

**CONTROS** SOPHISTICATED UNDERWATER GAS DETECTION

MADE IN GERMANY

# HydroC™



## THE „REAL TIME“ UNDERWATER pCO<sub>2</sub> SENSOR

- ✓ Carbon Capture and Storage Evaluation & Monitoring
- ✓ Process Monitoring
- ✓ Risk Management
- ✓ ROV and AUV suitable
- ✓ Verification of in-situ CO<sub>2</sub> concentrations
- ✓ Detects gaseous and dissolved CO<sub>2</sub>



Subsea fieldwork product line

Although not the most powerful greenhouse gas, CO<sub>2</sub> drives climate change due to the enormous volumes of this gas pumped into the atmosphere. Carbon Capture and Storage is considered a short- to medium-term approach to this problem, with the need for a reliable subsea CO<sub>2</sub> leakage monitoring.



**CONTROS' HydroC™/ CO<sub>2</sub> is a unique underwater carbon dioxide sensor solving the global problems of the in-situ and online measurements of CO<sub>2</sub>.**

Applications include Carbon Capture and Storage (CCS) Evaluation and Monitoring, Process Monitoring and Risk Management.

### FUNCTION PRINCIPLE

Dissolved CO<sub>2</sub> diffuses quickly from the liquid through a patented thinfilm composite membrane into a detector chamber.

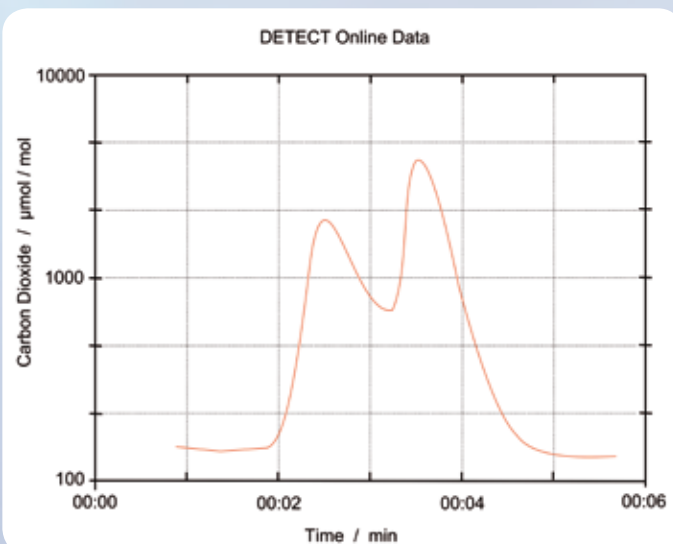
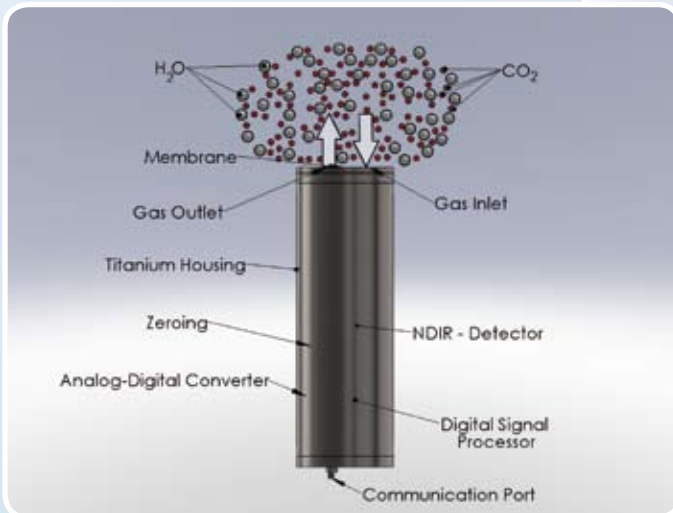
The CO<sub>2</sub> concentration is measured reliably by non-dispersive infrared spectrometry (NDIR) within a gas circuit.

