

CONTROS HydroC CH₄ FT



KONGSBERG



ACCURATE, LONG-TERM STABLE METHANE SENSOR

The CONTROS HydroC CH₄ is a unique surface methane partial pressure sensor designed for flow through applications like pumped stationary systems (e.g. monitoring stations) or ship based underway systems (e.g. FerryBox). Fields of application include: Climate studies, methane hydrate studies, limnology, fresh water control, aquaculture/fish farming.

All sensors are individually calibrated using a water tank, which simulates the expected water temperatures and gas partial pressures. A proven reference system is used to verify the CH₄ partial pressures in the calibration tank. This process ensures that the CONTROS HydroC CH₄ sensors achieves excellent short and long term accuracy.

Operating principle

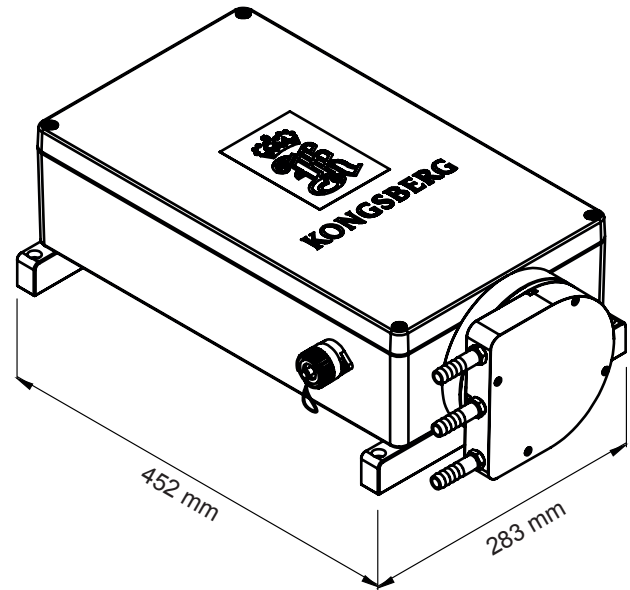
Water is pumped through the flow head of the CONTROS HydroC CH₄ sensor. Dissolved gases diffuse through a custom made thin film composite membrane into the internal gas circuit leading to a detector chamber, where the CH₄ concentration is determined by means of Tunable Diode Laser Absorption Spectroscopy (TDLAS).

Concentration dependent laser light intensities are converted into the output signal taking additional sensors within the gas circuit into account.



FEATURES

- High accuracy and low detection limit of background concentration
- Large measuring range
- Optimal long-term stability
- Ideal methane selectivity
- Non-consuming CH₄ measurement
- Very robust
- User-friendly 'Plug & Play' principle; all required cables, connectors and software are included



TECHNICAL SPECIFICATIONS

CONTROS HydroC CH₄ FT

- Detector: TDLAS -Tunable Diode Laser Absorption Spectroscopy
- Measuring range: 0 µatm – 40,000 µatm
- Detection limit: < 1 µatm
- Accuracy: ±2 µatm or ±3 %, whichever is greater
- Weight: 8.5 kg
- Dimensions: 452 x 283 x 142.5 mm
- Flow rate: 2 to 15 l/min (recommended 5l/min)
- Temp range: -2°C to +30°C
- Supply Voltage: 12-30 V
- Data interface: RS-232C
- Data format: ASCII
- Connector: Hirschmann-plug CA6LD (other connectors on request)

SOFTWARE

CONTROS DETECT® incl. real time data visualization, setting of sensor parameters (e.g. measuring intervals, internal data logger settings, sleep mode function) supported by a mission planning tool and data download from internal logger

HARDWARE REQUIREMENTS

Win 7 32 Bit, 200 MB free disk space,
Dual Core CPU with 2GB RAM

OPTIONS

- Data logger
- Easy integration into FerryBox applications
- Analogue output: 0 V - 5 V

Specifications subject to change without any further notice.

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