

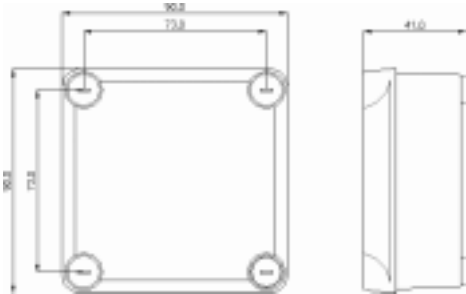
# Operating Instructions

Thank you for purchasing the Oakton dissolved oxygen Transmitter

## 1 Description of Unit

The Transmitter is used for the continuous measurement of DO from 0 to 200% saturation. Data output is via 4-20 mA current output. The Transmitter is housed in a IP65 enclosure, with openings for input and 4-20mA output.

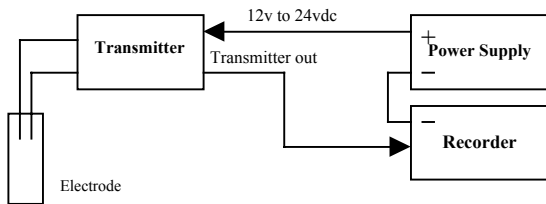
## 2 Diagram and Dimensions



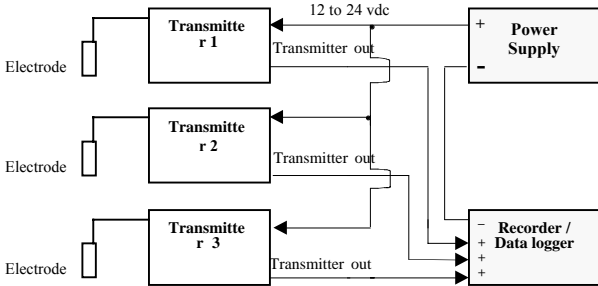
All dimensions in mm

## 3 INSTALLATION

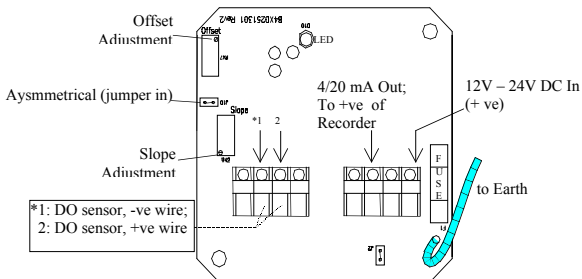
### 3.1 Operating with only one Transmitter:



### 3.2 Operating with several Transmitters:



### 3.3 Dissolved Oxygen Transmitter Electrical Connections



### 3.4 Dissolved Oxygen Transmitter Calibration

Remove cover of Transmitter and ensure that electrode is correctly connected as explained in Section 3.3. Connect Amp meter to the 4/20mA output of Transmitter ( see below).

- Short Dissolved Oxygen input and observe Amp meter display;
- Amp meter should read 4mA; if not, calibration is necessary;
- Locate "Offset adjustment" trimmer;
- Using a fine screwdriver, slowly turn trimmer till Amp meter reads 4mA;
- For greater accuracy, adjust the slope using Air as a reference;
- Hold the dry probe in Air;
- In 100% Saturation (in Air), output is 12 mA;
- In 200% Saturation, output is 20 mA;
- Using a fine screwdriver, slowly turn trimmer, marked 'Slope', till Amp meter reads correct mA value with respective Oxygen Saturation levels.

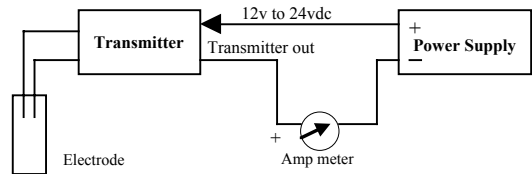
Remember to disconnect Amp meter and close cover.

**NB: For other % Saturation values, expected current output is based on:**

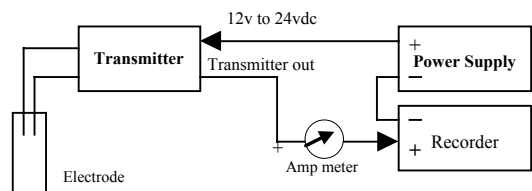
$$mA = \left\{ \frac{16}{200} \times \text{Saturation of Dissolved Oxygen} \right\} + 4mA$$

### 3.5 Connecting Amp Meter for Calibration

#### Method I



#### Method II



## 4 Dissolved Oxygen Transmitter, Specifications

Model	WD-35151-00
Range	0 to 200 %
Accuracy	± 1.5 % Full Scale
Calibration	2 point Slope & offset (100% air saturation)
Input	Only with Galvanic D.O. probe
Output	4-20 mA
Operating Voltage	DC 12 V to 24 V
Load	100 Ohms max. for 12 V; 600 Ohms max. for 24 V
Housing	77 x 77 x 28 mm, field mountable