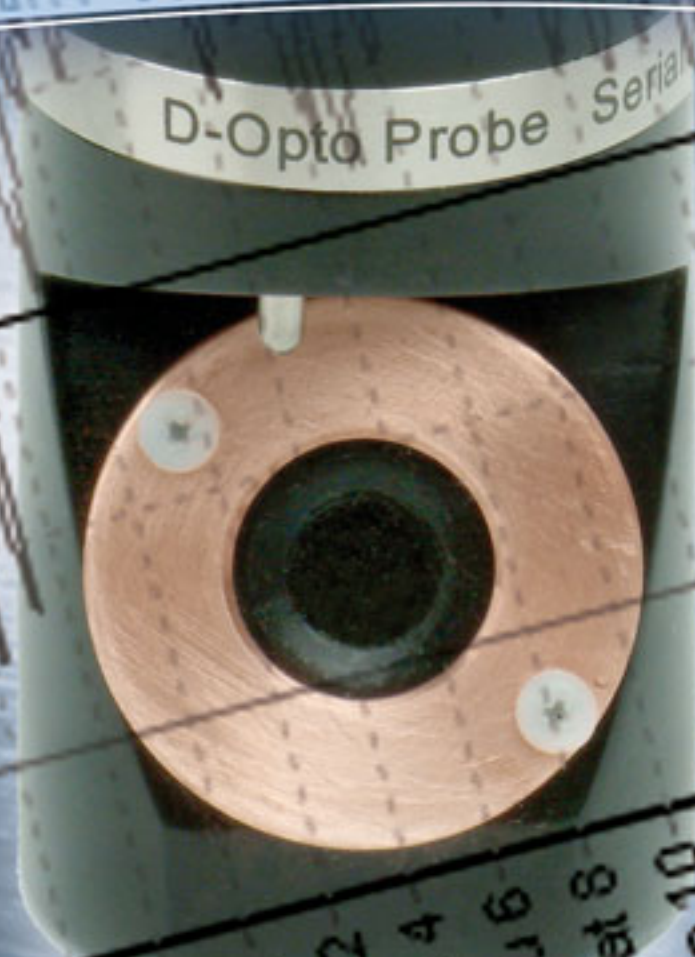


D-Opto

Optical Dissolved Oxygen Sensor



Specification: D-Opto Sensor SDI-12 series

The D-Opto sensor consists of a probe that incorporates the dissolved oxygen sensing element, temperature thermistor, and processing electronics in a tough high impact resistant

D-Opto Sensor benefits

- Calibration coefficients, serial number and SDI-12 address are stored on-board the probe in non-volatile memory.
- Outputs temperature, percent saturation and ppm
- Digital output signal enables long cable run without signal deterioration
- SDI-12 signal output as standard
- Low power requirement; 0.2mA in standby, 10mA during sampling
- Reverse polarity and fully surge protected
- Copper bio fouling control ring around the optical window
- Highly flexible, abrasion resistant, fully waterproof EPDM jacketed cable

ZEBRA-TECH LTD

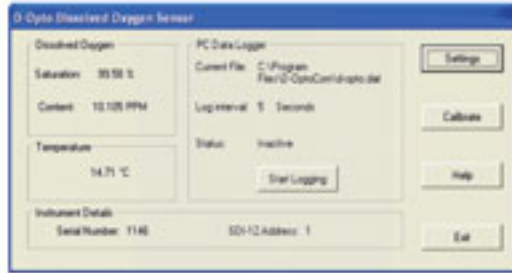
www.zebra-tech.co.nz

D-Opto

Dissolved Oxygen Sensor

Highly accurate and stable
Very low maintenance requirements and costs
Flow insensitive technology, completely unaffected by water velocity
Low power consumption
Long calibration interval
Simple to install and integrate

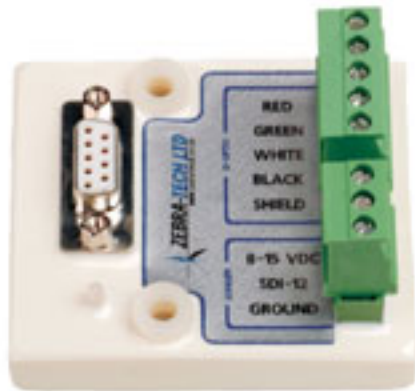
D-OptoCom Software



The D-Opto is supplied with the custom designed Windows based communication software program "D-OptoCom".

