

Mini CO₂TM

Features

- Low power consumption
- Compact size
- Optional internal or external battery power
- Easy integration
- Optional internal datalogger
- Large selection of concentration ranges
- Digital option comes with internal data logger and controller with 2GB flash memory

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

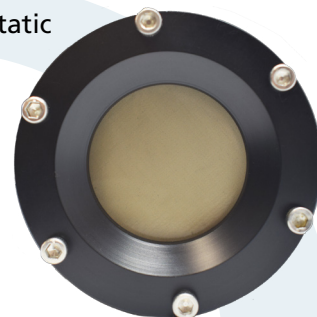
Mini CO₂ Submersible pCO₂ Sensor

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 for 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 6000 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

CO₂ Measurement Ranges 0-2000 ppm CO₂; by volume

0-5000 ppm

0-1% (10,000 ppm)

0-100%

*other ranges available

Total Dissolved Gas Pressure 0-2000 mbar

Accuracy: pCO₂ ± 2% of max range

TDGP ± 1%

Equilibration rate (t₆₃) 2 minutes

Resolution 0.1% of max range

Physical

Length 28 cm (11 in)

Diameter 5.1 cm (2 in)

Weight Air: 0.53 kg (1.2 lbs)

Water: -0.06 kg (-0.1 lbs)

Housing Material Acetal Plastic / Titanium

Depth Rating 0 - 600 m (Plastic)

Up to 6000 m (Titanium)

Water Temperature -2° to 40° C (standard)

Electrical

Input voltage digital: 5 - 30 VDC
analog: 12 - 24 VDC

Power consumption 0.45 W (35 mA @ 12 V)

Data output digital: RS-232, ASCII format
analog: 0-5 V or 4-20 mA

Sample rate 2 seconds (variable rate with logger/controller)

Optional Accessories

Titanium housings

Rated up to 6000 m depth

Internal battery power

External battery pack

76 or 134 Amp-hour capacity

Water-pumped head

Reduce biofouling and improve response rate

Mooring frame or cage with instrument brackets

Anti-fouling Copper Head

Pigtail Cables with Locking Sleeves

5, 10, 25, 50 meters, or longer



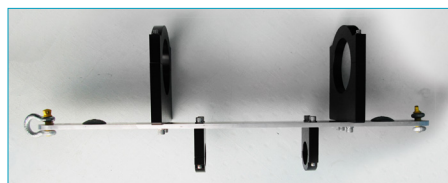
Water-Pumped Head Accessory



Pigtail Cable with Locking Sleeve



Copper Antifouling Head



Instrument and Battery Mooring Bracket

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