



## ISO-COP-2

### *Electrochemical CO Sensor for In Vivo Measurements for CO dissolved in solution*



- Measure CO *in vivo* or *in vitro*
- Real time measurement and recording of dissolved CO
- Works with WPI's TBR free radical analyzers
- 2.0mm Stainless steel sensor with replaceable membrane sleeves

Carbon monoxide (CO) is a versatile mediator of physiological processes. Carbon monoxide (CO) formed by internal mechanisms (endogenous) is measured in a variety of ways, but standard measurement methods are of limited utility in most biological systems. WPI's ingenious ISO-COP-2 CO sensor measures CO *in vivo* or *in vitro* in real time!

### Sensor Design

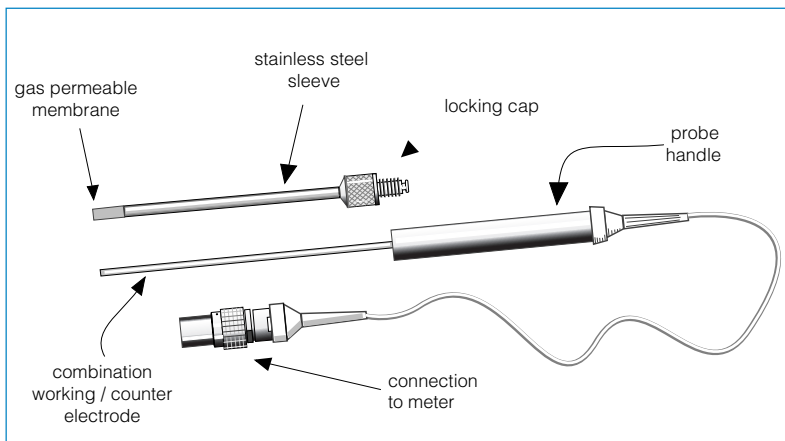
This CO sensor is comprised of a 2.0mm stainless steel body with a replaceable membrane-covered sleeve. The sleeve is filled with electrolyte. It is an amperometric sensor designed for use in cell culture and similar applications.

In principle, CO diffuses through the gas-permeable membrane and is then oxidized to CO<sub>2</sub> on the working electrode of the sensor. This oxidation creates a current with a magnitude directly related to the concentration of CO in solution.

It is designed for use with WPI's **TRB4100** (4-Channel Free Radical Analyzer) or **TBR1025** (1-Channel) or the Apollo series analyzers.

### References

Motterlini, M., Sawle, P., Bains, S., Hammad, J., Alberto, R., Foresti, R. and Green, C. "CORM-A1: A new pharmacologically active carbon monoxide-releasing molecule," *FASEB Journal*, November 19, 2004, express article 10.1096/fj.04-2169fje.



### SPECIFICATIONS

Sensor diameter .....	2mm
Sensor sensitivity .....	~0.5 pA/nM
Detection limit .....	~10nM
Linear range .....	10nM-10µM
Response time .....	<10 seconds

## WORLD PRECISION INSTRUMENTS

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