

HI9914

Industrial Grade pH and Conductivity Fertigation Controller

Wall Mounted

- Two measuring channels, one for pH and one for conductivity

Two Measuring Channels

The controller is provided with two measuring channels, one for pH and one for conductivity. The actual values of pH and conductivity are displayed separately on two large LCDs with backlight feature for a best easy reading.

Three Level Inputs

Three level inputs are used to offer the best control of water level, alarm conditions, and irrigation sequences. The beginning of the irrigation can be triggered through an external signal, while an additional input allows to restart the cycle at any time. The good water composition is signaled on the front panel and with an external signal for remote operating purposes. (Note: Sensors are not included and must be purchased separately).

Matching Pin

Avoid typical problems caused by grounding loop current, such as progressive damage of the electrode, fluctuating measurements, and poor process regulation. The matching pin prevents potential grounding problems and thus ensure longer life to the pH electrode.

Alarm System

The controller is equipped with an alarm system activated when an unusual working condition occurs. When an alarm condition is reached, the a LED turns ON and the alarm relay contact is closed.

Two Regulators

The controller includes two regulators for pH and conductivity, each of them can be adjusted from the front panel and the setpoint values will be displayed. The conductivity regulator adds fertilizer in order to increase the conductivity of the irrigation water, while the pH regulator can be set for high or low pH correction. For a better result, the conductivity and pH controls are time separated and a timed operation mode avoids overdosing of fertilizer or acid.



Specifications

HI9914

Range	0.00 to 14.00 pH; 0.00 to 10.00 mS/cm
Resolution	0.01 pH; 0.01 mS/cm
Accuracy (@25°C/77°F)	±0.02 pH; ±5% f.s. EC
Input Impedance	10 ¹² Ohm
pH calibration	Manual, 2 point, with offset (±2 pH) and slope (80 to 120%) trimmers
EC Calibration	Manual, 1 point with slope trimmer (80 to 120%) on the front panel
Set point	adjustable from 0.5 to 14.0 pH and 0.50 to 10.00 mS/cm (EC)
EC Temperature Compensation	automatic, 0 to 50°C (32 to 122°F)
EC/TDS Dosing Set Point	Adjustable, from 0.50 to 10.00 mS/cm
Analog Output	0-7V ±5% (0.5V / pH) and 0-5V ±5% (0.5V / mS)
Controller Output	2A, 220V relay
Timer	Adjustable, from 1 to 10 minutes within a 15-minutes-time frame
Feed OK Output	12V, 15 mA current source
Humidity sensor	Activated if resistivity is below 220 KΩ
Water nozzle Output	2A, 220V relay
Circulation Pump Output	2A, 220V relay
Feeding Pump Output	2A, 220V relay
Alarm Output	2A, 220V relay
Power Supply	±10% 115 VAC or 230 VAC; 50/60 Hz
Environment	-10 to 50°C (14 to 122°F); RH max 95% non-condensing
Case Material	fiber-reinforced, self-extinguishing ABS
Dimensions	221 x 181 x 86 mm (8.7 x 7.1 x 3.4")
Weight	1.6 kg (3.5 lb.)
Ordering Information	HI9914-1 (115V) and HI9914-2 (230V) is supplied complete with instructions.