

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
- CO₂ 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
- This instrument has a 36 month warranty which covers any faulty workmanship and normal component failure relating to electronic circuit cards
- Sensor life in excess of 3 years
- Range 0-30% oxygen
- Simple installation
- 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 O₂ 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.

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 | Universal input 85 - 264 VAC, 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 | |
| Stainless Steel Remote Cell Assemblies | |
| Extra Cable | Available by the metre |



Optional stainless steel remote cell

Systech Illinois have over 30 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.

Systech Instruments Ltd (UK)

17 Thame Park Business Centre,
Wenman Road,
Thame, Oxfordshire OX9 3XA
Tel: +44 (0)1844 216838
Fax: +44 (0)1844 217220
E-mail: sales.uk@systechillinois.com
www.systechillinois.com

Illinois Instruments, Inc (U.S)

2401 Hiller Ridge Road
Johnsburg, Illinois 60051
U.S.A
Tel: +1 815 344 6212
Fax: +1 815 344 6332
E-mail: sales.usa@systechillinois.com
www.systechillinois.com

Illinois Instruments (Thailand)

6th fl Nopnarong Bldg No7
Ladprao23, Jatujak, Bangkok
10900 Thailand
Tel: +66 (0)2938 0798
Fax: +66 (0)2938 1058
E-mail: sales.ap@systechillinois.com
www.systechillinois.com

Systech Illinois (China)

Room 1105 Forte Building
No.910 Quyang Rd, Hongkou district,
Shanghai, China 200434
Tel: +86 21 65533022
Fax: +86 21 65539651
Email: info@systechillinois.cn
www.systechillinois.cn