

# OxyGuard Atlantic for waste water

Advanced Single Channel Oxygen Meter



# OxyGuard reliability, accuracy and ease of use specially adapted for use in Waste Water plants.

The **OxyGuard Atlantic** is an accurate, reliable and easy to use oxygen meter with features specially suited for use in waste water treatment plants. It measures both dissolved oxygen and temperature - you can choose which units are used.

The Atlantic has 4 relays, a 4-20 mA output and a 4-20 mA compensation input. The Atlantic incorporates 8 alarm set points and 8 timers that can be logically linked to obtain several functions useful in waste water treatment plants.



## The Atlantic for Waste Water

Fiber, rags, floating objects?

Fat, grease or oil in the water?

Just use the Pioneer and fit an OxyGuard Probe Cleaner!





#### The Atlantic can easily control the Probe Cleaner!

use one of Atlantic's timers to freeze the output signal and another to control one of the 4 relays to switch a magnetic valve.



The cleaning nozzles direct blasts of air onto the membrane area. This has proved very effective.



### **Calibration?**

#### The Atlantic has Automatic Calibration

You just put the probe in the air and start the process - Atlantic does the rest.



For the best results make sure the probe has the same temperature as the air. Atlantic will remind you to wipe the probe

If you use the Pioneer it is easy to raise the probe, wipe the membrane and calibrate.



#### Alarms?

#### **Blower control?**

#### Atlantic has 4 relays, 8 timers and 8 set points

The set points, timers and relays can be logically linked to give the desired function. There is also a built in buzzer.

For example, you can choose to start the buzzer if the DO has been under a set point for a certain length of time. If the DO stays low even longer a relay can be activated to trigger a remote alarm. A second, lower, set point can trigger the remote alarm immediately if it is violated.

Two other set points can be used to activate two relay outputs to control aerators.

There is still one relay left to control the probe cleaner.

There is a button on the front panel to silence the buzzer. Red indicators on the front panel show when there is an alarm. The display tells you exactly which condition has triggered the alarm.



#### **Specifications - OxyGuard Probe**

Measurement principle:	Oxygen: Galvanic oxygen partial pressure cell, self polarizing, self
	temperature compensating. Temperature: Precision NTC
Dimensions:	Diameter = $58 \text{ mm}$ , length = $59 \text{ mm}$ .
Weight:	Probe alone 0.2 kg. Probe with 7m cable 0.5 kg.
Connections:	Cable, 4 lead, standard cable length $= 7$ m.
Measurement range:	0 to 20 mg/l (ppm)/ 0 to 200 % sat, higher on request. Temp. from -5°C.
Accuracy:	Depends on calibration and conditions. Typical better than +/-1% of value.
Output stability:	In air at constant temperature stable to within +/- 1% over 1 year.
Accuracy, temperature:	+/- 0,3°C.
Operating conditions:	0 to 40°C, pressure to 2 bar. Higher on request.
Storage temperature:	$-5 \text{ to } +60^{\circ}\text{C}.$

#### **Specifications - Atlantic Transmitter**

Construction:	ABS enclosure with display, indicators, pushbuttons and alarm buzzer.
Dimensions & weight:	b x h x d: 213 x 185 x 95 mm, 1.2 kg.
Supply & consumption:	230 VAC, 115 VAC +/-10% or 9 to 36VDC. 10 W. Specify when ordering.
Operating conditions:	-10 to +50°C. Max. 90% humidity non-condensing. Enclosure IP65.
Storage conditions:	-10 to +60°. Max. 90% humidity non-condensing.
Measurement inputs:	From probe: mV oxygen signal, resistance temperature signal. Scaleable ranges.
Compensation input:	4-20 mA. Scaleable. Max voltage drop 5V at 20 mA.
Parameters:	mg/l (ppm); % sat; % vol; mbar O2, temperature. Can be scaled and linked.
Analogue output:	4-20 mA. Max. load 820 ohm (total). User selectable range & parameter.
	Fully galvanically isolated from all inputs.
Display:	Graphical LCD with backlight. Max 4 figures, 2 decimals, 13 mm height.
Conversion accuracy:	To display and analogue output $< +/- 0.1\%$ .
	Non-linearity and repeatability typically $< +/- 0.1\%$ of actual value.
Relay outputs:	4, with potential free changeover (SPDT) contacts. Selectable mode (direct or
	inverted), and linking to parameter or logical argument.
	Max load 200VA or 1A AC, recommended max 24 VAC (abs. max 250 VAC).
	2A at 24 VDC.
Logical functions:	Direct, inverted, multiply. With "and" and "not and" linking.
Alarms:	8, variable hysteresis about set point. Selectable parameter, values & linking.
Timers:	8, from 1 second to 999999 seconds (11 days). Selectable period, duty cycle
	and offset. Can activate or be activated by alarm. Can freeze the output.
	Can activate relays. Can be reset from front panel.

#### **Ordering Information**

B071:	OxyGuard Atlantic with probe.
Please	specify operating voltage - 230 VAC, 115 VAC or 24 VDC.
STXWO	HR Configuration to customer specification per hour.
D0703:	Pioneer system complete.
D0704:	Pioneer without aluminium frame.
D07XCL	: Air Cleaner/probe holder assembly (fitted to Pioneer)
D10DA7	01: Non-flexible probe holder.