### ADVANTAGES

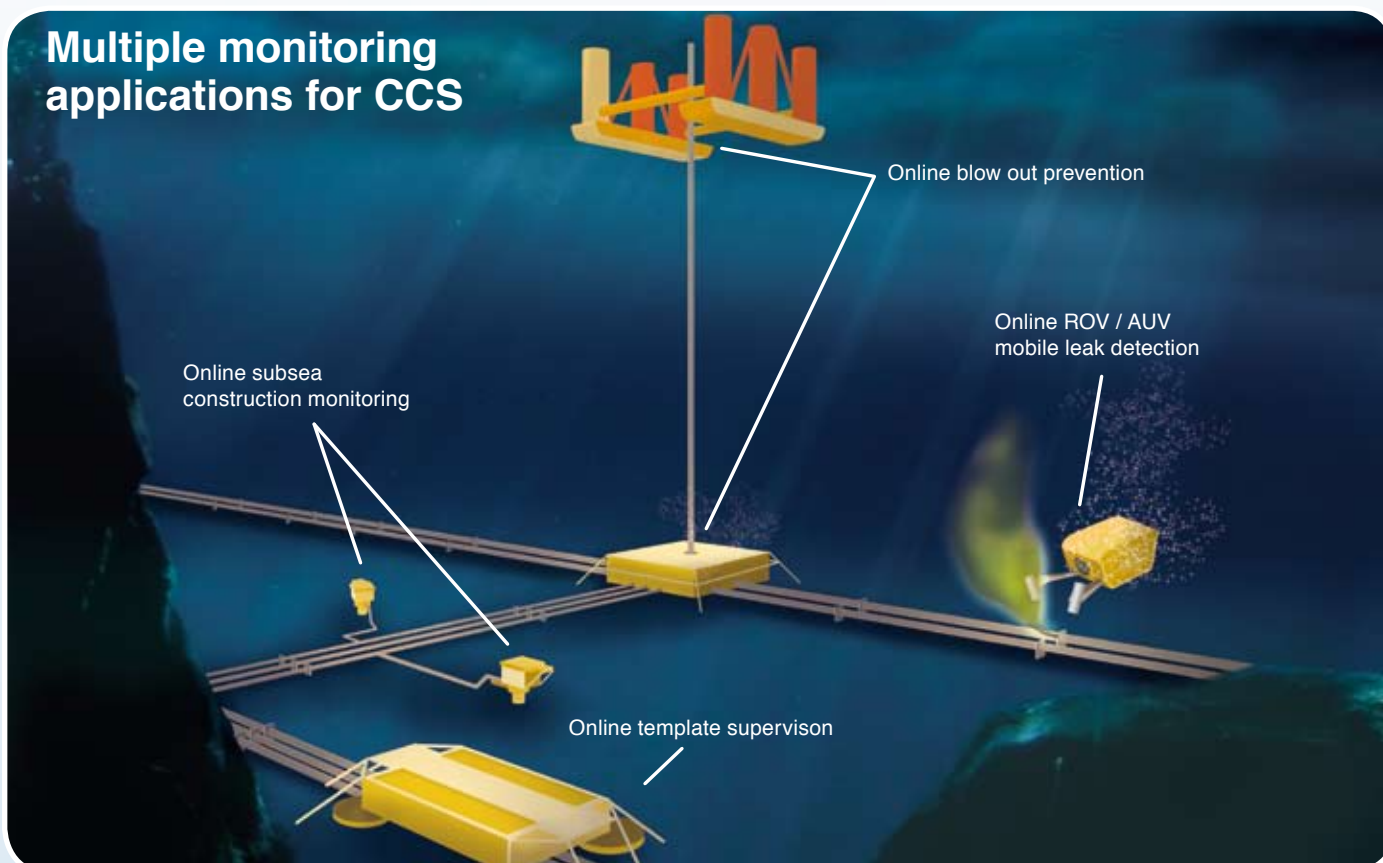
- ✓ The HydroC™ system is unaffected by turbidity or interferences to other gaseous substances in the environment (lowers false alarm rate).
- ✓ The HydroC™ system detects gaseous and dissolved CO<sub>2</sub> in the water column.
- ✓ The HydroC™ system features an optical technology with a proven track record.
- ✓ The HydroC™ system has a long-term stable signal and a long maintenance interval.
- ✓ The HydroC™ system has a proven ROV and AUV compatibility.

### TECHNICAL OUTLINE

Detection time:	typical 10 s
Operational depths:	up to 6000 m
Maintenance interval:	12 Months
Data outputs:	digital & analogue



## Multiple monitoring applications for CCS



### CONTROS' OFFER

CONTROS provides offshore pipeline inspection and long term monitoring solutions. HydroC™ leak detection product line, field experience and advanced data management systems meet demanding regulatory requirements and enhance safety during all Carbon Capture and Storage processes subsea.

### PRODUCTS

- ✓ Sensor Systems
- ✓ Subsea Power Supplies
- ✓ Data Management Systems
- ✓ Subsea Datalogger

### SERVICES

- ✓ Instruction and Training
- ✓ Engineering Services
- ✓ International Project Management
- ✓ Offshore Surveys
- ✓ Global presence and availability





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