

Mini CO₂™

Features

- Low power consumption
- Compact size
- Optional internal or external battery power
- Easy integration
- Optional internal datalogger
- Large selection of concentration ranges

pCO₂ Sensor Applications

- Aquaculture monitoring of dissolved CO₂ for fish and shellfish health
- Coastal zone CO₂ fluxes
- Algae to fuel bioreactor feedback control
- Groundwater and wellwater monitoring
- Carbon budget studies for lakes and rivers
- Carbon capture storage monitoring of aquifer and surface water levels of pCO₂
- Wastewater greenhouse gas emissions
- Ocean glider and profiler missions

Mini CO₂ Submersible pCO₂ Sensor

The Mini CO₂ instrument uses infrared detection to measure the partial pressure of CO₂ gas dissolved in liquids. With pCO₂ ranges from 0-1000 ppm up to 0-100%, the Mini CO₂ provides the versatility needed to any application.

Mini CO₂ submersible instruments are compact, lightweight, plug and play sensors. The instrument also measures total dissolved gas pressure (TDGP), a useful parameter for many applications and data correction.

With housing options rated to 4000 dbar of hydrostatic pressure, and resistance to most corrosive liquids, the Mini CO₂ can provide reliable dissolved carbon dioxide data for many applications. Flow-through and in-line adapters are also available for simple and effective industrial solutions.

For specialized applications Pro-Oceanus can provide custom solutions to suit any need.



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Mini CO₂™

Sensor Specifications

Sensor Performance

CO ₂ Measurement Ranges	0-2000 ppm CO ₂ ; by volume
	0-5000 ppm
	0-1% (10,000 ppm)
	0-100%
	*other ranges available
Total Dissolved Gas Pressure	0-2000 mbar
Accuracy: pCO ₂	± 2% of max range
TDGP	± 1%
Equilibration rate (t ₆₃)	3 minutes

Physical

Length	28 cm (11 in)
Diameter	5 cm (2 in)
Weight	1 kg in air (2.2 lbs)
	0.25 kg in water (.55 lbs)
Housing Material	Acetal Plastic / Titanium
Depth Rating	0-300 m (Plastic)
	0-4000 m (Titanium)
Water Temperature	-2° to 50° C (standard)

Electrical

Input voltage	5-30 VDC
Power consumption	0.4 W (35 mA @ 12 V)
Data output	Analog 0-5 V or 4-20mA
	Digital RS-232
Sample rate	2 seconds (variable rate with logger/controller)

Options & Accessories

Datalogger and controller

Complete with 2gb flash memory for self-contained measurement and data logging

Titanium housings for depths to 4000 m

Internal battery power

External battery pack

Water-pumped head

Reduce biofouling and improve response rate

Pigtail Cables with Locking Sleeves

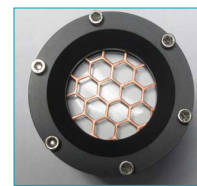
5, 10, 25, 50 meters, or longer



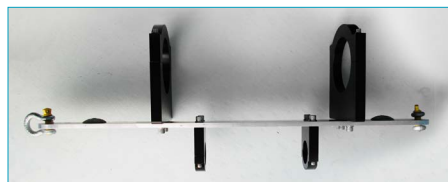
Water-Pumped Head Accessory



Pigtail Cable with Locking Sleeve



Copper Antifouling Shield



Instrument and Battery Mooring Bracket

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