

HI 8410

# Panel Mounted Dissolved Oxygen Controller

with Extended Range and Analog Output



## SPECIFICATIONS

### HI 8410

Range	0.0 to 50.0 mg/L (ppm) O <sub>2</sub> 0 to 600 % O <sub>2</sub> -5.0 to 50.0 °C
Resolution	0.1 mg/L or 1% (O <sub>2</sub> ) / 0.1 °C
Accuracy (@20°C/68°F)	±1% of reading (O <sub>2</sub> ) / ±0.2 °C
Input	High impedance 10 <sup>12</sup> Ohm; Reference and Matching pin inputs are available; 4-20 mA
Calibration	Manual, one point, in saturated air
Temperature 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)	HI 76409/4 with 4 m cable or HI 76409/10 with 10 m cable
Recorder Output	0 to 20 mA or 4 to 20 mA (isolated)
Setpoint and Alarm Relay	1, Isolated, 2A, Max. 240V, resistive load, 1,000,000 strokes
Setpoint Range	1 to 600 % O <sub>2</sub> ; 0.1 to 50.0 mg/L (ppm) O <sub>2</sub>
Alarm Range	1.0 to 5.0 mg/L (ppm) O <sub>2</sub>
Hysteresis Range	0.1 to 1.0 mg/L (ppm) O <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	black anodized aluminum 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 8410 is supplied complete with mounting brackets and instructions.

## Reliable DO Control

The HI 8410 is an extended range panel mounted Dissolved Oxygen (DO) controller that is used to maintain and monitor the concentration of DO in a wide range of applications from wastewater treatment to aquaculture. The HI 8410 uses a Galvanic probe and typically requires less maintenance than a Polarographic style making it ideal for long term monitoring of aeration basins, ponds, and lakes. 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 set point. Calibration is single set point and can be done in zero oxygen solution.

The dosing mode: Automatic, Continuous ON or OFF and over dosing control by setting the Overtime dosing trimmer. If the dosing relay remains continuously activated for more than the selected dosing time, the alarm relay is activated, the alarm LED will start blinking and the dosing relay will be deactivated. A jumper found on the rear panel can disable the "Over time dosage" function.

"Automatic/Off/Manual" dosing selection switch and LED on the front panel.

In Automatic mode all the relays are controlled based on the measurement set point and alarm values. In OFF mode the dosing and alarm relays are always deactivated. The dosing LED is OFF (as relay status) and the ALARM LED is in accordance with the instrument setpoint, input reading, and ΔALARM.

In ON (Manual) mode the dosing relay is always on. The alarm relay is still enabled. If an alarm occurs the dosing relay remains activated. If the over dosage time exceeds the setting during manual mode, the alarm relay remains activated.

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

- Extended DO range to 50 mg/L (ppm)
- Manual single point calibration
- Selectable 0-20 or 4-20 mA output
- Low maintenance Galvanic probe
- Backlit LCD
- Operational mode LED indicators