



# DO5021

## Single Channel Optical DO<sub>2</sub> Monitor/Controller

The DO5021 measures dissolved Oxygen levels in tanks, ponds and lakes and can turn on an installed aeration system when it is required thus saving energy. This cost-effective system can ensure DO<sub>2</sub> levels are maintained, and fish are kept at their best and in an unstressed state. The system can also be used to control bottled O<sub>2</sub> supply in both static and transportation tanks.

### **DO5021 System**

The system comes with an integral 16A socket to drive existing aerators as required. Low DO<sub>2</sub> alarm levels can be user adjusted to desired trigger levels. The display provides readings in mg/l, temperature and %SAT levels. Simple 1 point calibration.



The DO5021 optical probe is supplied with 8 mtrs cable as standard but can be increased with connectors or single length at the factory.

The DO5021 optical DO<sub>2</sub> sensor, popularly known as luminescent DO<sub>2</sub> sensors (LDO), measures dissolved oxygen concentration in water based on the quenching of luminescence in the presence of oxygen.

Advantage over conventional probes:

- Minimal calibration required.
- No sensor drift.
- Fast speed of response
- Minimized installation and maintenance time.
- Resistant to abrasion and photobleaching.
- Minimal loss of performance, 2-year sensor cap life.



## Specifications

Indicators:	4 digit LED display(Amber)
Power Supply:	110/230VAC or 12/24VDC (factory set)
Ambient Temperature:	-10 to +40°C
Power Switch Current Rating* <sup>2</sup> :	13A@240V
Oxygen control valve option	Degreased, 3mm Orifice, 12VDC 5W
Single DO <sub>2</sub> Sensor type	luminescent DO <sub>2</sub> sensor, with replaceable cap every 2 years
DO <sub>2</sub> Range	0-40mg/l, Resolution 0.1 mg/l
DO <sub>2</sub> Accuracy	1% of reading ± 0.2 mg/l
Temperature Probe, internal RTD	-10 to +40°C reading to 1°C

\*<sup>1</sup> - Can be wall/pole mounted in static applications – optional extra (factory fitted)

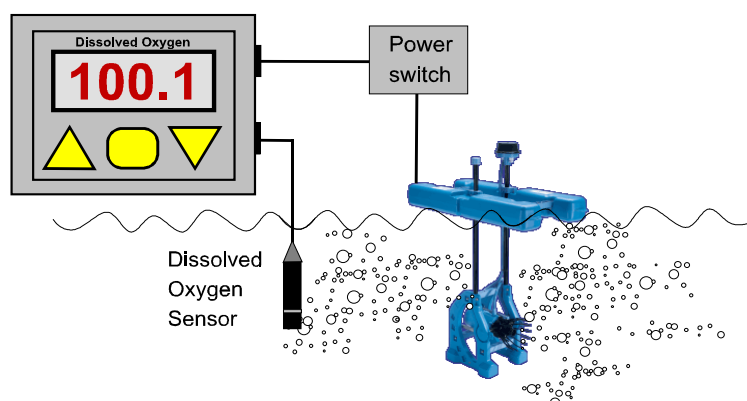
\*<sup>2</sup> - Single phase control as standard – 3 phase as an optional extra.

## Functionality/Benefits

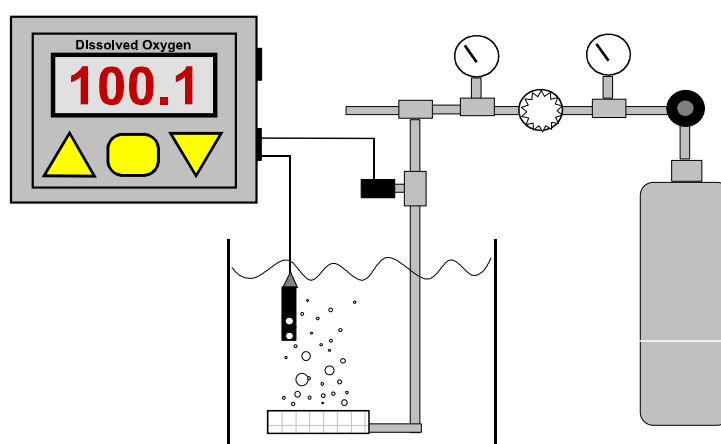
- Continuous monitoring of DO<sub>2</sub> levels in tanks or water courses
- Save energy, only aerate water when required
- Circulate water during periods of super saturation
- High brightness LED display
- Cost effective maintenance free Optical probe
- Auto Temperature correction
- Simple threshold setting of minimum & maximum DO<sub>2</sub> levels

## DO5021 Applications

- Aeration Control



- Control for fish transportation



- Up to 24 Probes can be integrated for a complete hatchery solution
- DO<sub>2</sub> monitoring in measurement & control applications.

### DO5021 System Options *(call for availability)*

- A - RS485 port. PC link up to 2 kms. Up to 24 DO5051 daisy chain.
- B - Wall/Pole mount kit
- C - Windscreen suction kit – for LED display
- D - Oxygen clean control valve (call for specification)
- E - Three phase contactor. 400/440 VAC 16A
- F - Additional probe cables (extend cable up to 100 mtrs)
- G - SMS messaging system to notify of low DO<sub>2</sub> and remote activation



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