

# 6309POT pH/ORP Analyzer and Controller

Instrument for Measuring and Controlling pH, ORP, and Temperature



## Description

The 6309POT pH/ORP Analyzer and Controller is an easy to use instrument that measures, analyzes, and controls pH, ORP, and temperature.

### Easy Set Up, Calibrations, and Display

You can set up the instrument and make calibrations via the 6309POT's user-friendly menu, which you can password protect to ensure security. You can also perform calibrations quickly and accurately with automatic buffer recognition of US or European buffer sets. The calibration values are stored in a nonvolatile memory. A large backlit screen displays pH, ORP, and temperature values or pH, DO, and temperature measurements, in addition to the current mA output and relay status.

### Accurate Control and Recording

The 6309POT provides accurate on/off control via its five programmable relays. You can also use the instrument's 4-20 mA output for proportional control. A standard RS-485 output allows for access via a compatible PC computer and allows you to link multiple units to a common control system.

### Capable Operation

The 6309POT's built-in temperature and automatic temperature compensation (ATC) functions may be used with an ATC-type sensor or with a 10K ohm thermistor. At power up, the 6309POT performs self-diagnostics to ensure proper operation. You can display electrode efficiency to indicate when electrode maintenance is necessary. The 6309POT is housed in a watertight (IP65), DIN case and includes a terminal block that accommodates the tinned leads and spade lugs on industrial type pH and ORP electrodes.

## Specifications

Range	pH: -2.00 to 16.00 pH ORP (absolute/relative): -2500 to 2500 mV / -3999 to 3999 mV Temp: 14 to 248°F (-10.0 to 120.0 °C)
Resolution	pH: 0.01 pH ORP (absolute/relative): 1 mV/1 mV Temp: 32.18°F (0.1 °C)
Accuracy	pH: ± 0.01 pH ± 1 LSD ORP (absolute/relative): ± 0.2 % of span / ± 0.2 % of span Temp: ± 32.18 °F (0.1 °C)
pH Temperature Compensation	Auto -10.0 to 120.0 °C
pH Buffer Recognition	4.00, 4.01, 6.86, 7.00, 9.18, 10.01
pH Buffer Temperature Range	0 to 60 °C
pH Electrode Offset Recognition	± 100 mV at pH 7.00 to 91.7 to +108.3 at pH 6.86
pH Electrode Slope Recognition	± 30% at pH 4.00, 4.01, 9.18, or 10.01
Input Impedance	>1013 ohms
Relays	Control Type: 5 ON/OFF controls Relay Output: 5A at 115 VAC or 2.5 A at 220 VAC, resistive load only
4-20 mA Analog Output	Input Select: User selectable pH or ORP Current Output Range: 4 to 20 mA (isolated), programmable span Current Output Scale: User programmable, linear or log Maximum Load: 500 ohm Accuracy: ± 0.02 mA Isolation Voltage: 500 VDC
Calibration End Point Sensing	Yes
Temperature Sensor	Thermistor, 10.00 k ohm at 77°F (25 °C)
Power Supply	115 V AC or 230 V AC at 50/60 HZ
Communication	RS-485
Display	128 x 64 graphical LCD with backlight
Ambient Temperature Range	0 to 122°F (0 to 50°C)
Case	IP65, 1/4 DIN, 148 mm depth
Dimensions	3-5/8 x 3-5/8 x 5-7/8" (96 x 96 x 148 mm)
Weight	2.1 lbs (950 g)
Certifications	CE, ISO 9001:2000

## Features

- Measures and controls pH, ORP, and temperature
- Easy to set up and calibrate
- User-friendly menu with password protection to ensure security
- Five programmable relays: 2 for pH, 2 for ORP, and 1 for temperature
- Isolated and reversible 4-20 mA output for a single parameter

## Ordering & Options

### pH/ORP Analyzer and Controller

Order No.	Description
6309POT	pH/ORP Analyzer and Controller

### pH and ORP Electrodes<sup>1</sup>

Order No.	Type
WQ220-020	pH/ATC
WQ620-020	ORP

1) Electrodes are flat surface and self-cleaning and include 20' of cable with spade and tinned leads. A signal amplifier is required for sensor cable runs over 40 feet.

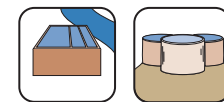
### Accessories

Order No.	Description
600B-Y <sup>2</sup>	Adapter, BNC Connector to Spade Lugs and Tinned Leads

2) Please note that a BNC to Y adapter is required to maintain the IP65 rating when using sensors with a BNC connector.

Please call us for calibration standards and enclosure options.

## Applications



Ideal for water and wastewater pH monitoring and control.



In the U.S. call toll free  
at 1-800-876-1172  
International: 916-638-3429  
Fax: 916-638-3270  
Email: [globalw@globalw.com](mailto:globalw@globalw.com)

Visit our online catalog at:  
[www.globalw.com](http://www.globalw.com)  
Our Address:  
11390 Amalgam Way  
Gold River, CA 95670