

OxyGuard Polaris 2 TGP

Hand held Total Gas Pressure Meter



The OxyGuard Handy Polaris TGP is a hand-held gas pressure meter. It can operate in three modes, one where it acts as a standard Polaris dissolved oxygen meter, one where it is a Total Gas Pressure meter that shows pressures as “percent saturation” values of the actual atmospheric pressure and one where it is a Total Gas Pressure meter that shows pressures as volume percentages.

To do this it measures the atmospheric pressure, the total dissolved gas pressure, the oxygen partial pressure and the temperature.

The instrument incorporates a data logger. Messages on the display, and menu functions, make the Handy TGP easy to use

Technical Information

Advantages

The Polaris 2 TGP is designed for easy use and to give accurate here-and-now measurements of both the dissolved oxygen and the dissolved rest gases - i.e. the gases that can cause decompression sickness - "the bends" - in fish. This is achieved because the instrument measures all three pressures needed - the dissolved oxygen, the total dissolved gas and the atmospheric.

Maintenance is easy - the DO measurement is made using the well-known OxyGuard Handy probe, and the TGP measurement tube sensor element can easily be exchanged if necessary.

Specifications

Dimensions: Meter 98 mm diameter x 36 mm
Probe 58 mm x 110 mm + cable gland
Cable Length: Standard 3 m. Other on request.
Operating Conditions: Probe: -5 to +45°C, meter -20 to +60°C.
Encapsulation (meter): Short-term immersion proof to 5m depth.
Display: Graphical LCD display. Variable backlight.
Parameters measured: Oxygen partial pressure, atmospheric pressure, total dissolved gas pressure, temperature at probe.
Parameters displayed: DO in mg/l, % sat, % vol.
TGP in % sat.
Rest gas in % sat, % vol.
Temperature in °C or °F.

Measuring range, DO: 0-60.0 ppm (mg/l), 0-600% saturation and 0-60% vol.

Oxygen Probe Type: Galvanic cell, self polarizing, self temperature compensating.

DO measurement automatically compensated for temperature and barometric pressure. Manual salinity compensation between 0-59 ppt salinity. DO accuracy depends on calibration accuracy. Typically better than +/- 1% of measured value +/- 1 digit within the standard measuring range. DO measurement repeatability typically better than +/- 0.5% of measured value. Response Time (DO) 90% of end value in less than 20 seconds in water.

Measuring range, pressures: to over 200% sat, 2 bar. Accuracy +/- 2% of value

Measuring range, temp. -5 to +45°C. Accuracy +/- 0.2°C.

Self-check of: Probe function, meter function, cable, battery.

Accessories included: Storage pouch, DO probe membranes with O-rings & electrolyte, cathode cleaning pad, storage pouch.

Ordering Information

H08: OxyGuard Polaris 2 TGP complete with accessories.
H08XSE: Replacement TGP sensor element.
H08XPR: Probe protector and sensor element retainer.
H10LINK: OxyGuard Polaris Link for transfer of data to PC.
H10ACC: DO Accessory kit: membrane cap, 5 membranes & O-rings, 50 ml electrolyte and tool.
D10E1500: 500 ml electrolyte for DO probe.
D10E11L: 1 liter electrolyte for DO probe.
H10CAP: Membrane cap with membrane for DO probe.
H10CB6: Extra cable per meter.
H10PO: Pouch.

F01 TGP Probe brochure gb 0512
Data subject to change without notice