

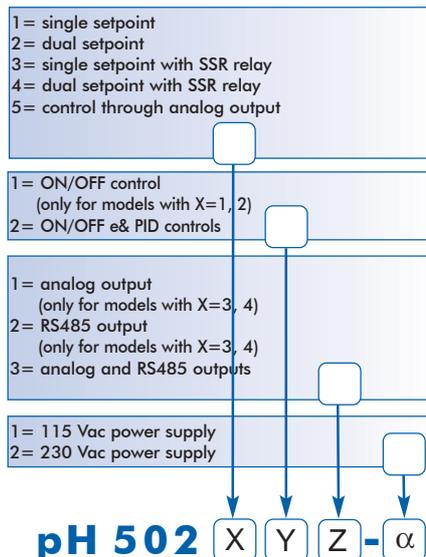
## pH Controllers with Matching Pin and PID Control



The pH 502 series of controllers offer many features to increase the level of control available in your plant. These instruments can be configured to utilize P, PI or PID controlling. With this feature, the pH 502 takes the place of three instruments that only allow one configuration each. The pH 502 line includes models that incorporate control through analog output to drive any compatible device, such as an electrovalve or pump. Models equipped with a Solid State Relay are also available to ensure maximum life of the switching device. Each model has a differential input for a grounding bar to extend electrode life. Several models come with an RS485 port, as well as analog recorder output. The fully programmable microprocessor memory has a 3 month backup power supply. Fail Safe Alarm system protection against power interruption or line failure. 1, 2 or 3 point automatic calibration and manual or Automatic Temperature Compensation complete the features of these state-of-the-art controllers.

### Ordering Information

Each pH 502 model is supplied complete with mounting brackets and instructions.



### Example:

#### pH 502123-2

pH controller with single setpoint, ON/OFF & PID controls, analog & RS485 outputs, and 230 Vac power supply.



### Specifications

pH 502	
Range	0.00 to 14.00 pH; -9.9 to 120°C
Resolution	0.01 pH; 0.1°C
Accuracy (@20°C/68°F)	±0.02 pH; ±0.5°C
Input Impedance	10 <sup>12</sup> Ohm
pH Calibration	automatic, 1, 2 or 3 point, at pH 4.01, 7.01, 10.01
Temperature Compensation	automatic (with Pt100 probe) or manual from -9.9 to 120°C
Outputs	digital: RS485 bi-directional opto-isolated; or analog, galvanically isolated: 0-1 mA, 0-20 mA and 4-20 mA, 0-5 Vdc, 1-5 Vdc and 0-10 Vdc
Setpoint Relay	1 or 2 contact outputs SPDT 5A-250 Vac, 5A-30 Vdc (resistive load) or 1 or 2 Solid State Relay (SSR), 1A, 250 Vac (resistive and inductive load)
Power Supply	115 Vac ±10% or 230 Vac ±10%; 50/60 Hz
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing
Dimensions	panel cutout: 140 x 140 mm, instrument: 144 x 144 x 170 mm
Weight	1.6 kg (3.5 lb.)

### Accessories

HI 7004L	pH 4.01 buffer solution, 500 mL bottle	HI 7010L	pH 10.01 buffer solution, 500 mL bottle
HI 7007L	pH 7.01 buffer solution, 500 mL bottle		

For a complete range of process electrodes and probes, see section T2.