



Panel-mounted pH Digital Controller with Matching Pin – pH500 series-single setpoint, on/off control, single analog output

## Description

The product is a real time microprocessor-based pH controller. It provides accurate measurements, flexible ON/OFF or proportional control capabilities and dual alarm signals. For more flexibility and better resolution for chart recorders, any two points between 0 and 14 pH can be chosen to correspond to the analog output spans. Several pH500 models are equipped with a bi-directional RS232 port. Push button password programming prevents tampering. The Fail Safe Alarm System protects the pH500 against the pit falls of process control, like power interruption or line failure. With pH500 quick one, two or three point calibration at pH 4.01, 7.01 and 10.01 comes standard. The temperature can be manually or automatically compensated for. Models with RS232 output allow computer compatibility, a necessity for process control instrumentation. You can also choose from ON/OFF or proportional dosage to save on chemicals. **Product Selection**

pH500111-2	pH Digital Panel Mount Controller, single setpoint, on/off control, analog output
pH500121-2	pH Digital Panel Mount Controller, single setpoint, proportional control, analog output
pH500211-2	pH Digital Panel Mount Controller, dual setpoint, on/off control, analog output
pH500221-2	pH Digital Panel Mount Controller, dual setpoint, proportional control, analog output
pH500222-2	pH Digital Panel Mount Controller, dual setpoint, proportional control, RS232 output
pH502421-2	pH Digital Panel Mount Controller, dual setpoint with SSR relay, on/off and PID controls, analog output

## pH500 Series pH Controller's FEATURES/BENEFITS:

### Display

- Large LCD with 4 ½ 17 mm digits and 3 ½ 10 mm digits.

### Indicator LEDs

- Four LEDs are provided for signaling the energizing of relay 1 and 2 (yellow LEDs) and alarm relays (a green and a red LED).

### PC Connectivity

- RS232C port allows for connection to a PC. Data transmission from the instrument to the PC is possible with the HI 92500 Windows® compatible application software offered by Hanna Instruments.

### Fail Safe Alarm System

- Hanna's exclusive Fail Safe Alarm System protects against problems caused by power supply failure or signal interruption, which are typical risks in industrial environments. An alarm condition is indicated by a red LED, located directly on the front panel of the controller.

### Differential Input

- In a system with poor grounding, it is possible to have a ground current flowing through the reference junction. This can cause a rapid degradation of the electrode. The Hanna differential input reduces the likelihood of ground loops.

## **Proportional Control**

- Slows the pump down when the measured pH level approaches the set value, which ensures precise dosage and avoids costly waste of chemicals due to overdosage.

## **Analog Output**

- To enhance troubleshooting and the ability to record data while monitoring, simply attach a recording device to the instrument's 4 to 20 mA output contacts, conveniently located on the front panel, to obtain a hard copy of the results on demand.

## **Automatic Temperature Compensation**

- A 2-wire Pt100 can be connected to provide automatic temperature compensation of measurements.

## **Relays**

- 1 or 2 output relays for acid or base dosage (COM,NO and NC contacts) and 1 output relay for alarm condition (COM, NO and NC contacts)

## **Calibration**

- Automatic up to 3 point calibration. alibration and Setup procedures allowed only through an unlock password.

## **Input**

- pH electrode with BNC connector.