

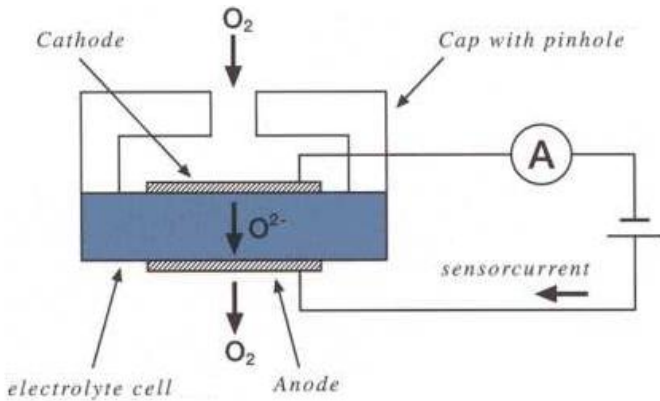
CMD-430 PPM Oxygen Transmitter



Oxygen Analysis from 1 to 1000 PPM
(Additional Ranges Available)

No Periodic Calibration Required
(Calibrated for Life From Factory)

Configured for Glove Box Application's
(Sensor Mounted in KF-40 Adapter)



Schematic of Sensor Element

Principle of Operation:

When voltage is applied to the electrolyte cell, oxygen is pumped through the Zirconia disc from the cathode to the anode because the carriers of current flowing through the electrolyte are oxygen ions. By attaching a cap with a pinhole on the cathode side of the cell and by increasing the voltage over the cell the current shows saturation due to the rate limiting step in the transfer of oxygen to the cathode. This saturation current is called limiting current and is proportional to the ambient oxygen concentration.

Not Recommended With the following Apps:

- Gases which contain halogens such as F, Cl, Br
- Wet Gas Streams
- Flammable Gases due to high temperature
- *SO_x and H₂S will shorten life*

Performance Specifications:

Specify Oxygen Sensor Model:

MO2 - 1	1 — 1000 PPM
MO2 - 2	0.1 — 25 Percent
MO2 - 3	1.0 — 96 Percent

Accuracy:	+/- 1% Full Scale Range
Calibration:	<u>NOT</u> Required by User
Classification:	General Purpose
Connections:	KF40 Flange
Dimensions:	Sensor: 2.16" x 0.75"
Dimensions:	Board: 4.75" x 3.95"
Display:	None
Flow:	0 — 3 SCFH
Output:	0 — 5V
Power:	12 — 28 VDC
Response time:	T ₉₀ 2 — 10 Seconds
Sensor Life:	> 15,000 Hours in use
Temperature:	Max 350 deg C Ambient
Warm up:	Approximately 2 minutes
Warranty:	12 Months

Optional Accessories:

- Flow Through Sensor Housing w/ 1/8" NPT
- Integral Sampling Pump
- Intrinsically Safe (IS) Barriers