



INTEGRATED CIRCUITS
ELECTROINC INDUSTRIES

PH control unit ICF-CTRL-PH

2025

1. Overview

The ICF-CTRL-PH is designed to monitor and regulate the pH level in various liquid processes. It features rapid on/off control for dosing and supports multiple control strategies including proportional, integral, derivative (PID), and feed-forward control. This unit is ideal for applications in water treatment, food processing, hydroponics, and industrial waste management.

2. Specification

- **Feed Tanks:** Integrated tanks for process fluid storage.
- **Pumps:** High-quality pumps for fluid circulation and level adjustment.
- **Stirrer:** Motorized stirrer for maintaining homogeneity in the tank.
- **pH Electrode:** Accurate pH measurement for monitoring system conditions.
- **Flowmeters:** Digital flowmeters for real-time flow rate monitoring.
- **Control Instruments:** Includes basic instruments for automatic level regulation.
- **Valves:** Electrically actuated valves for precise control.
- **Structure:** Compact and modular frame with accessible connections.
- **Accessories:** Complete with all necessary tubing, fittings, and electrical wiring for plug-and-play operation.



ICF-CTRL-PH

3. Experiments to be done

1. Closed-loop pressure control.
2. Proportional (P) control.
3. Proportional-Integral (PI) control.
4. Proportional-Derivative (PD) control.
5. Proportional-Integral-Derivative (PID) control.