

Trace and Percentage (ATEX approved) Suitable for Hazardous Environments



Applications

Offshore	Gas purity checking	Hydrogen plants
Chemical plants	Pharmaceutical plants	Oil refineries
Petrochemical	Centrifuges	
Inert atmospheres and cylinder gas analysis in hazardous area		

Features & Benefits

- Unique fast purge system
- Easy calibration
- Maintenance-free measuring cell
- Intrinsically safe certification
- Selectable ranges % and ppm
- Powered by 2 x PP3 batteries

The EC92DIS portable oxygen analyser will detect levels of oxygen as low as 1ppm, up to high percent levels and can be used on most industrial gases and atmospheres. There is no need for routine maintenance of the fuel cell, and the instrument may be easily calibrated, using ambient air or standard calibration samples.

Unique fast purge system

The innovative design of the fast purge/cell seal system means readings of single digit parts per million oxygen can be obtained within a few minutes. Apart from a single switch, no adjustments or controls are necessary, making the unit ideal for use by non-technical personnel.

Operation of the EC92DIS is made easy by the internal sample system. Taking gas measurements is simply a matter of connecting the gas line, purging for a short time and switching a valve position. When not in use the cell is sealed.

Easy calibration

The digital display is easily visible in sunlight or low level light; can display readings below 1 part per million and indicate low battery power. A calibration adjustment on the front panel can be set to give a reading of 20.9% when the analyser is working on clean air. Using this method ensures that the instrument will be absolutely accurate on any selected part of its operational range. If calibration of trace levels is required, certified calibration gas may be used.

Maintenance-free measuring cell

Each sensor is individually tested to meet stringent performance specifications. The micro-fuel cell is sealed and is simply replaced when exhausted. The normal lifetime for % measuring instruments is 3 years while trace sensors can last for several years, unlike others which may only function for several months.

Intrinsically safe certification

The instrument provides best in class certification compared to any other trace oxygen analyser in the market place. Unlike any other analyser it can be used in Zone 0 / Division 1. The instrument may also be used in safe/non hazardous areas and the batteries may be replaced by rechargeable types.

Technical Specifications

Ranges	0 - 30% plus 3 selectable from 0-20, 0-200, 0-2000 (ppm) 0-2%, 0-20%
Resolution	0.05% of scale
Accuracy	>10ppm ±2% of reading at 20°C ±5% of reading over temperature range <10ppm ±2% of reading + 0.4ppm at 20°C ±5% of reading + 0.4ppm + 0.15ppm/°C over temperature range
Response Time	90% of reading within 20 seconds
Calibration Range	Ambient (20.9%) or certified gas
Measuring Cell Type	Electrochemical fuel cell


Operating Conditions

Sample inlet pressure	1.0 to 10 Barg
Sample flow rate	Internally regulated to 150ml/min
Sample temperature	0 to 40°C
Ambient temperature	0 to 40°C, RH 0-99% non condensing

Power Requirements

Power Supply	2 x PP3 dry batteries, fitted internally
Battery life	36 hours, normal life
Battery low indication	Automatic warning
Display Type	Digital LCD meter

Cabinetry and Mounting

Enclosure	Sheet metal/cast aluminium
Installation	Free standing for desk, shelf or panel mounting
Dimensions	257W x 102H x 262D (mm)
Panel cutout	240W x 99D (mm), if required
Weight	3kg
Ingress protection	IP40
Approvals	ATEX  II 1G EEX ia IIC T4

Options

Carrying case. Remote probe.

Systech Illinois have over 25 years experience of providing analysis solutions for a wide range of industries. From our manufacturing plants in the UK and U.S we produce gas analysers for industrial process industries, headspace analysers for monitoring gas flushing of food products, and our range of permeation analysers.

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