



# O<sub>2</sub>-Log3055

# Data Logger for Dissolved Oxygen

### Oxygen Saturation in Waters

Huge amounts of nutrients (mainly phosphates and nitrates) find their way into the waters by sewage water (amongst others detergent residue, faeces etc.) and seepage of fertilizers in argiculturally used areas, and thus accelerate the growth of water plants.



If rivers or lakes become overly enriched with minerals or nutrients such as phosphore or nitrogen compounds, this process is called Eutrophication.

The more plants die back the more oxygen is consumed in the process of decomposition.



Consequently, toxic substances such as hydrogen sulphide or methane form followed by the water becoming a dead zone accompaned by fish die-off and malodour. Thus it is very important to measure and monitor the dissolved oxygen content in endangered waters.



## **Features**

Highly accurate readings and long-term measurements through optical measuring method

Low power cosumption

Corrosion resistance ensured by POM housing and stainless steel probe head

PTFE membrane

Long battery life

Commercially available Li batteries, user-replaceable

Large Memory for up to 4 million readings



# O<sub>2</sub>-Log3055 – What It Has to Offer

The  $O_2$ -Log3055 measures both dissolved oxygen and temperature and saves the readings to its internal memory. It utilizes an optical oxygen sensor which yields reliable results in a wide measurement range. A fundamental advantage of the optical measurement method is the substantially improved long-term stability.

Before starting a measurement the data logger needs to be set up with a notebook, tablet or PC and can then be deployed to a river or lake. The software InfraLog for Windows lets you configure parameters such as a predefined start time and the logging interval (1 minute ... 24 hours). Both the run description as well as the file name which includes date and time make managing your data convenient and intuitive.

Time-related analyses can show correlations and indicate potential water endangering conditions enabling you to initiate appropriate countermeasures.

After measurements have been taken you can download the readings using the USB interface and our InfraLog software which is included in delivery.

If downloading data via USB on-site is not possible or intended, the readings can be retrieved through remote transmission to a web server. Refer to the data sheet of model DK3000D-GPRS for more details.

#### Software InfraLog for Windows V5

The software InfraLog provides EASY, SECURE & CONVENIENT control for all Driesen + Kern products. After establishing a connection between your logger and PC, InfraLog automatically detects the device. InfraLog V5 offers a multitude of features for water line data loggers by Driesen + Kern.



InfraLog is available in three versions:

- InfraLog Basic (included in delivery)
- InfraLog Light (optional upgrade)
- InfraLog Enhanced (optional upgrade)

**InfraLog Basic** already offers fundamental features for setting up your logger as well as downloading, saving and converting data.

**InfraLog Light** comes with additional tools for graphic representation of your readings.

By far the most features are included in **InfraLog Enhanced** which also lets you create daily, weekly, monthly or annual reports.

#### O<sub>2</sub>-Log3055 Specifications

**Dissolved Oxygen** 

Sensor: Optical DO sensor

Measuring range: 0...30 mg/l dissolved oxygen

(0...100% saturation)

Resolution: 0.05%

Accuracy: ±1% of reading + 8ppb

Life span: DO electrode approx. 12 months

(user-replaceable)

General

Dimensions: see drawing

Weight: ca. 1400 g with batteries

Housing: POM (optionally V4A)

Batteries: 2x LITH37 Li-SOCL2 Batteries (Type D, 3.6 V, user-replaceable)

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Battery life: 3 months @ 15 minutes (at given intervals) 1 year @ 1 hour

Memory capacity: 2 million readings each for

DO and temperature

Interval: 1 minute...24 hours selectable

Operating conditions: 0.2...6 bar absolute pressure

0...60°C



