G810 portable oxygen analyser

Features

- **Measures from 100% to below 1000ppm**
- **Air calibration**
- **High accuracy**
- **Sample pump**
- **Rechargeable batteries provide up to 30 hours of running time**

The G810 oxygen analyser is a portable instrument for measuring oxygen concentrations over a wide range. Based on a galvanic cell sensor, the analyser employs advanced linearisation to offer a high degree of accuracy whilst retaining the ability to be simply calibrated on air.

Two sensor versions are available to enable the analyser to operate at optimum performance in a diverse range of applications. One of the sensors is for operating in the presence of high concentrations of mildly acidic gases such as carbon dioxide and hydrogen sulphide.

A large multi-digit, autoranging LCD shows the concentration and user-adjustable parameters.

A 0 to 1V analogue output is provided, which can be set to one of several pre-set ranges by the user.

An internal sample pump is fitted as standard, enabling samples at less than atmospheric pressure to be taken. For samples at an adequate pressure the pump may be switched off. The gas flow is set by an integral needle valve.

True portability is achieved from sealed rechargeable batteries which offer from 16 to 30 hours' operation, depending on pump use. For maximum flexibility, recharging can be carried out from a mains supply or from a vehicle's cigarette lighter socket.

The whole instrument is housed in a tough ABS case with a carrying handle that doubles a s available-height tilt food for bench use. A mains charger unit (UK only) and vehicle cigarette lighter adaptor are supplied with the instrument as standard, and a carrying case is available as an option.

Applications include:

- Checking quality of inert gases
- Checking oxygen content of landfill gases
- Cylinder gas quality checking
- Commissioning purged processes and gas generators
- Checking oxygen content of process gases.

SPECIFICATION

Display
Multi-digit LCD — character height 12.7mm

Ranges
1) **0 to 100%**
Display range 0.01% to 100.0%. Suitable for samples containing mildly acidic gases, e.g. carbon dioxide, hydrogen sulphide etc.
2) **0 to 50%**
Display range 1 00ppm to *50%.*

Stability
Better than 2% of reading per month

Speed of response
Less than 3s for 90% step change for % levels of oxygen

Cell life
Acid gas resistant cell (KE): up to *5* years Standard CN cell: up to 1 8 months

Sample connection
Compression fitting suitable for 1/4 inch O/D (6mm) tubing

Sample pressure
Pump off: +3 bar C maximum
Pump on: -100mb G minimum

Sample flow
200 to 500ml/min for optimum accuracy

Sample temperature
-10 to 80°C

Analogue outputs
O to 1V standard.
User-programmable in the following spans.
Range 1) 0 to 100%,0 to 25%, 0 to 5%
Range 2) 0 to 100%, 0 to 25%, 0 to *5%,* 0 to 5000ppm

Ambient temperature
0 to 40°C

Battery capacity
Pump off: 30 hours
Pump on: 16 hours

Battery chargers

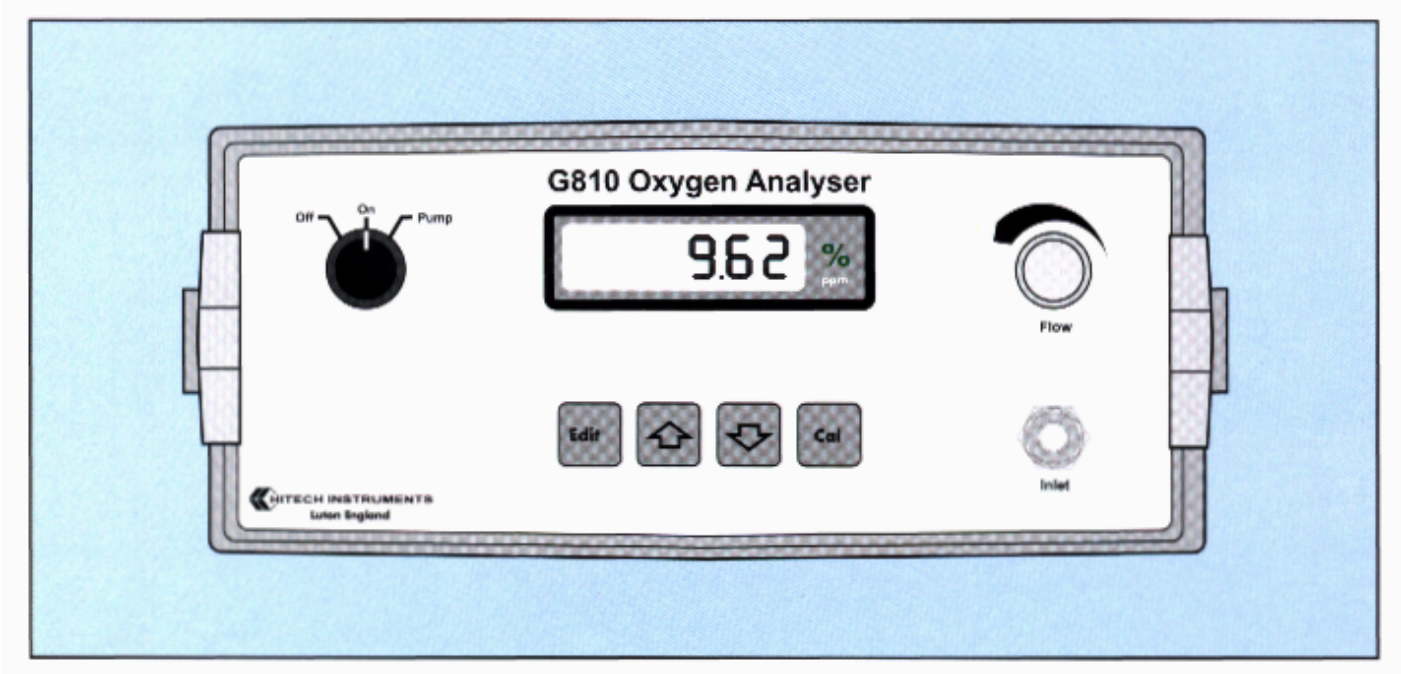
Mains:	240V ac supply (UK only)
Vehicle cigarette lighter:	12Vdc
General:	12 to 24Vdc at 300mA

Case
ABS plastic with carrying handle doubling as a variable-height tilt foot

Dimensions
250mm wide x 255mm deep x 94mm high with handle parked in forward position

Weight
1kg approximately

Options
Carrying case



In keeping with a policy of continuous development, Hitech Instruments Ltd. reserves the right to change any part of this specification without notice

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