

# 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: ± 1% sat, ± 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

H05LDOSPK: Sensor spot kit for

Handy Polaris C Optical

H10TOOL: Tool

H10CB6: Extra Handy cable, per meter

H10PO: Pouch for Handy

C70TAG: Cobália tag

H05LDO Polaris C Optical brochure GB 2023 05  
Data subject to change without notice