

POLC16 HANDHELD PPM MEASURING DEVICE USER MANUAL GENERAL

The device uses the potentiostatic method to measure dissolved ozone gas in the liquid.

The measurement uses an electrochemical technique of the probe called potential amperometry on the surface of the platinum cathode.

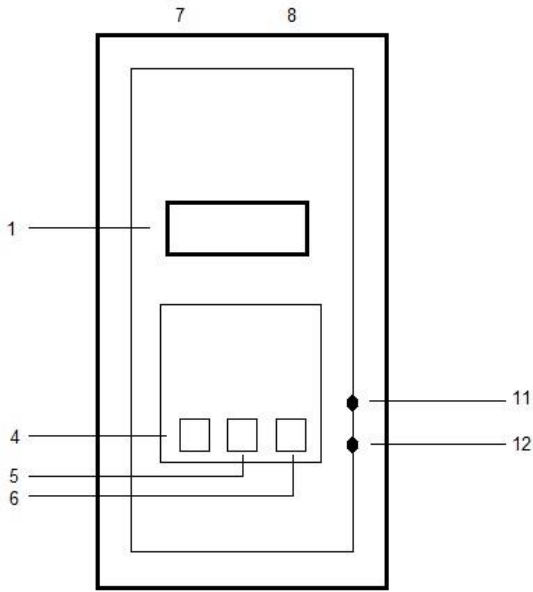
It values the user in the digital display with the current obtained from the electrode reaction.

The device takes the most appropriate measurement in the pH range of 4-6.5. In the 9 to 14 pH range, measurement may not be possible.

The device does not require calibration too often. However, the calibration steps specified in the maintenance times should be done within the time recommended by the authorized service.

Calibration is done by DPD method or different sample device. (See Calibration)

Device Descriptions



- 1** – Digital Monitor
- 4**- Temperature Display Button
- 5**- PPB Scale Button
- 6**- PPM Scale Button
- 7**- Electrode Input
- 8**- Temperature Probe Input
- 11**- Sensitivity Setting
- 12** - Zero Setting

Properties

Measuring Range	0.00/+19.99 PPM 0/+1999 PPB -20.0/+120.0 °C
Input	Potantiostaic Sensor ve PT 1000
Working Voltage	9 V Battery
Battery Life	100 Hour
Sizes	92*155*33 mm
Weight	300 gram

STARTING THE DEVICE

Active Measurement

- Connect the ozone and temperature sensor to the device
Press the key PPM or PPB.
- Drop the sensor into the sample and shake it gently
- Reading will gradually increase and will stabilize after a while.
- Depending on the temperature and due to ozone life, there will be a decrease in value after a while.

Free Ozone Measurement

- Check the pH between 4 and 6.5 pH and adjust with Acetic Acid if necessary.
- Connect ozone and temperature sensor to the device.
- Press the PPM key.
- Drop the sensor into the sample and gently shake it.
- Reading will be gradually and will be fixed after a while.
- Depending on the temperature and due to ozone life, there will be a decrease in value after a while.

Temperature Measurement

- Attach the temperature probe to the connection.
- Immerse the temperature probe into the sample
- Press ➤ (OC) Key
- The value that appears on the screen is the temperature value.

CALIBRATION

The device was calibrated at the factory. Calibration may be required at first use or maintenance times of the device.

This calibration should be repeated when necessary to check the effectiveness of the sensor.

Free Chlorine Calibration

During normal operation, you can calibrate with a different instrument that has correct calibration or with a fixed chlorine solution of PPM ratio.

Calibration Processes in Order;

- Clean the probe before calibration. (See maintenance section)
- The screen should show 0.00 when the sensor is not in the liquid.
- Prepare a sample containing chlorine and measure the PPM ratio with a different calibrated device. Or, prepare a liquid solution whose PPM value we know. and measure its value with DPD.
- Check the pH value and make sure it is between 4.00 and 6.5 pH. If not, use acetic acid to bring it between the values.
- Drop the sensor into the sample and gently shake it.
- Reading will gradually increase and will stabilize after a while.
- Depending on the temperature and due to ozone life, there will be a decrease in value after a while.
- With the aid of a screwdriver, adjust the calibration button number 11 with the device value or the PPM value of the device whose value is fixed on the screen with a different device.

TEMPERATURE CALIBRATION

The RTD sensor does not require any calibration.



MAINTENANCE

- Keep the device dry during storage to avoid erroneous measurements due to the presence of residual moisture.
- Keep the ozone measuring probe wet when not in use.
- If the device has not been used for a long time, wait 10 minutes before starting the device and wipe it with a cloth slightly moistened with water.
- The ozone measuring probe should be cleaned once every 3 months without pressing the electrode part with water sandpaper or paper with very gentle and slow movements.

BATTERY REPLACEMENT

- When the "batt" mark appears on the screen, the battery is over.
- Open the back panel with a screwdriver and replace it with a 9V battery.