

OxyGuard Polaris C Optical



Hand-held oxygen and temperature meter with NFC and Bluetooth technology

The Polaris C Optical meter is an almost maintenance free meter for measuring dissolved oxygen and temperature. The meter is sturdy, easy to use and has an extensive longevity making it ideal for harsh conditions.

Polaris C Optical can store up to 2500 complete set of data, including time and date stamps. The logged data can be stored either manually or automatically with the possibility to group the data into categories.

The stored data can be uploaded directly to Cobália using Bluetooth technology. Scan the Cobália NFC tag on the tank and all data will be uploaded to your “digital farm”. Tank specific data assigned to the tags will be stored in Cobália for analysis on temporal variation, generation of graphs and for multivariable analysis on performance.

The meter has a built-in self-check of all hardware, it compensates automatically for barometric pressure and it has a notably short response time. With this meter, you get the high-quality associated with OxyGuard technology and a product that will serve you well for many years.

Technical Information

Key benefits

High accuracy
Easy-to-do calibration
Automatic check of the hardware
Automatic compensation for barometric pressure and temperature
Water-resistant
Automatic or manual data logging of up to 2500 full sets of data
Bluetooth and NFC technology for direct upload to Cobália
Low power consumption: ~150 hours
Immediate response time
Variable display options and unit use
Based on luminescence quenching of an oxygen sensitive dye immobilized on a support foil (sensor spot), it can be used for gas as well as for dissolved oxygen (DO) measurements.
Long-term stability
Low drift (No offset/zero point calibration)

Specifications

Units of measurement: Oxygen: ppm (mg/L), % saturation. Temperature: degrees Celsius (°C), degrees Fahrenheit (°F)

Display: Graphical LCD display with variable backlight

Probe type: LDO Luminescence optical technology

Cable length: Standard 3 m. Available at any length up to 50 meters by request

Operating temperature: Probe: -10 to +60 degrees Celsius (°C) and +14 to +140 degrees Fahrenheit (°F).

Meter: -20 to +60 degrees Celsius (°C) and -4 to 140 degrees Fahrenheit (°F)

Waterproof: The meter is short term immersion proof to 5m depth

Response time: To 90% in less than 15 seconds in water (less than 5 sec in air)

Measuring range: Oxygen: 0-25 mg/L and 0-250 % saturation. **Temperature:** -5 to +45 degrees Celsius (°C) and +23 to +113 degrees Fahrenheit

Measuring accuracy: Oxygen: $\pm 1\%$ sat, $\pm 0,1$ ppm (mg/l).
 ± 0.5 Celsius/Fahrenheit (°C/°F)

Data logging capacity: 2500 sets of data with up to 99 data groups

Salinity compensation range: 0-50 ppt salinity. Manually set

Automatic check of: Probe function, meter function, cable and battery

Automatic compensation: Temperature and barometric pressure (0-7000 m a.s.l)

Dimensions meter: Length = 98 mm, diameter = 36 mm (Length: 3.86 in, diameter: 1.42 in)

Dimensions probe: Length = 50 mm, diameter = 47,5 mm (1.97 in, 1.87 in)

Power: 1 AA alkaline batteries

Battery life: 150 hours use depending on settings and battery quality

Standard accessories: Tool, storage pouch

Lifetime (minimum): Sensor spot: 2 years

Ordering information

H05LDO: Polaris C Optical comes with standard accessories and one Cobália tag

Spare parts

D30SPK: Sensor spot kit for optical oxygen Handy probe

H10T00I: Tool

H10CAPLDO: Cap with sensor spot

H10CB5 (p-net): Extra Handy cable, per meter

H10PO: Pouch for Handy

C70TAG: Cobália tag

H05LDO Polaris C Optical brochure GB 2022 10
Data subject to change without notice