

Mini CH₄™

Features

- Compact size
- Low power consumption
- Easy integration
- Multiple data output formats available
- Optional internal datalogger
- Large selection of concentration ranges
- Optional internal or external battery power

pCH₄ Sensor Applications

- Determining background levels of dissolved methane prior to hydrofracturing
- Groundwater and wellwater monitoring
- Offshore oil and gas leak detection
- Wastewater greenhouse gas emissions
- Landfill leachate methane monitoring
- Greenhouse gas emissions from dam reservoir water supplies
- Methane hydrate studies
- Measurement of pCH₄ in fermentation bioreactors

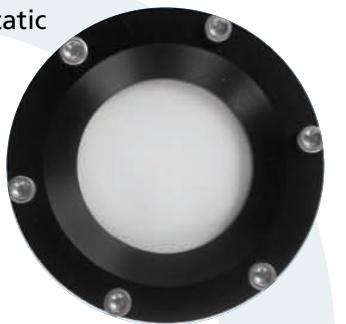
Mini CH₄ Submersible pCH₄ Sensor

The Mini CH₄ instrument uses infrared detection to measure the partial pressure of CH₄ gas dissolved in liquids. Conversion to dissolved methane concentration is simple with known temperature and salinity values.

Mini CH₄ submersible instruments are compact, lightweight, plug and play sensors designed to measure pCH₄ for a range of applications. 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 CH₄ can provide reliable dissolved methane data for many applications. Flow-through and in-line adapters are also available for simple industrial solutions.

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



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Sensor Specifications

Sensor Performance

pCH ₄ Measurement Ranges	0-1% CH ₄ ; by volume (~0-300 µg/L; by mass)
	0-10% v/v (~0-3 mg/L)
	0-100% v/v (~0-30 mg/L)
Total Dissolved Gas Pressure	0-2000 mbar
Accuracy: pCH ₄	± 2% of max range
TDGP	± 1%
Equilibration rate (t ₆₃)	8 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	0-600 m (Plastic)
	0-4000 m (Titanium)
Water Temperature	-2° to 50° C

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 packs

Water-pumped head

Reduce biofouling and improve response rate

Pigtail Cables with Locking Sleeves

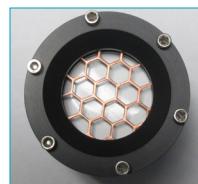
5, 10, 25, 50 meters, or longer



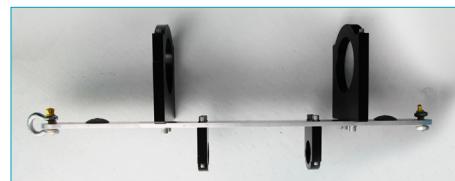
Water-Pumped Head Accessory



Pigtail Cable with Locking Sleeve



Copper Antifouling Shield



Instrument and Battery Mooring Bracket

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