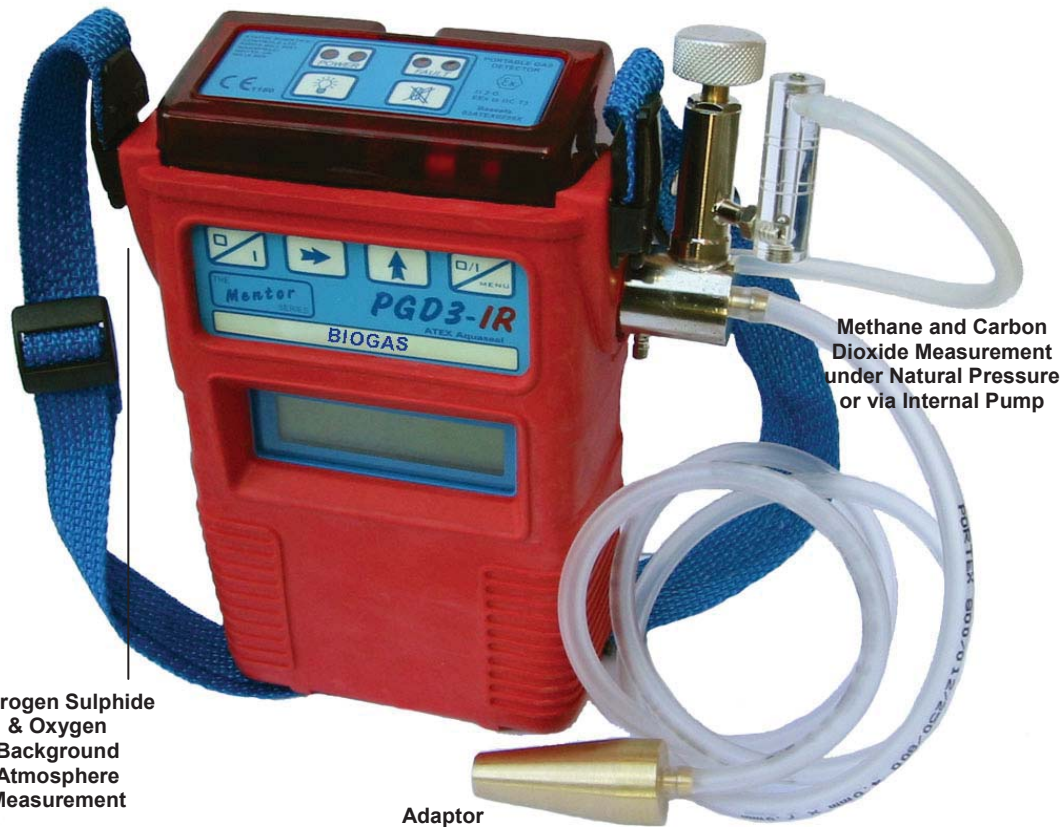


SCIENTIFIC

Biogas Measurement and Analysis

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

Weight: 1Kg
Size: 185x108x50mm



Hydrogen Sulphide
& Oxygen
Background
Atmosphere
Measurement

Adaptor

Methane and Carbon
Dioxide Measurement
under Natural Pressure
or via Internal Pump

The Status Mentor PGD3-IR Gas Detector uses the latest miniature infrared technology for the detection of CH₄ and CO₂. 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 CO₂ can be measured accurately and, the CH₄ sensor cannot become poisoned if high levels of H₂S are present.

The PGD3-IR is fitted with the following sensors

- 0-100% Volume CH₄
- 0-100% Volume CO₂
- 0-25% Volume O₂
- 0-200ppm H₂S

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 CH₄ and CO₂
- Analysis of CH₄ and CO₂ can be carried out independently of H₂S and O₂
- 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

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

When calibrated with a gas mix of 60%v/v CH₄ and 40%v/v CO₂, the PGD3-IR will read the following: -

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

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

