

Mini-Pro CH₄ Submersible pCH₄ Sensor

For partial pressure measurement of dissolved Methane.



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

Mini-Pro 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 submersible options rated from 600-6000 dBar pressure, and resistant to most corrosive liquids, the Mini-Pro CH₄ can provide reliable methane data for many applications. Flow-through and in-line adapters are also available for simple industrial solutions.

Features

- Low power consumption
- Easy integration
- Multiple data output formats available
- Optional data logger (>1 year of data storage)
- Large selection of concentration ranges
- Optional internal or external battery power

Applications

- Groundwater and well-water monitoring
- Offshore oil and gas leak detection
- Wastewater greenhouse gas emissions
- Landfill leachate methane monitoring
- Methane hydrate studies
- Measurement of pCH₄ in fermentation bioreactors
- Background levels of pCH₄ prior to hydro-fracking
- Greenhouse gas emissions from reservoirs

pCH ₄ Concentration	Resolution
0-1% CH ₄ ; by volume (~0-300 µg/L; by mass)	0.01%
0-10 % (~0-3 mg/L)	0.01%
0-100 % (~0-30 mg/L)	0.1%
TDGP	0 – 2 Bar
Accuracy: pCH ₄	± 3% FS
TDGP	± 1% FS
Equilibration rate (t63)	8 minutes

Length	280mm
Diameter	53mm
Weight (air / water)	0.53kg / 0.06kg
Depth (Delrin / Titanium)	600m / 6000m
Operational Temp	-0 – +40 °C
Input Voltage	7 – 24 Vdc
Power consumption	7 mA @ 12 V
Data Output	Analog 0 – 5 V or 4 – 20mA
	Digital RS-232 or RS-485
Sample Rate	2 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.)

Internal batteries / External power / Water pumped Head / Anti-fouling head

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