Methane is one of the most important gases in our environment. Indeed, in many areas of everyday life, the monitoring of methane is a necessity. CONTROS’ HydroC™ is a unique underwater methane sensor solving the global problems of the in-situ measurements of CH₄. Applications include offshore pipeline inspections, exploration of new oil and gas deposits, oceanographic applications and water & waste water treatment tasks.

**HydroC™ - Methane and Hydrocarbons Sensor**

- **Detector:** Optical analysing system (patented) NIR 3.4 µm /bandwidth 180 nm for CH₄
- **Function principle:** Hydrocarbon / methane diffuse out of the liquid through a special silicone membrane (patented) into the detector chamber. The adsorption of light and gas (hydrocarbon molecules) leads to change of intensity which is measured electronically and converted into an output signal.
- **Membrane:** Standard: 10 µm silicone membrane. Other or anti fouling device on request
- **Operational depth:** 2000 m, 4000m (6000m on request)
- **Temperature:** 0 .. +50 °C, other ranges on request
- **Measuring range:** 100 nmol/l .. 50 µmol/l, other ranges on request
- **Resolution** 10 ppm
- **Accuracy** ±3% reading + 1.5% full scale range (one year max.)
- **Response time:** typ. 7 seconds
- **T90-Time range:** typ. 30 seconds
- **Calibration:** Stored internally. Recalibration recommended every 12 months
- **Zero adjust:** Auto / smart zeroing, external (RS-232/485) with software or switch button
- **Power supply:** wide range 9 .. 36 VDC, typ. 300 mA @ 12V (6W)
- **Output:** Connector SUBCONN® MCBH8MTI 8-pin
  - Analogue 0 .. 5 V, 0 ..10 V, 0 .. 20 mA, 4 .. 20 mA linear output; voltage range point can be user-configured
- **Specifications**
  - Housing diameter: 110 d x 390 l mm
  - Weight in air / water: 13 kg / 8 kg approx.
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