Analog Process Controllers

HANNA instruments® panel mounted pH, ORP and conductivity controllers are designed to meet your most demanding process control requirements. Our controllers come equipped with a power relay operating at a maximum of 2 A (240V). Where a direct electrode input is not suitable, the controller is available with a 4-20 mA input from the amplifier. This feature greatly improves the safety of your instrumentation and plant. Accurate measurements are displayed on a large LCD, enabling the operator to check the controller readings easily. These units have sophisticated, built-in self-diagnostic functions that allow the operator to check whether a malfunction has originated in the instrument itself, or in the outside connection (electrode, transmitter or cables). This saves valuable time and money, particularly in the monitoring of critical processes. In the event of a malfunction, the operator can determine the origin and rectify the situation before any costly errors occur. This Self-Diagnostic Error Prevention System makes the HANNA instruments® process meters superior to conventional controllers.

Alarm Feature

HANNA instruments® controllers incorporate an alarm warning system. When the measured value of the meter is out of the user-specified range, the alarm is activated. When activated, the alarm contacts close, triggering the mechanism of your choice, whether a buzzer, light or any other electrical connection. The alarm feature is a necessity when the installation is in a remote location and corrective action must be taken immediately in the event of an out-of-range condition.

Recorder Output

The ability to record data from the process you are monitoring greatly enhances process troubleshooting. By simply connecting a recorder to the controller's output terminals (choose between 0 to 20 mA or 4 to 20 mA according to your needs), you are able to acquire a hard copy for demonstrative or analytical purposes.

Low or High Impedance Input

HANNA instruments® pH and ORP controllers come in two different models to meet all requirements. The E model, has a high impedance 10^{12} Ohm direct input from an electrode, ideal for connections with a distance of up to 10 meters (33 feet). The T model, however, is recommended for distances greater than 10 m (33') and should be used with a 4 to 20 mA transmitter. The greater the distance between the controller and the sample, the greater the chance you have of line noise causing erroneous readings. Using a transmitter greatly enhances the input signal, thus allowing high accuracy at distances of up to 300 m (1000').

Consent Feature

The consent contact allows you to be sure that the ORP dosing occurs only when the pH value is correct. This assures that the pH is within a specified range before any dosing of oxidizing or reducing agents occurs. This will prevent any overdosing of chemicals, a very important cost-effective feature in many applications, especially in pools, spas and hot tubs.

Quality Construction

The controllers are housed in sturdy aluminum casings with ABS plastic front panels. The mounting brackets that are supplied with the meter, can be installed securely and quickly. When in operation, and with the transparent protective cover installed, the units comply with IP42 standards (see chart in section W for IP codes). The use of this design protects the unit from the conditions associated with industrial environments, ensuring long and trouble-free operation.

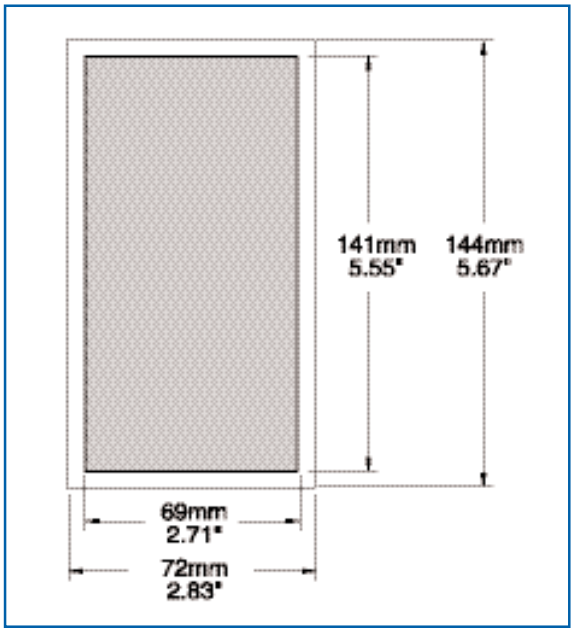
LED Indicators

The LEDs on the front panel light up to indicate the correct operational mode. The LEDs also blink at different rates to indicate multiple modes occurring simultaneously. This feature allows the user to evaluate the controller from a distance and clearly read which mode it is in.

Analog Indicators & Controllers

HI 8510E / HI 8510T
HI 8512E / HI 8512T
HI 8710E / HI 8710T
HI 8711E / HI 8711T
HI 8720E / HI 8720T
HI 8931A / HI 8931B
HI 8931C / HI 8931D
HI 943500

Mechanical Dimensions for Panel Mounting

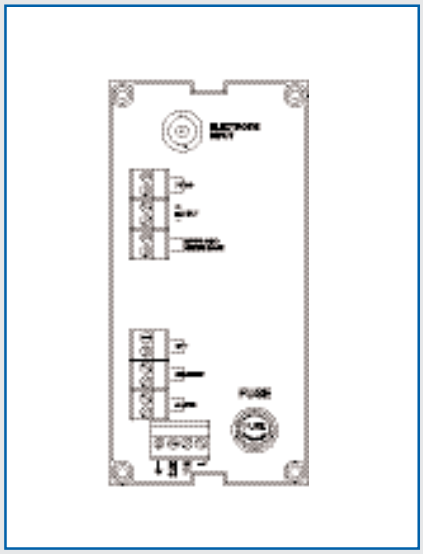


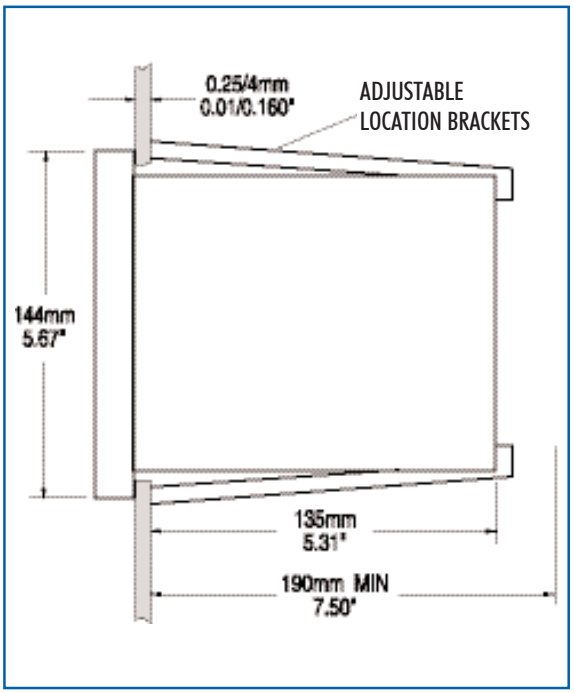
Front View

Dimensions show the cutout size for installation and also the outside dimensions of the instrument panel.

Rear View

Rear view of the HI 8710E shows the typical electrical connections.





Side View

Adjustable location brackets allow the instrument to slide into the cutout and will hold the unit securely in place. 190 mm (7.50") is the minimum amount of room required to install the indicator with the cables connected.