



DO5051

Single Channel Optical DO₂ Monitor/Controller

The DO5051 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 DO₂ levels are maintained, and fish are kept at their best and in an unstressed state. The system can also be used to control DO₂ in both static and transportation tanks.

DO5051 System



The DO5021 optical probe is supplied with 5 mtrs cable as standard but can be increased with connectors or single length at the factory.

The DO5051 optical DO sensor, popularly known as luminescent DO 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
Power Supply:	110/230VAC or 12/24VDC (factory set)
Ambient Temperature:	-10 to +40°C
Power Switch Current Rating*2:	24A@240V or 16A @24VDC Typ.
Oxygen control valve option	Degreased, 3mm Orifice, 12VDC 5W
Single DO ₂ Sensor type	luminescent DO sensor, with replaceable cap every 2 years
DO ₂ Range	0-40mg/l, Resolution 0.1 mg/l
DO ₂ Accuracy	1% of reading ± 0.2 mg/l
Temperature Probe, internal RTD	-10 to +40°C reading to 1°C

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

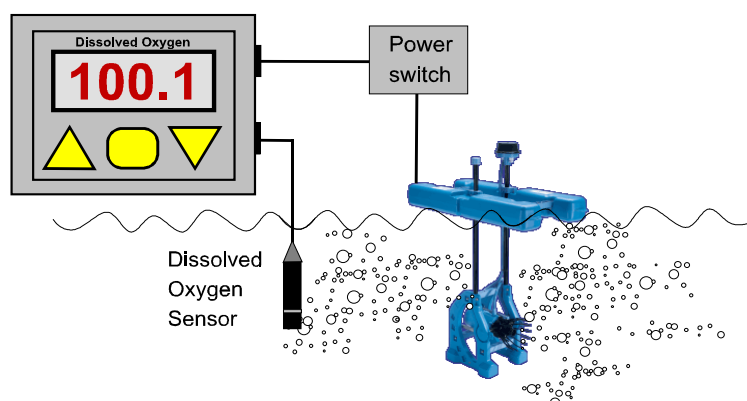
*2 - Single phase control as standard – 3 phase as an optional extra.

Functionality/Benefits

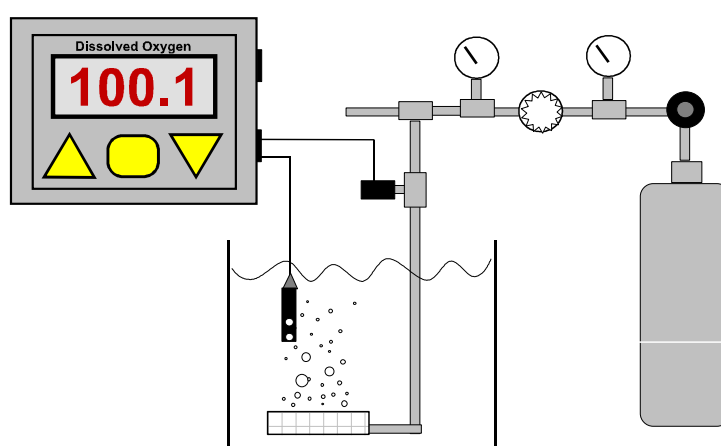
- Continuous monitoring of Oxygen levels in tanks or water courses
- Save energy, only aerate water when required
- Circulate water during periods of super saturation
- High brightness LED display
- Cost effective maintenance free Optical probe
- Auto Temperature & manual Barometric/Salinity correction
- Simple threshold setting of minimum & maximum DO₂ levels

DO5051 Applications

- Aeration Control



- Control for fish transportation



- Up to 24 Probes can be integrated for a complete hatchery solution
- Oxygen monitoring in measurement & control applications

DO5051 System Options

- 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 and remote activation



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