

## Dissolved Oxygen

Controller with Extended Range and Analog Output

- 0.5 to 5.0 mg/L (ppm) O<sub>2</sub> alarm range
- Automatic temperature compensation

The HI8410 is a panel mounted dissolved oxygen controller that is used to maintain and monitor the concentration of DO in a wide range of industrial process applications. The HI8410 uses a Galvanic probe that typically requires less maintenance than a Polarographic style making it ideal for long term monitoring.

The set point for controlling the activation of a relay is adjusted manually by the user. An alarm relay is also manually adjustable and is based upon a tolerance from the programmed setpoint. This controller features single set point calibration in zero oxygen solution.

The D.O. probe is provided with a membrane covering the galvanic sensor and a built-in thermistor for temperature measurement and compensation.

Range	0.0 to 50.0 mg/L (ppm) $O_2$ ; 0 to 600 % $O_2$ ; -5.0 to 50.0 °C	
Resolution	0.1 mg/L (ppm) or 1% (O <sub>2</sub> ) / 0.1°C	
Accuracy (@25°C/77°F)	±1% of reading (O <sub>2</sub> ) / ±0.2°C	
Calibration	manual, one point, in saturated air	
Temp. Compensation	automatic, from -5 to 50°C (23 to 122 °F)	
Salinity Compensation	0 to 51 g/L (resolution 1 g/L)	
Probe (not included)	HI76410/4 with 4 m (13.1') cable or HI76410/10 with 10 m (32.8') cable	
Recorder Output	0 to 20 mA or 4 to 20 mA (isolated)	
Set point and Alarm Relay	1, isolated, 2A, max. 240V, resistive load, 1,000,000 strokes	
Set point Range	5 to 600 % $\rm O_{z^{\prime}}$ 0.5 to 50.0 mg/L (ppm) $\rm O_{z}$	
Alarm Range	0.5 to 5.0 mg/L (ppm) 0 <sub>2</sub>	
Hysteresis Range	0.5 to 2.4 mg/L (ppm) 0 <sub>2</sub>	
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 ±10% or 230 VAC ±10%; 50/60 Hz	
Enclosure	flame retardant ABS body and front panel; transparent splash-proof front cover	
Environment	-10 to 50°C (14 to 122°F); RH max 95% non-conndensing	
Panel Cutout	141 x 69 mm (5.6 x 2.7")	
Weight	1 kg (2.2 lb.)	
Ordering Information	The <b>HI8410</b> is supplied complete with mounting brackets and instructions.	
Probes and Accessories	HI76410/4	Galvanic DO probe (fixed) with internal temperature sensor, DIN connector and 4 m (13.1') cable
	HI76410/10	Galvanic DO probe (fixed) with internal temperature sensor, DINconnector and 10 m (32.8') cable
	HI76410A	Spare membranes for HI76410



- 1. DO probe connection terminals
- 2. Range selection: mg/L or % DO
- 3. SET terminals for connection to a dosing pump
- 4. ALARM terminals for connection to an external alarm device
- 5. Power supply terminals
- 6. Fuse holder
- 7. mA OUTPUT terminals for connection to a recorder
- 8. Hysteresis set knob (0.5 to 2.4 mg/L)
- 9. Disable overtime dosing connection
- 10. Overtime dosing set knob (about 5 to 60 min)

Specifications

HI8410

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