# Dissolved CO2 Sensor HR

### **APPLICATION**

- Process control in aquaculture
- Long-term monitoring in hydroelectricity reservoirs
- · Survey of coastal waters

#### **FEATURES**

- Maintenance limited to a few minutes a month
- No recalibration
- Plug-and-play
- · Continuous monitoring
- Reliable and accurate values 1 50 mg/l



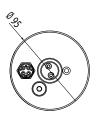
## SENSOR PRINCIPLES

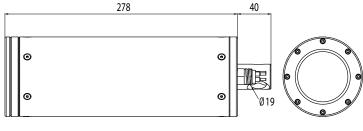
The CO2-HR is an in-situ sensor to be deployed underwater. It measures the Carbon Dioxide dissolved in fresh or salt water. The concentration of dissolved CO2 in the water equilibrates with the concentration in the internal detector room of the sensor. Outside water and detector room are separated by a pressure resistant membrane inlet system, which is impermeable to water and ions, but let gases diffuse freely back and forth. The process is continuous and reversible, so that the changes of internal concentration are mirroring the changes in the outside water. The internal detector uses Infra-Red Absorptiometry to analyse the gas. This technology is tuned for CO2, thus minimizing cross-sensitivities.

# **SPECIFICATIONS**

- Operation temperature
  -2°C +40°C
- Salinity 0.5 40 %
- Depth rating sensor 300m
- IP rating Junction Box IP 64
- Range 1 50 mg/l
- Supply voltage 110-240 VAC or 24 VDC
- Power consumption 6 W
- Output both digital (RS485) and analog (4..20mA)
- USB Port Logger setting and Data
- · Sensor 2,6 kg
- Junction Cable (standard 10m) 2,6 kg
- Junction Box 1,2 kg

#### **DIMENSIONS IN MM**













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