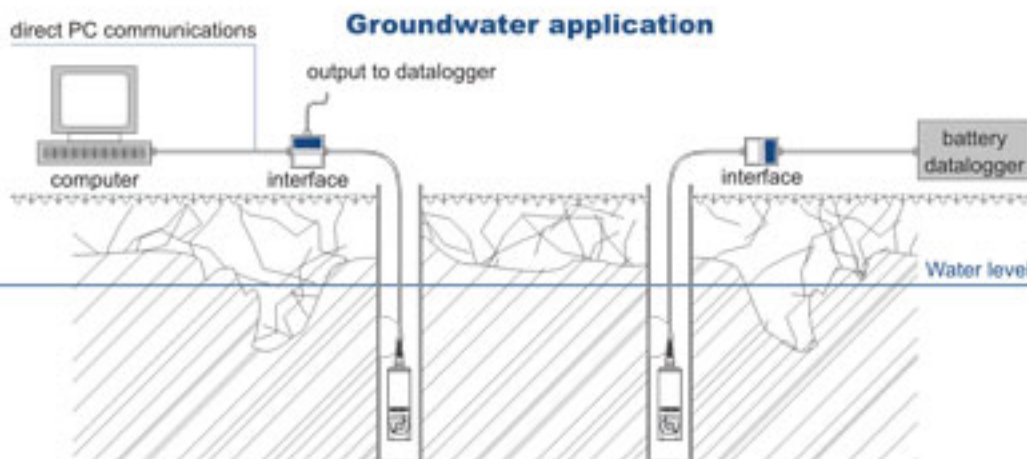
- Enables the user to communicate with the D-Opto via a computer;
- Is used to configure and calibrate the D-Opto;
- Has a data logging function that enables data collected by the D-Opto to be logged directly to the computer.

Interface for Sensor



D-Opto is supplied with an interface board to simplify installation. The interface board features screw clamp terminals for connecting the D-Opto and power supply and data logger. The interface board also enables a laptop to be connected to the D-Opto WITHOUT having to disconnect the D-Opto from the data logger.

Diagrams of applications



Dissolved Oxygen

Accuracy	1% of reading or 0.02ppm, whichever is greater
Resolution	0.01% Saturation, 0.001ppm
Range	0.00 to 25.00 ppm
Repeatability	0.01ppm
Response time	90% in less than 60 seconds
Temperature compensated	0 to 50 Deg c
Sensor drift	Less than 1% per year

Temperature

Accuracy	+/- 0.1 Deg C
Resolution	0.01 Deg C
Range	0 to 50 Deg C

Physical Specifications

Probe dimensions	48mm (1.89") diameter, 156mm (6.173") long
Probe construction	Acetyl, stainless steel, cast epoxy
Ambient conditions	-40 to 55 Deg C, 0 to 100% humidity, 0 to 10,000 feet
Pressure rating	100 psi
Cable	4 core, 20AWG, fully screened, EPDM sheath

Electrical Specifications

Power requirement	8-15 V DC, 0.2 mA standby, 12mA during sampling
Protection	Reverse polarity, fully surge protected

Communications Protocols

- SDI-12 as standard and various digital or analogue output options
- User set address (0-9,A-Z)
- Maximum transmission distance; 350 meters
- RS232 communications between PC and interface board

Optional configurations

- User select cable length
- Turnkey telemetry systems
- Standard pipe thread mounting clamp
- DO-Cal Kit; mobile field DO calibration kit
- Optical isolation interface

