

# SELECT Dosing System

## ORP Monitor

### Technical data

There are many situations where maintaining ORP within a defined range is critical to process operations. This is particularly true where chlorine activity can be adversely affected by incorrect ORP readings. Knowing that the ORP is even slightly out of range means that remedial action can be taken.

The Select ORP Monitor is connected to an ORP electrode and is powered by a 12V DC power supply. Any ORP electrode can be used as this can be calibrated via an on-screen menu option on the ORP Monitor.

Under the Options menu, a maximum and minimum ORP level can be chosen. As the ORP Monitor is supplied with a strobe light (green), there is an option to activate this warning method within the Options section.

In use, the display screen shows the current detected ORP value as well as the minimum and maximum ORP values chosen.

As soon as an ORP value is detected that is outside the chosen range, the Alarm strobe light (green) will be activated as will an audible siren if this is fitted. A message will be shown on the screen to indicate if the detected ORP value is above or below the desired range.

With the strobe Alarm light illuminated, it is possible for the process control personnel to quickly see a process line in a plant that needs attention.

A feature of the ORP Monitor is that both Direct and Average readings of ORP can be taken. If Direct is selected, instantaneous readings are taken. If the Average function is selected, the value used for display and Alarm purposes is the average value of the readings taken each second over the last readings. If it is known that there are likely to be small fluctuations in the ORP level, then this is the setting to choose.

The ORP Monitor is pre-programmed to be connectable to the Tx communications system (also manufactured by Dosing Solutions Ltd). Once connected, Tx can raise an Alarm by SMS to nominated personnel should the ORP range be exceeded, and also send the hourly ORP values to a computer-based database via the Tx Terminal modem. This data can act as a permanent record for conformance purposes.



Maintaining the correct ORP levels (and pH levels) by adding chemicals by hand can be difficult. These levels constantly change owing to the chemicals working within the process. Dosing Solutions Ltd has developed the Select-648 pH/ORP peristaltic dosing pump.

This pH/ORP pump is connected to electrodes that detect the ORP and/or pH in the process tank and dose the chemical required to bring values to within the accepted levels. Once the target value is seen, the pump will stop working but continue its monitoring function until called into action again.

#### Specification

Power:	12V DC, 1.5A
Strobe light (blue)	Supplied
Tx connectivity	Allowed
Max ORP limit	1990
Minimum ORP limit	1
Options	Select maximum Select minimum Allow Alarms Direct or Average reading

See also data sheets on:

- The Select 648 ORP/ORP doser
- TX

These data sheets can be found on [www.dosingsolutions.com](http://www.dosingsolutions.com)