

Rapidox 4100 Portable Oxygen Gas Analyser



Description

The Rapidox 4100 electrochemical cell oxygen gas analyser based on the Hitech G1010 OEM module is housed in our smart Rapidox metal case with carry handle and tilting feet. Incorporating a powerful and silent linear piston pump for remote sampling of gas via 6/4mm flexible tubing to the front panel input and output unions. A flow gauge allows the user to control the rate of gas flow into the analyser. Using galvanic cell primary elements the analyser can measure oxygen concentrations from 0.1ppm to 100% (actual range depends on the cell fitted). Two alarm channels, user-programmable to be high, low or off, each provide one set of volt-free changeover contacts, and can be set to any concentration within the span of the instrument. A user programmable analogue output can be set to one of several ranges. A choice of 0 to 5v or 4 to 20mA is provided at the time of ordering. Several versions of sensor are available, enabling the analyser to operate at optimum performance in a diverse range of applications. These include a sensor suitable for operating in the presence of high concentrations of mildly acidic gases such as carbon dioxide and hydrogen sulphide and a version for use in hydrogen. See the chart below for the options available:

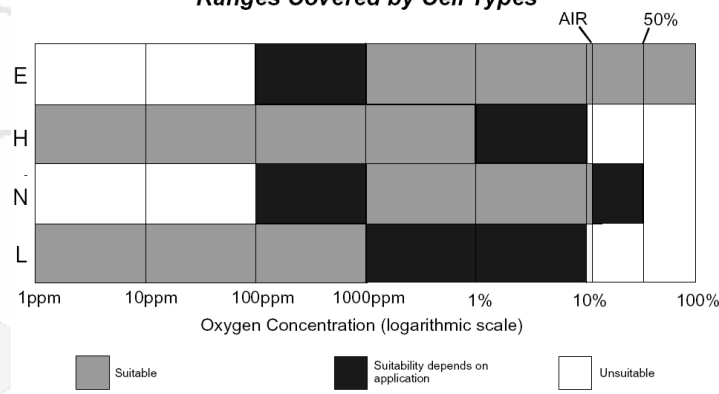
Applications

- Air separation plants & Purge gas monitoring
- Nitrogen purged soldering systems
- Cylinder gas quality
- Food packaging and storing
- Landfill gas monitoring
- Glove boxes
- Workplace air monitoring

Features

- Exceptional dynamic Range with four sensor options
- Measurement range 0.1ppm to 100% oxygen (actual range depends on the cell).
- Mild acid gases, hydrogen and helium catered for
- Programmable alarm channels and analogue outputs (0-5V or 4-20mA).
- Easy to calibrate by the user using single point gas.
- Multi-lit auto-ranging LCD display
- Solenoid valve protection fitted for L & H cells which are air sensitive
- Powerful internal linear piston pump fitted
- Full sample control with panel mounted flow gauge

Ranges Covered by Cell Types



Technical Data

Voltage	110 / 220V ac 50/60 Hz
Analyser dimension	250mm X 263mm X 150mm
Weight	3.5 kg
Display	Multi-digit LCD - character height 12.7mm
Display Ranges	E version - display range 0.01% to 100.0%. Suitable for samples containing mildly acidic gases; eg, carbon dioxide, hydrogen sulphide etc N version - display range 100ppm to 50% L version - display range 0.1ppm to 25% H version - display range 0.1ppm to 10% (hydrogen use)
Display Resolution	0.1% from 10% to 100% 0.01% from 0.50% to 9.99% 10ppm from 500ppm to 4999ppm 1ppm from 50ppm to 499ppm
Stability	Better than 2% of full-scale per month
Cell Life	E version - up to 5 years N, L & H versions - up to 2 years
Sample Flow	0-2 litres per minute

Technical Data

Working Temperature	-5 to +40°C (non condensing)
Sample Connections	Inlet and outlet: captive-seal compression fittings suitable for 0.25 inch (or 6mm) o/d tube
Speed of Response	T90 - variable depending on sensor and concentration. Approximately 3s at % levels and 20s at ppm levels. The ppm figure assumes that the sensor is purged down to the ppm concentration of interest.
Analogue Outputs	0 to 5V or 4 to 20mA (specify at time of order) Each user-programmable to the following spans: E version 0 to 100%, 0 to 25%, 0 to 5% N version 0 to 100%, 0 to 25%, 0 to 5%, 0 to 5000ppm, 0 to 500ppm L & H version 0-50ppm, 0-500ppm, 0-5000ppm, 0-5%
Alarm Outputs	Two alarms, each user-programmable for mode - HIGH, LOW or OFF Hysteresis programmable from 0 to 10% of set point Volt-free changeover contacts rated at 250V r.m.s.a.c max., 3A max., max power 60W, normally energised.

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