

7096 pH/ORP Analyzer/Controller

Specification

Overview

The Honeywell 7096 pH/ORP Analyzer/Controller is a microprocessor-based instrument for the measurement and control of pH or ORP in industrial processes. The 7096 is designed specifically for the market.

The 7096 pH analyzer may be used with a conventional combination glass electrode or with the patented Durafet® electrode. ISFET (Ion Sensitive Field Effect Transistor) technology has been used to produce a non-glass electrode. The standard Durafet pH electrode design is perfect for wastewater applications while the Sanitary Durafet electrode was specifically designed to meet the rigorous environment of the food and dairy industry.

Features/Benefits

- pH or ORP can be measured and controlled.
- Temperature compensation is performed by either manual or automatic algorithms.
- 1/4 DIN, NEMA 4 front panel design
- Auto-buffer recognition of three commonly used buffers; 4.01, 6.86 and 9.18 are stored in memory.
- Self-diagnostics indicate when a calibration is incorrect or the probe is failing.

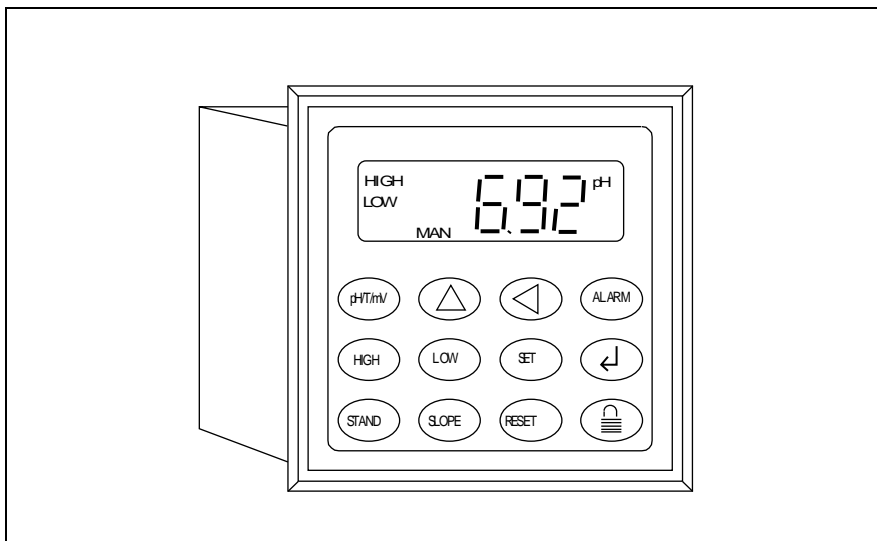


Figure 1 7096 pH Analyzer/Controller

- One or two point calibration is used to best match probe responsiveness with process needs.
- Proportional control provides for more rapid batch treatment.
- CAT or PFT output is available.
- Total operating costs are lowered using scaleable high and low setpoints. These provide the optimal proportional band limit for the reagent addition to the process.
- An optional current output is available to retransmit pH or ORP signals to a recorder or distributed control system.
- High and low setpoints are individually adjustable to allow the user to scale the output signal.
- Each high and low alarm is assigned an individual SPDT relay.
- A red LED on the HIGH and LOW buttons visually alert the user of an alarm condition
- An alarm deadband is provided to prevent dither around setpoint.
- A four-digit security code may be used to protect all user-entered values and calibration status.

Specifications

Physical	
Mounting (Panel):	¼ DIN, NEMA 4 front bezel
Dimensions:	Bezel: 96 mm (H) x 96 mm (W) 3.78" (H) x 3.78" (W) Case: 92 mm (H) x 92 mm (W) x 192 mm (D) 3.62" (H) x 3.62" (W) x 7.55" (D)
Keyboard	Monoplanar front panel with 12 pushbutton entry keys and audible feedback
Display Ranges	pH: -2.00 to 16.00 mV: -1999 to 1999 Temp: 0.00 to +100.00
Display	0.5" LCD displays pH or mV, temperature, alarm conditions, alarm setpoints, calibration, diagnostics, output setpoints, security status
Weight	0.745 kg (1.7 lbs).
Environmental	
Temperature	Operating: 0 to 50°C (32 to 131°F). Storage: 0 to 70°C (32 to 158°F). Relative Humidity: 10 to 95%
Power	Memory protected from power loss or power surge through EEPROM Power Source: 115 VAC, 60 Hz; 230 VAC, 50 Hz; ±15% on voltages
Fuse Rating	1.0 amp/250VAC fast acting type, not replaceable by operator.
Operational	
Accuracy (± Digit)	pH: ±0.01 mV: ±0.1% Temp (0-100°C): ±0.2°C ATC (0-100°C): ±0.2°C
Temperature Compensation	Auto: 0. to +100.0°C Manual: 0. to +100.0°C
Automatic Buffer Recognition	4.01, 6.86, 9.18
Security	All user-entered values and calibration can be protected by a four-digit security code
Alarms	Two SPDT alarm relays assigned to high and low alarms. User-adjusted alarm setpoint hysteresis
Controls	Proportional controller with current-adjusting-type (CAT) output or pulse-frequency-type (PFT) output
Output signal	current output: scaleable 4 to 20 mA output between setpoints
