

## *Portable Dissolved Oxygen Meter*

All Series 2 meters from EDT Instruments are designed to offer the user the convenience of portability whilst providing the accuracy and reliability more usually associated with laboratory instruments.

### ★FE247



*The meter offers* ★ Fast response and recovery rates  
*the following* ★ Direct read-out in % saturation, ppm, temperature  
*features* ★ Fully temperature compensated



The FE247 Dissolved Oxygen meter is a compact, battery-operated instrument designed for use in the field. The robust, splash proof meter and polarographic cell are supplied with a sturdy carrying case for transportation to on-site locations. An optional BOD funnel kit is also available.

#### **The Cell**

The E8025 Clark (or polarographic) cell is extremely easy to prepare. Simply fill the pre-assembled membrane module with the solution provided and screw on to the probe body. Once connected to the meter, polarisation is achieved in less than two minutes. The built-in thermistor ensures fully temperature compensated measurements automatically, over the range 0 - 50°C with an accuracy of  $\pm 2\%$  at 100% saturation.

As can be seen from Fig 1, the response and recovery rate of the cell is very rapid, reaching 98% in less than one minute.

#### **The Meter**

The FE247 has four measurement modes: % saturation; ppm; temperature and the uncalibrated raw signal in  $\mu\text{A}$ . This last mode can be used for investigating the permeability of different membranes such as packaging materials.

The instrument may be calibrated at both 0% and 100% in water or air. Changes in oxygen solubility with changing atmospheric pressure are compensated for by manual adjustment, whilst temperature compensation is automatic.

The FE247 has an output for use with recorders and dataloggers.

# FE247

## Specifications

Ranges and resolution	0 - 199.9% saturation 0 - 19.9ppm concentration
Accuracy	$\pm 2\%$ saturation; $\pm 0.2\text{ppm}$ (within $\pm 10^\circ\text{C}$ of calibration temperature)
$^\circ\text{C}$ Range	-5 to $+50^\circ\text{C}$
$^\circ\text{C}$ Resolution	0.1 $^\circ\text{C}$
$^\circ\text{C}$ Accuracy	$\pm 0.5^\circ\text{C}$
ATC	0 to $50^\circ\text{C}$
Display	12.7mm LCD
Recorder output	0 - 199.9mV
Instrument size	100x180x44mm (DxWxH)
Instrument weight	410g
Power requirement	9v battery.

