



HydroC™ HISEM CH₄

Hydrocarbon and Methane Sensor

CONTROS' HydroC™ HISEM CH₄ sensor is a unique underwater hydrocarbon and methane sensor for in-situ and online measurements of CH₄. The HydroC™ HISEM CH₄ is a perfect solution for the detection of background CH₄ concentrations and for long-term monitoring. Applications include: pipeline inspection, early leak detection, climate change studies, methane hydrate studies, limnology, profiling/moorings and offshore risk management.

HOW IT WORKS

Dissolved CH₄ molecules diffuse through a silicone membrane into the patented detector chamber. Based on state-of-the-art Laser Spectrometry, the laser gas-detection modules have virtually no cross-sensitivity with other gases and feature an innovative, patented measurement principle that eliminates the need for a reference channel. Concentration dependent IR light intensities are converted into output signals.

ADVANTAGES

- High accuracy at 1 nmol/l ± 0,3 nmol/l
- Very robust, can be used in water depths up to 3,000 metres
- User-friendly
- Versatile; easy integration with almost every oceanographic measurement system and platform
- Excellent long-term measurement solution; maintenance interval of 36 months
- 'Plug & Play' principle; all required cables, connectors and software are included



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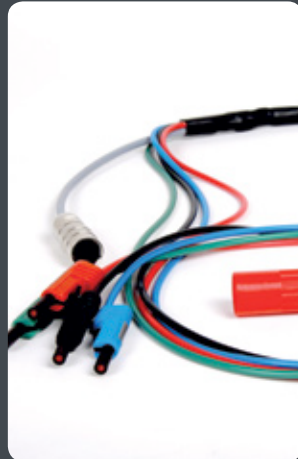


CONTROS
Systems & Solutions GmbH

FAST FACTS

ACCESSORIES

CONTROS provides all kinds of cables for laboratory and field work, along with subsea power options and a variety of turn-key solutions for underwater sensing. Furthermore CONTROS has broad experience in building customer-specific winches, mountings, and cages for every type of application.



DETECTOR	Tunable Diode Laser Spectrometry (TDLS), high selectivity, fast response
MEASURING RANGE	1 nmol/l – 1 µmol/l (other ranges available)
WEIGHT	25 kg (13 kg in water)
DIMENSIONS	136 d x 630 mm
OPERATIONAL DEPTH	500; 3,000 m
TEMPERATURE RANGE	+3°C to +30°C (Arctic version: -2°C to +15°C)
RESPONSE TIME	First signal > 7s (with external pump)
DETECTION LIMIT	1 nmol/l
ACCURACY	At 1 nmol/l ± 0,3 nmol/l
CONNECTOR	Connector SUBCONN® MCBH8-M Titanium 8-pin • Others on request
POWER SUPPLY	Depending on water temp. approx. 300 mA (+ ~ 600 mA with big external pump) @ 12 V
DATA INTERFACE	RS-232C and RS-485; Data format ASCII NMEA-0183
SOFTWARE	Windows® Software DETECT™ incl. real time data visualization, setting of sensor parameters, download data from internal data logger • Sleep mode function

OPTIONS

- Analogue Output: 0 – 5 V
- Internal data logger
- External battery pack
- ROV and AUV installation packages
- Profiling and mooring frames

CONTACT US

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