

# CO<sub>2</sub>-Pro™ FT

## 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

## pCO<sub>2</sub> Sensor Applications

- Ocean acidification studies
- Long-term pCO<sub>2</sub> monitoring
- Shipboard flow-through pCO<sub>2</sub> measurements
- Laboratory experiments

## CO<sub>2</sub>-Pro™ FT pCO<sub>2</sub> Sensor

The CO<sub>2</sub>-Pro™ FT instrument measures the partial pressure of CO<sub>2</sub> gas dissolved in water using infrared detection. Standard ranges from 0-600 ppm up to 0-10,000 ppm provide the full spectrum of pCO<sub>2</sub> needed for accurate measurement of water CO<sub>2</sub> levels.

Labelled FT for Flow-Through version of our flagship CO<sub>2</sub>-Pro™ 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 CO<sub>2</sub>-Pro™ 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<sub>2</sub>-Pro™ 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 pCO<sub>2</sub> in water.



# CO<sub>2</sub>-Pro<sup>TM</sup> FT

## Sensor Specifications

### Sensor Performance

#### Accuracy

CO<sub>2</sub> concentration ±0.5%

#### Resolution

CO<sub>2</sub> concentration 0.01 ppm

#### Zero drift

automatic zero compensation

#### Equilibration time (t<sub>63</sub>)

50 seconds (with water pumped head)

#### Standard range

0 - 600 ppm  
(alternate ranges available) 0 - 1000 ppm  
0 - 2000 ppm

### 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 (variable rate 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

**PRO** Stability in a sea of change.  
**OCEANUS**



ES France - Département Bio-tests & Industries  
127 rue de Buzenval BP 26 - 92380 Garches



Tél. 01 47 95 99 90  
Fax. 01 47 01 16 22



e-mail : [bio@es-france.com](mailto:bio@es-france.com)  
Site Web : [www.es-france.com](http://www.es-france.com)