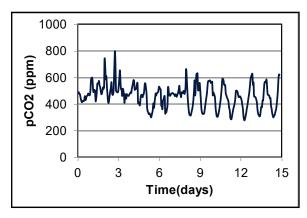


C-sense *in situ* pCO₂ Sensor



C-sense probes are compact, lightweight sensors for measurement of the partial pressure of gas in liquids. Designed for applications involving immersion in water, oil, or water and oil mixtures, the sensors combine an oil-resistant interface with a compact, temperature-compensated non-dispersive infrared (NDIR) detector. C-sense ships with a copper antifouling guard which minimizes biofouling as well as protects the membrane. Designed for integration, C-sense enables pCO₂ monitoring at a significantly lower price than traditional pCO₂ sensors.



pCO₂ data from Kaneohe Bay, Hawaii showing the large variability that can be seen in shallow coastal areas where coral reefs are growing. Data courtesy Pro-Oceanus Systems Inc.



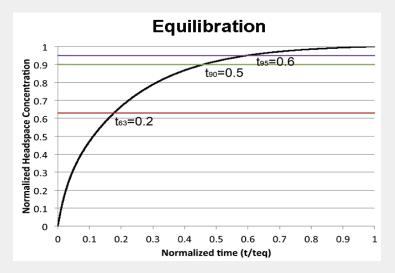
PRODUCT HIGHLIGHTS

- Available in 4 standard measurement ranges
 - 1,000ppm 2,000ppm
 - 4,000ppm
 - 10,000ppm
 - other ranges available
- Accuracy 3% of full scale
- Submersible to 600m
- Easily integrated: 4-pin analog output
- Small size: <2" x 8" and <11b
- Low power consumption: 80mA @ 6V DC
- Field-replaceable Membrane
- Submersible Logger Available

APPLICATIONS

- Water quality monitoring
- Aquaculture
- Wastewater monitoring
- Reef monitoring
- Carbon capture storage monitoring
- Biofuel production





C-sense will reach the t63 level in ~4 minutes. Total equilibration time is ~15 minutes but this is reduced to ~12 minutes when using the water-pumped head. Equilibration with surrounding waters is not dependent on powering the C-sense. The analog output updates at once per second.



PHYSICAL SPECIFICATIONS

Length x Diameter: 8" x 1.97"; 20.3cm x 5cm Weight: <1 lb; 430 grams

ENVIRONMENTAL SPECIFICATIONS

Temperature Range Water Temp: -2 to 35C Ambient Temp: -20 to 50C Depth Range: 600 meters

ELECTRICAL SPECIFICATIONS

Signal Output: 0-5V DC Supply Voltage: 6-12V DC Power Consumption: 80mA @ 6 VDC (100mA during warm-up) Detector Warm-up Time: 45 sec - 3 min

WHO WE ARE

Since 1972 Turner Designs has provided over 75,000 sensitive, reliable and easy-to-use fluorometers for environmental and industrial uses. We specialize in sensitive detection of materials with fluorescence properties. With distributors around the world, we provide free technical support for the life of our instruments.

