CO₂-Pro[™] FT

CO₂-PRO™ FT PCO₂ SENSOR

The CO_2 -ProTM FT instrument measures the partial pressure of CO_2 gas dissolved in water using infrared detection. Standard ranges from 0-600 ppm up to 0-10,000 ppm provide the full spectrum of pCO₂ needed for accurate measurement of water CO_2 levels.

Labelled FT for Flow-Through version of our flagship CO_2 - Pro^{TM} instrument, the Pro-FT can be used wherever a supply of flowing sample water is available, including shipboard flow-through systems and laboratory testing.

The small size of the CO₂-ProTM FT makes it versatile and easy to integrate into larger systems where space is a concern. When combined with system anti-fouling options, the instrument can perform in even the most biologically active waters for extended periods of time. An internal zeroing feature provides a stable long-term baseline to ensure accurate measurements.

The CO_2 -ProTM FT is factory calibrated using WMO traceable standard gases. In addition, detector temperature stabilization and measurement of gas steam pressure and humidity provide an accurate and stable measurement of pCO₂ in water.



FEATURES

- Fast response and high accuracy
- Long-term stable data for deployments of a year or longer
- · Resistant to biofouling
- · Real-time data output
- Large selection of concentration ranges
- · Compact benchtop design
- Internal data logger and controller with 2GB flash memory

PCO₂ SENSOR APPLICATIONS

- · Ocean acidification studies
- · Long-term pCO₂ monitoring
- Shipboard flow-through pCO₂ measurements
- · Laboratory experiments



Dissolved Gas Sensors

CO₂-Pro[™] FT

SENSOR SPECIFICATIONS

Sensor Performance	
Accuracy	
CO ₂ concentration	±0.5%
Resolution	
CO ₂ concentration	0.01 ppm
Zero drift	automatic zero compensation
Equilibration time (t ₆₃)	50 seconds (with water pumped head)
Standard ranges (alternate ranges available)	0-600 μatm 0 - 1000 μatm 0 - 2000 μatm

Physical	
Length	20 cm (8 in)
Width	20 cm (8 in)
Height	10 cm (4 in)
Weight (plastic)	2.7 kg (6 lbs)
Housing	Plastic or Aluminum
Water Pressure	Up to 3 bar
Water Temperature	0° to 30° C (Standard) -2° to 20° C (Arctic) 15° to 40° C (Tropical)

Electrical	
Input voltage	10-18 VDC
Power consumption	3 W (9 W during warmup)
Optional water pump	add 1 W
Data output	RS-232, ASCII format, 0-5 V or 4-20mA optional
Sample rate	1 second (user selectable with logger/controller)

Optional Accessories

Seabird Water Pump with cable 5P (Plastic) or 5T (Titanium)

Pigtail Cables with Locking Sleeve

5, 10, 25, or 50 meters



Pigtail Cable with Locking Sleeve



SBE 5T Water Pump

