

# Panel Mounted pH Analog Controller

with Dual Output and Self-diagnostic Test

## Dual Output Versatility

This instrument allow the selection of two setpoints with two independent outputs for acid and alkaline dosages.

HI 8711 pH controllers are ideal for process control monitoring in a wide range of industrial applications.

These instruments have been redesigned with extended pH and temperature compensation ranges as well as BNC, amplified input and input from transmitter all in one instrument.

Each model accepts either a direct input from a pH or 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.

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

The HI 8711 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.

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

- *Dual setpoint with two independent dosing outputs*
- *Broader pH range: -2.00 to 16.00 pH*
- *Extended temperature compensation range: -0 to 100°C*
- *Supports potential matching pin connection*
- *Both 4-20 and 0-20 mA output*
- *$\pm 5V$  outputs for amplified electrodes*
- *Fail Safe function—the alarm relay is activated at power down*
- *Operational mode LED indicators*
- *Backlit LCD*
- *Transparent splash-proof cover included*



*Auto-diagnostics to verify offset and slope calibration and electrode contamination/deterioration*

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

### 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 8711
Range	-2.00 to 16.00 pH
Resolution	0.01 pH
Accuracy (@20°C/68°F)	$\pm 0.02$ pH (0 to 100 °C) $\pm 0.05$ pH (-20 to 0 °C) $\pm 0.5\%$ (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: $\pm 2$ pH with OFFSET trimmer; Slope: 80 to 110% with SLOPE trimmer
Temperature Compensation	fixed or automatic with Pt100, from -20 to 100°C (-4 to 212°F)
Recorder Output	0-20 mA or 4-20 mA (isolated)
Setpoint Relay	2, isolated, 2 A, Max 240 V, resistive load, 1000000 strokes (not fuse protected)
Setpoint Range	ALK. SET: from -2.00 to 16.00 pH; ACID SET: from -2.00 to 16.00 pH
Alarm Relay	1, isolated, 2 A, Max 240 V, resistive load, 1000000 strokes (not fuse protected)
$\Delta$ Alarm Range	0.2 to 3.00 pH
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 8711 is supplied complete with mounting brackets and instructions.

### Solutions

HI 7004/1L	pH 4.01 buffer solution, 1 L
HI 7007/1L	pH 7.01 buffer solution, 1 L
HI 7010/1L	pH 10.01 buffer solution, 1 L

### ACCESSORIES

HI 8427	pH / ORP electrode simulator
HI 931001	pH / ORP electrode simulator with display

### ACCESSORIES

HI 8614-01	pH transmitter
HI 8614L-01	pH transmitter with display