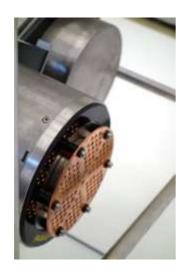




OceanXpert-Sea IR-CH4

Precise subsea CH₄ Analyzer



- ✓ ROV or AUV integration
- ✓ Shallow water or deep sea
- ✓ Water quality control

- Cost-effective sensor for leak detection
- Precise NDIR dual-wavelength sensor
- Low maintenance low follow up costs
- ▶ Robust construction
- Corrosion-free
- Low power
- Snaps into industrial PLC
- ► Integrated Datalogger
- Expandable
 - ✓ Monitoring e.g. Offshore Oil+Gas / CCS
 - ✓ Environmental monitoring
 - ✓ Long-time deployments

Features & Benefits:

- Robust, versatile and compact submergible housing for buoy and marine applications
- Complete, portable and easy to maintain. Easy handling and intuitive design
- Extensive temperature and pressure compensation. Optional external gas tanks for autocalibration
- Flat membrane equilibrator with anti-fouling protection for long-time deployments
- Internal data logger allows easy integration of additional sensors: CTD/TSG, Oxygen, Fluorometer, Turbidity, Nutrient Analysers, pH, etc.
- Optional alarm outputs for configurable threshold concentrations
- Complete solution "Ready to Run" with cables, clamps, etc.
- Optional high-reliability production IPC-A-610 class 3
- Optional GPS georeferences for all data and position event control
- Optional online telemetry data transfer and alarm services
- Optional external or internal Li-Ion PowerPack







Subsea Technologies for the marine environment

Specifications	
Sensor Principle	High performance NDIR dual-wavelength optical sensor • Silicone flat membrane equilibrator
Range	01%, 05%, 010%, 030%, 0100%
Resolution	0.1 ppm CH₄
Accuracy	Auto-correction for pressure and temperature effects • ±2% Full-scale
Sample Rate	Output rate typ. 1 Hz with optional averaging • User configurable • Storage rate configurable
Calibration	Internally stored coefficients • User correction supported for Zero & Span
Temperature	Operating temperature range 0 to +40°C ● Optional heater for -20 to +40°C
Analogue Out	Optional • 05V or 020mA / 420mA • Range can be adjusted
Data Interface	RS-232 (RS-485 optional) • simple ASCII NMEA-0183 • Easy integration into existing systems
Data Storage	Internal 8GB SD card • Storage capacity approx. 5 years (depending on sample rate)
External Sensors	GPS • CTD • Meteorological instrumentation • Oceanographic sensors
Anti-fouling	Flat membrane equilibrator with anti-fouling protection for long-time deployments
Housing	Shallow water (max. 50m): POM ● 15 kg (2 kg in water) ● Φ180mm x 527mm Deep sea (300m; up to 3000m possible): Titanium ● 16 kg (4 kg in water) ● Φ168mm x 527mm
Power	1232 VDC ● typ. 15 W (@20 °C) ● Warming up max. 25 W ● Optional Li-Ion PowerPack
Accessories	Li-Ion Batteries • External datalogger • External sensors or analyzers • Pump for faster equilibration time • Frames or lander available
Service	Recalibration & service recommended every 12 months • Membrane lifetime up to 10years

