HI700 · HI710

Conductivity and TDS Digital Controllers

with Four-ring Potentiometric Probe

- CAL Check™
 - · Alerts users of calibration status
- ATC
 - Automatic temperature compensation
- 2 Point Calibration
 - Up to two point calibration
- Backlight
 - Backlit, LCD display

The HI700 series of controllers offer state of the art specifications for your process control. They can be configured for ON/ OFF, proportional, PI or PID control. Thanks to our exclusive technology, they can be customized to best fit your application. Bright LED's show the current status even from a distance. A menu-driven display aids the user throughout the operations with running messages and clear prompts. All relevant parameters can be simply adjusted and will remain memorized until overwritten.

With self-diagnostic features and extractable terminals, installation and maintenance are fast and simple. Password protection guarantees that the calibration and predetermined parameters cannot be altered unnecessarily. The controllers can operate with four-ring probe or 4-20 mA signal. They accept probes with or without a built-in Pt100 temperature sensor. HI710 includes all of the features of the HI700 and adds TDS measurement.





Specifications			HI700	HI710
Range	EC		0.0 to 199.9 µS/cm; 0 to 1999 µS/cm; 0.00 to 19.99 mS/cm; 0.0 to 199.9 mS/cm	0.0 to 199.9 µS/cm; 0 to 1999 µS/cm; 0.00 to 19.99 mS/cm; 0.0 to 199.9 mS/cm
	TDS		-	0.0 to 100.0 mg/L (ppm); 0 to 1000 mg/L (ppm); 0.00 to 10.00 g/L (ppt); 0.0 to 100.0 g/L (ppt)
	Temperature		-10.0 to 100.0°C	-10.0 to 100.0°C
Additional Specifications	Resolution		EC: 0.1 μS; 1 μS; 0.01 mS; 0.1 mS; 0.1 °C	EC: 0.1 μS; 1 μS; 0.01 mS; 0.1 mS; 0.1 °C
			-	TDS: 0.1 ppm; 1 ppm; 0.01 g/L (ppt); 0.1 g/L (ppt)
	TDS Conversion Factor		-	adjustable from 0.00 to 1.00
	Accuracy (@25°C/77°F)		±0.5% f.s. (EC / TDS); ±0.5°C (0 to 70°C); ±1°C (outside)	
	EC Calibration		automatic or manual at 1 point	
	Temperature Compensation		automatic or manual, -10 to 100°C with adjustable temperature coefficient from 0.00 to 10.00%/°C	
	Outputs		analog: isolated 0-1 mA, 0-20 mA and 4-20 mA; 0-5 VDC, 1-5 VDC and 0-10 VDC or digital: RS485 bi-directional opto-isolated	
	Analog Input		4-20 mA	
	Set Point Relay		two contact outputs SPDT 5A-250 VAC, 5A-30 VDC (resistive load), fuse protected (2A, 250V fast fuse)	
	Alarm Relay		contact output SPDT 5A-250 VAC, 5A-30 VDC (resistive load), fuse protected (2A, 250V fast fuse	
	Power Supply		115 VAC ±10% or 230 VAC ±10%; 50/60 Hz	
	Power Consumption		15 VA	
	Over Current Protection		400 mA 250V fast fuse	
	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.)	
Ordering Information	Each HI700 and HI710 model is supplied with mounting brackets and instructions.			
	Choose your configuration			
	HI700221-1 dual setpoint		t, on/off and PID controls, analog output, 115V	
	HI700221-2	dual setpoint	;, on/off and PID controls, analog output, 230V	
	HI710221-1	dual setpoint	, on/off and PID controls, analog output, 115V	
	HI710221-2	dual setpoint, on/off and PID controls, analog output, 230V		
	HI710222-1	dual setpoint, on/off and PID controls, RS485 output, 115V		
	HI710222-2	dual setpoint, on/off and PID controls, RS485 output, 230V		



Panel Mounted Controllers

Hanna panel mounted pH, ORP and conductivity controllers are designed to meet your most demanding process control requirements. Our controllers come equipped with a 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 a transmitter. 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 these process instruments superior to conventional controllers.

Alarm Feature

Hanna 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), users are able to acquire a hard copy for demonstrative or analytical purposes.

Analog Process Controllers

Low or High Impedance Input and Analog Inputs

Hanna pH and ORP controllers come in two different models to meet user requirements. These models, have a high impedance 10¹² Ohm direct input from an electrode, ideal for connections with a distance of up to 10 m (33'). However, if the distance is greater than 10 m (33') then a 4 to 20 mA transmitter should be used. 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 20 for IP codes). The use of this design protects the unit from the conditions associated with industrial environments, ensuring a long and trouble-free operation.

LED Indicators

The LEDs on the front panel light up to indicate the current 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.



Mechanical Dimensions for Panel Mounting



Analog Indicators and Controllers HI8510 / HI8710 / HI8711 / HI8720 / HI8931A / HI8931B / HI8931C / HI8931D / HI943500



Front View

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



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.

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계측기 전문회사



Rear View Rear view of the HI8710 shows the typical electrical connections.

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