

# EC96 Oxygen Deficiency Monitor



For the continuous monitoring of confined spaces, inert storage areas or where low or high levels of Oxygen may pose a hazard to personnel.

## Applications

Breweries  
Soft Drink Plants  
CO<sub>2</sub> Storage  
Nitrogen Plants  
Enclosed Work Areas  
Welding Installations  
Fruit Storage Facilities



## Features & Benefits

- Two adjustable levels of oxygen with audible alarm
- 4-20mA output for remote monitoring
- Waterproof IP65 rated enclosure
- Sensor life in excess of 3 years
- Range 0-30% oxygen
- Simple installation
- 3 years warranty
- High accuracy

The EC96 enables continuous monitoring of the oxygen level within confined rooms and work areas. Adjustable alarm contacts give early warning of changes in oxygen levels, allowing action to be taken. The EC96 O<sub>2</sub> Deficiency Monitor transmits continuous oxygen concentration level to any control data acquisition system or programmable logic controller with 4-20mA input.

Supplied with 25 metres of cable as standard, allowing the cell to be mounted remotely, if required.

The EC96 incorporates diffusion type electrochemical sensor that does not require sample pumping making it easy to use and calibrate.

## Systech EC96 - Oxygen Deficiency Monitor

The normal level of oxygen in breathing air is 20.9%. This level sustains life comfortably with an adequate safety margin either side of the atmospheric value. However in conditions of oxygen deficiency impairment of mental functions often confuses the victims, so that they fail to recognise the danger they are in.

If the level of oxygen drops below 17%, due to displacement by nitrogen, carbon

dioxide or other gases, an individual will suffer impairment. At 15% they will quickly lose consciousness, possibly causing injury, brain damage or death.

Conversely, oxygen enrichment is also known to be hazardous. With an oxygen concentration only 2% above ambient levels, a significant increase in the flammability of common materials is observed.

### Technical Specifications

Ranges	0 - 30%
Accuracy	± 0.1%
Response Time	90% of reading within 20 seconds
Calibration Range	Ambient air (20.9%)
Measuring Cell Type	Electrochemical fuel cell.

#### Operating Conditions

Ambient Temperature	0 to 40°C
---------------------	-----------

#### Power Requirements

Power Supply	230/115V ± 10%, 50/60Hz mains supply
Display Type	Analogue Meter

#### Cabinetry and Mounting

Enclosure	Polyester
Installation	Wall mounting, remote cell (Acetal) with 25 metres of cable
Dimensions	200W ~ 200H ~ 175D (mm)
Weight	3kg
Ingress Protection	IP67/Nema 4X

#### Options

Flashing Audible Beacon	
Stainless Steel Remote Cell Assemblies	
Extra Cable	Available by the metre



Optional stainless steel remote cell

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



17 Thame Park Business Centre, Wenman Road,  
Thame, Oxfordshire OX9 3XA  
Tel: +44 (0)1844 216838 Fax: +44 (0)1844 217220  
E-mail: [advice@systech.co.uk](mailto:advice@systech.co.uk) [www.systechinstruments.com](http://www.systechinstruments.com)



Illinois Instruments, inc  
2401 Hiller Ridge Road  
Johnsburg, Illinois 60050  
U.S.A.  
Tel: +1 815 344 6212  
Fax: +1 815 344 6332  
E-mail: [sales@illinoisinstruments.com](mailto:sales@illinoisinstruments.com)  
[www.illinoisinstruments.com](http://www.illinoisinstruments.com)