

EC96 Oxygen Deficiency Monitor

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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
- 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 O₂ Deficiency Monitor transmits continuous oxygen concentration level to any control data acquisition system or programmable logic controller with 4-20mA input.

Supplied with 82 feet 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.

Illinois 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	32 to 104°F (0 to 40°C)
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Power Requirements

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

Cabinetry and Mounting

Enclosure	Polyester
Installation	Wall mounting, remote cell (Acetal) with 82 feet of cable
Dimensions	7.87W ~ 7.87H ~ 6.89D (inches)
Weight	6.6 lbs (3kg)
Ingress Protection	IP67/Nema 4X

Options

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



Optional stainless steel remote cell

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

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