

# Panel Mounted ORP Analog Controller

with Self-diagnostic Test

## ORP Controller

This instrument allows the selection of a setpoint for oxidizing or reducing dosage. It is provided with self-diagnostic feature to control the calibration at 0 and 500 mV. The user can also set the tolerance of the setpoint (10 to 200 mV), before an alarm is activated.

When used in conjunction with the HI 8710 pH controller, the ODCD\* function (featured by the HI 8710) will ensure that the ORP dosage will start only when the pH level is correct.

These instruments have been designed for easy and fast installation, and are provided with membrane keypads on the front panel, large display and autodiagnostic functions.

All connections are made through screw terminals on the rear panel.

Each model accepts either a direct input from an ORP electrode or from a transmitter through 4-20 mA input. The instrument also provides  $\pm 5V$  power output and input terminals for amplified electrodes.

The HI 8720 incorporates adjustable overtime dosing protection from 5 to 60 minutes. If dosing exceeds selected time, the alarm will be triggered and the dosing contact will deactivate. This feature can be activated or deactivated via a shorting connection on the rear panel.

Moreover, you can choose the output configuration for connecting a recorder or a PLC, between 0-20 or 4-20 mA.

The front panel is protected behind a transparent splash-proof cover.

\* ORP Dosing Consent Device

- Supports potential matching pin connection
- Both 4-20 and 0-20 mA output
- $\pm 5V$  outputs for amplified electrodes
- Backlit LCD
- Transparent splash-proof cover included



Selectable manual ON, OFF and Automatic Dosing Control for alkaline, acid and REDOX dosing with indicator

Auto-diagnostic test for instrument status troubleshooting

Operational mode LED indicators

Inputs allowed:

- 1) BNC Connector
- 2) Direct wire connection with amplified probe (supports HI 1006 series probes)
- 3) 4-20 mA from a transmitter

### SPECIFICATIONS

### HI 8720

Range	$\pm 1999$ mV
Resolution	1 mV
Accuracy (@20°C/68°F)	$\pm 5$ mV $\pm 0.5\%$ (input from transmitter)
Input	High impedance $10^{12}$ Ohm; Reference and Matching Pin inputs are available; 4-20 mA
Power Output	$\pm 5$ Vcc; 150 mA max load for amplified electrodes
Calibration	Offset: $\pm 200$ mV with CAL trimmer;
Recorder Output	0-20 mA or 4-20 mA (isolated)
Setpoint Relay	1, isolated, 2 A, Max 240 V, resistive load, 1000000 strokes (not fuse protected)
Setpoint Range	$\pm 1999$ mV
Alarm Relay	1, isolated, 2 A, Max 240 V, resistive load, 1000000 strokes (not fuse protected)
$\Delta$ Alarm Range	10 to 300 mV
Dosing Control	OFF/AUTO/ON with selection switch
Over Dosing Control	Adjustable, from 5 min to 60 min with knob or Disable by wire strap - on rear panel
Backlight	Continuous ON
Power Supply	115 Vac $\pm 10\%$ or 230 Vac $\pm 10\%$ ; 50/60 Hz
Enclosure	Black anodized aluminium body; front panel with flame retardant ABS; transparent splash-proof front cover
Environment	-10 to 50°C (14 to 122°F); RH max 95% non-condensing
Panel Cutout	141 x 69 mm (5.6 x 2.7")
Weight	1 kg (2.2 lb.)

### ORDERING INFORMATION

The HI 8720 is supplied complete with mounting brackets and instructions.

### SOLUTIONS

HI 7020L	200-275 mV test solution, 500 mL
HI 7091L	Reducing solution, 500 mL
HI 7092L	Oxidizing solution, 500 mL

### ACCESSORIES

HI 8427	pH / ORP electrode simulator
HI 931001	pH / ORP electrode simulator with display HI 8720T only
HI 8615-01	ORP transmitter
HI 8615L-01	ORP transmitter with display