

ORP Indicator Model 121-ORP



Features

- Accurate ORP display with calibration facility on front panel.
- Large 0.8" Red 7 Segment Display
- Digital offset calibration for ORP
- Slim enclosure of only 50mm depth

Specifications

- Display : 3½ Digit Red, 0.8" character height LED display
- Range : 0 to 1999mV
- Calibration : Offset
- Accuracy : 0.5% ± 1 Digit
- Input Impedance: >10¹² Ω
- Supply : 220V AC ±10% @ 50/60Hz
- Size : Front facia - 96mm x 96mm x 40mm
Cut Out - 92mm x 92mm
- Enclosure : Plastic ABS
- Weight : 700gms

INSTALLATION

The ORP sensor has a very high Input Impedance and hence should be connected using the shortest shielded co-axial cable as possible. Usually the sensor has a 1m lead. You may extend it up to a maximum of 5m using co-axial BNC couplers (Never make joints as this will pick-up noise)

Ensure that the original bottle connected to the pH sensor is unscrewed from the sensor before dipping the sensor into the solution. This bottle is provided only for storage purposes of the sensor. Never let the sensor dry. Always keep it in some solution.

Further, it is important to note that the pH sensor cables are highly sensitive to noise and therefore must not be bundled with high voltage or high current cables. The very high input impedance of the pH sensor is prone to pick up noise, so avoid sparking etc in its vicinity. It may be a good idea to provide additional shielding by running the wire through a grounded metallic tube.

Once the power wiring is completed, connect the pH sensor using the BNC input on the head plate of the instrument.

Now power can be switched ON to the instrument.

Calibration

- Dip the sensor in a standard solution of ORP. If the sensor reads the buffer value then no further calibration is required. If reading does not match, press the CAL switch, the display shows ZERO and then the current ORP value with MSB digit blinking. Use Increment and Decrement switches to set the display to buffer value. Then press the CAL switch again. The display shows the buffer value.
- It is advisable to repeat the above 2 steps once more. Also, when the sensor is shifted from one solution to another, give the sensor sufficient time to stabilize. Also ensure you do not contaminate the solution when shifting the sensor from one to the other.
- Also ensure that the sensor is cleaned regularly.

Factory Calibration:

- In case, the calibration needs to be reverted back to factory calibration, press the UP and Down keys together.
- The Display shows "FCAL". Keep the switches pressed till "done" is displayed.
- This will revert the calibration to factory calibration. Any calibration done by the user will be lost.

Maintenance

- It is very important to note that most ORP sensors do not have a life of more than 6 months. Ensure the pH sensor is fine. Never let it dry. Keep it in some solution.