

HI700 · HI710

# Conductivity and TDS Digital Controllers

with Four-ring Potentiometric Probe

- **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	<b>EC:</b> 0.1 µS; 1 µS; 0.01 mS; 0.1 mS; 0.1 °C	<b>EC:</b> 0.1 µS; 1 µS; 0.01 mS; 0.1 mS; 0.1 °C <b>TDS:</b> 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 (5A, 250V fast fuse)		
	Alarm Relay	contact output SPDT 5A-250 VAC, 5A-30 VDC (resistive load), fuse protected (5A, 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.			
	<b>Choose your configuration</b>			
	<b>HI700221-1</b>	dual setpoint, on/off and PID controls, analog output, 115V	<b>HI700222-1</b>	dual setpoint, on/off and PID controls, RS485 output, 115V
	<b>HI700221-2</b>	dual setpoint, on/off and PID controls, analog output, 230V	<b>HI700222-2</b>	dual setpoint, on/off and PID controls, RS485 output, 230V
	<b>HI710221-1</b>	dual setpoint, on/off and PID controls, analog output, 115V	<b>HI710222-1</b>	dual setpoint, on/off and PID controls, RS485 output, 115V
	<b>HI710221-2</b>	dual setpoint, on/off and PID controls, analog output, 230V	<b>HI710222-2</b>	dual setpoint, on/off and PID controls, RS485 output, 230V