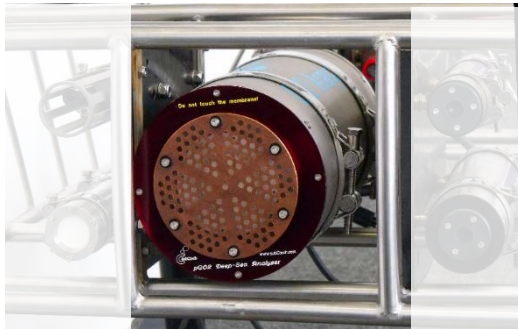


# Subsea CH<sub>4</sub> Analyzer

## Precise optical NDIR CH<sub>4</sub> Methane Analyzer



- Monitoring e.g. Offshore Oil+Gas or CCS
- ROV or AUV integration
- Profiling
- Deep-Sea
- Monitoring of biological processes
- Water quality control

- Premium optical Edinburgh® analyzer
- No calibration required
- Corrosion-free titanium or POM housing
- Low maintenance
- Robust design
- Highest precision
- Low investment – low follow up costs
- Low power
- Expandable

### Features & Benefits:

- Scientific NDIR analyzer unit included. Highest accuracy due to automatic temperature and pressure compensation.
- Robust, versatile and compact submersible housing for buoy and subsea applications
- Complete, hands carry able and easy to maintain. Easy handling and intuitive overall design (e.g. red / green LED signals)
- High stability with auto calibration features including standard offset zeroing, auto- or manually span gas calibration supported: low maintenance costs
- Long-time deployment anti-fouling protection for the flat membrane equilibrator conductor
- Optionally expandable by easy integration of instrumentation through the data logger, e.g. Oxygen optode, Fluorometer and Turbidity sensors, CTD's etc.
- For shallow water deployments expandable through external modules via RS-485 MBUS bus, e.g. to connect a Meteorology or GPS geo references with position event control
- Optional real-time online telemetry data transfer and alarm services
- Optional external Li-Ion PowerPack
- Adaption set for Inspection ROV



Specification	
<b>Sensor Principle</b>	High performance NDIR analyzer • Contains dual-wavelength NDIR detector for CH <sub>4</sub> • Silicone flat membrane equilibrator • External sea-water pump for high response times (T <sub>66</sub> : 3min) supported
<b>Range</b>	Standard 0...5 % CH <sub>4</sub> • up to 100% CH <sub>4</sub> available • Units selectable
<b>Resolution</b>	0.1 ppm CH <sub>4</sub>
<b>Accuracy</b>	Correction for pressure and temperature effects • Overall accuracy < 2%
<b>Sample Rate</b>	Physical 1 Hz with optionally averages for storage (e.g. 30s, 10min,...) and real-time output
<b>Air CH<sub>4</sub></b>	Optionally automatic analysis on programmed intervals • Additional air CO <sub>2</sub> port and external gas inlet
<b>Calibration</b>	Factory calibration with traceable gases • User correction supported Optional manual or automatic gas calibration on programmed intervals
<b>Temperature</b>	Operating temperature range 0 to +40°C • Optional heater for -20 to +40°C
<b>Analogue Out</b>	0...5V / 0...2,5V or 0/4...20mA • Range can be adjusted
<b>Interface</b>	RS-232 / RS-485 interfaces provided • Real-time data output ASCII NMEA-0183, typ. 1 Hz • Easy integration into existing systems • Optionally usage of radio links, Ethernet, WLAN etc.
<b>Data logger</b>	Optional data logger • 2GB CF card for approx. 5 years' storage (depending sample rate) Quality and event flagging • PLC Controller for auto-calibration and external component control (pumps, lights, sensors etc.) • Real time processing with 180+ calibration formulas • Optional alarms
<b>More Sensors</b>	Additional sensors such as CTD, pH, Fluorometer etc. can be adapted
<b>Analogue Input</b>	Optionally 16 or 24 Bit data acquisition 0/4-20 mA, ±10V etc.
<b>Software</b>	NEW Windows® PC Software <i>OceanView™ 4</i> for logging and online real-time data • Diagnostic screen
<b>Anti-fouling</b>	Anti-fouling design for the equilibrator sensor head
<b>Housing</b>	Titanium Φ168mm x 380 mm length (300m) • Approx. 12 kg at air, 4 kg in seawater Titanium Φ180mm x 380 mm length (3000m) • Approx. 15 kg at air, 6 kg in seawater
<b>Water depth</b>	Buoy / Shallow water 50m • Estuary 300m • Subsea up to 6000m on request
<b>Power</b>	12...28 VDC • typ. 8W • Warming up max. 25W • Optional Li-Ion PowerPack™ Optional low-power version <5W operating and Power-Manager-Module for sleep-modes
<b>Service</b>	Recalibration & Service recommended every 12 months • Membrane lifetime up to 10years • Operating time for 24/7 usage typ. 1 year before service (internal micro pump, zero filter)

