SELL SHEET

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

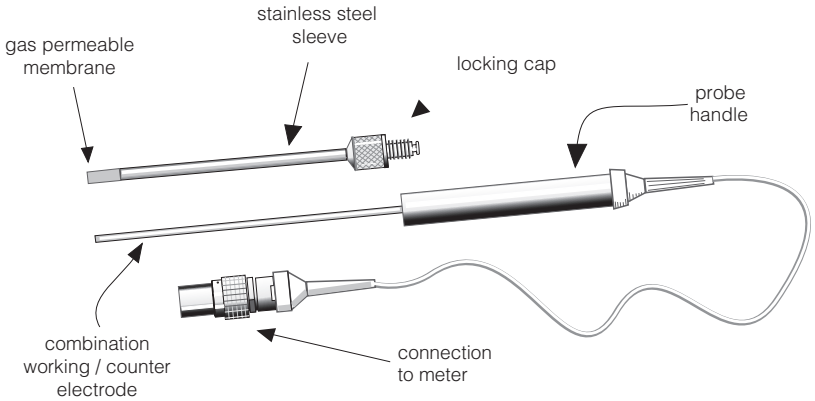
Carbon monoxide (CO) is a versatile mediator of physiological processes. Carbon monoxide (CO) formed by internal mechanisms (endogenous) is measured in a variety of ways, but standard measurement methods are of limited utility in most biological systems. WPI's ingenious ISO-COP-2 CO sensor measures CO *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 CO2 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.



ISO-COP-2 CO sensor (exploded view)

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