

pH 500 Controller



pH 500 series of controllers offer exceptional value for your money. They are simple-to-operate, microprocessor-based process meters packed with features for the biological laboratory. 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 pH 500 models are equipped with a bi-directional RS232C port. Push button password programming prevents tampering. The microprocessor memory is fully programmable and has 3 months backup power supply. The Fail Safe Alarm system protects the pH 500 against the pitfalls of process control, like power interruption or line failure. With pH 500 quick 1, 2 or 3 point calibration at pH 4.01, 7.01 and 10.01 comes standard. The temperature can be manually or automatically compensated for. Increased automation has made computer compatibility a necessity for process control instrumentation.

This unit can be adapted to control the pH of biological preparations such as cell cultures by controlling flow of a pH reducing gas such as CO₂. The CO₂ gas can be regulated by on/off proportional control to save gas.

- Hi-tech pH 500 controller
- The new measure of value
- Simple to operate
- Microprocessor-based

Specifications

Range	0.00 to 14.00 pH / -600.0 to 600.0 mV / -9.9 to 120°C
Resolution	0.01 pH / 0.2 mV / 0.1°C
Accuracy at 20°C/68°F	±0.02 pH / ±0.5 mV / ±0.5°C
Typical EMC Deviation	±0.02 pH / ±10 mV / ±0.5°C
Input	High impedance 10 ¹² Ω
Calibration	1, 2 or 3 point at pH 4.01, 7.01 and 10.01
Temperature Compensation	Automatic (with Pt100) or manual from -9.9° to 120°C
Readout	4°-digit dual level LCD with graphic symbols and messages
Outputs:	
Digital	RS232 bi-directional opto-isolated
Analog	Galvanically isolated 0 to 1 mA, 0 to 20 mA and 4 to 20 mA (max. resistive load 1 KW), 0 to 5 VDC, 1 to 5 VDC and 0 to 10 VDC (min. resistive load 1 KW)
Setpoint Relays	1 or 2: SPST NO contact outputs 5 A-250 VAC, 5 A-30 VDC (resistive load)
Power Supply:	
pH 500/D	230 V ±10% VAC; 50 Hz
pH 500/U	115 V ±10% VAC; 60 Hz
Environment	0 to 50°C (32° to 122°F); max. RH 85% non-condensing
Panel Cutout	140 x 140 mm (5.5 x 5.5 in) / °DIN
Dimensions, H x W x D	170 x 144 x 144 mm (6.7 x 5.7 x 5.7 in)
Weight	1.6 kg (3.5 lb)

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No. of Setpoints	Controls	Output	115 V, 60 Hz	230 V, 50 Hz
Single	ON/OFF	Analog	CGS8523.78	CGS8531.78
Single	ON/OFF	RS232	CGS8524.78	CGS8532.78
Single	Proportional	Analog	CGS8525.78	CGS8533.78
Single	Proportional	RS232	CGS8526.78	CGS8534.78
Dual	ON/OFF	Analog	CGS8527.78	CGS8535.78
Dual	ON/OFF	RS232	CGS8527.78	CGS8536.78
Dual	Proportional	Analog	CGS8529.78	CGS8537.78
Dual	Proportional	RS232	CGS8530.78	CGS8538.78