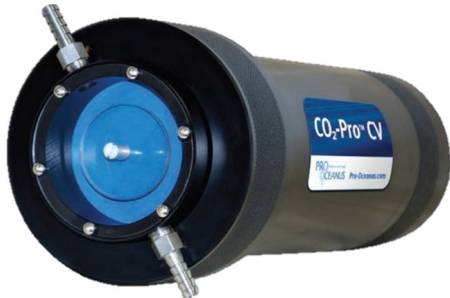




SWALE OCEANOGRAPHIC

CO₂-Pro-CV Submersible pCO₂ Sensor

For partial pressure measurement of dissolved CO₂.



The CO₂-Pro CV™ features the same exceptional reliability, accuracy and stability as the CO₂-Pro™, but in less than half the volume. In addition, the CV is lower cost, lighter weight, and comes with a flat *advanced-matrix* gas transfer interface. The CO₂-Pro-CV measures the partial pressure of CO₂ gas dissolved in water using infrared detection. Standard ranges from 0-600 ppm up to 0-2000 ppm provide the full spectrum of pCO₂ required for accurate measurement of ocean CO₂.

With industry-leading pCO₂ accuracy and stability, the CO₂-Pro-CV sensor provides the long-term, reliable results that are needed for ocean acidification, climate change and carbon flux monitoring and assessment.

With submersible options rated from 350-4000 metres, combined with a variety of biofouling features and options, the CO₂-Pro-CV is ideal for shallow waters and highly productive areas. An internal zeroing feature provides a stable long-term baseline to ensure accurate and stable measurements. A flow-through adapter is also available for simple integration into many existing systems.

For optimal accuracy, factory calibration uses WMO standard gases and detector temperature stabilization and measurement of gas stream pressure and humidity provide accuracy unmatched by small submersible pCO₂ instruments.

Features

- High accuracy, long-term stability
- Easy integration into any system
- RS-232 or analogue data output formats available
- Optional data logger (>1 year of data storage)
- Large selection of concentration ranges
- Optional internal or external battery power

Applications

- Ocean acidification
- Long-term ocean pCO₂ monitoring
- Near-surface flux studies
- Shipboard flow-through pCO₂ measurements
- Coastal zone CO₂ fluxes

Accuracy (Range 0 – 600ppm)	Resolution	Length	330mm
CO ₂ concentration	± 2 ppm	Diameter	115mm
Gas stream humidity	± 1 mbar	Weight (air / water)	2.0 kg / 0.5 kg
Gas stream pressure	± 2 mbar	Depth (Delrin*)	350m
Resolution		Operational Temp	-2 – +30 °C (+40 ° option)
CO ₂ concentration	0.01 ppm	Input Voltage	12 – 18 Vdc
Gas stream humidity	1 mbar	Power consumption	250mA (0.85A warm-up)
Gas stream pressure	1 mbar	Data Output Analog	0 – 5 V or 4 – 20mA
Equilibration rate (t63)	2.5 minutes	Digital	RS-232 ASCII
		Sample Rate	1.6 Sec *

*Options:

Data logger and controller, complete with 2 GB flash memory and terminal program for self-contained measurement and logging, with variable sampling rate (Required for digital output.)

Optional housing for 4000m depth / Internal batteries / External power / Water pumped Head

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