



Datasheet

Polaris C CO₂ HR
Product no. H05D0H-25



Intended use

Polaris C meters are portable instruments designed for fast and accurate spot measurements of environmental parameters in aquaculture, research and industrial use.

Polaris C CO₂ High Range measures carbon dioxide directly in gas, making it ideal for monitoring high CO₂ concentrations where standard dissolved-CO₂ sensors are not sufficient. It is used in systems with degassing, CO₂ control or ventilation monitoring, providing stable and maintenance-free measurements up to 100% CO₂.

Technical specifications

Units of measure	CO ₂ : %vol and mg/l or ppm. Temperature: Celsius (°C), Fahrenheit (°F)
Display	Graphical LCD display with variable backlight
Types of probes	Optical
Cable length	Standard 3 meters / 10 ft. By request, available at any length up to 100 m / 328 ft
Operating temperature	<ul style="list-style-type: none">Probe: -5°C to +40°C / + 23°F to + 104°FMeter: -20°C to +60°C / -4°F to +140°F
Meter water resistance	IP67-rated, allowing short-term immersion up to 1 m / 3 ft
Response time	Typically 5-15 minutes at 20°C, depending on flow velocity. With low-flow conditions, up to 20 min.
Flow requirements	A continuous water flow around the probe is necessary to maintain measurement accuracy.
Measuring range	<ul style="list-style-type: none">HR Standard: CO₂: 0-100% volume CO₂: 0-1000 mg/L or 0-1000 ppm
Measuring accuracy	<ul style="list-style-type: none">HR Standard: Depends on calibration. Typically, at 20° C / 68° F: ± 2% of measured value. Temperature: ± 0.2° C / F
Data logging capacity	Min. 3000+ sets of data with a maximum of 140 tag references
Compensation ranges (manually set)	0-59 ppt, manually set
Automatic check of	Probe function, meter function, cable and battery
Automatic compensation	Temperature and barometric pressure (300-1200 mBar)
Dimensions meter	Length = 98 mm / 3.86". Diameter = 36 mm / 1.42"
Dimensions probe	Length = 140 mm / 5.51". Diameter = 40 mm / 1.57"
Power	Single-cell Li-Ion battery pack with integrated battery protection circuitry. Nom. 3.7V, max. capacity 9Wh. UN38.3 certified
Battery life	Up to 6,5 days of typical usage of 2 hr/day

Order information / part numbers

Replacement probe for Polaris C CO ₂	Item no: G02YRP-25
Replacement probe for Polaris C CO ₂ High Range	Item no: G02HYRP-25
Membrane protector for CO ₂ probe	Item no: G10MP
Membrane protector (antifouling) for CO ₂ probe	Item no: G10MPAF