

HI 700 • HI 710

# Conductivity and TDS Digital Controllers with Four-ring Potentiometric Probe

- Fully programmable microprocessor memory
- Dual set points
- mA & VDC recorder output
- Differential input for ground loop protection
- Automatic one or two point calibration
- Last calibration data
- Manual or Automatic Temperature Compensation
- Extensive range for both conductivity and TDS



## ORDERING INFORMATION

Each HI 700 and HI 710 model is provided with dual set point, ON/OFF and PID controls and is supplied with mounting brackets and instructions.

Choose your configuration:

HI 700221-1	dual setpoint, on/off and PID controls, analog output, 115V
HI 700221-2	dual setpoint, on/off and PID controls, analog output, 230V
HI 700222-1	dual setpoint, on/off and PID controls, RS485 output, 115V
HI 700222-2	dual setpoint, on/off and PID controls, RS485 output, 230V
HI 710221-1	dual setpoint, on/off and PID controls, analog output, 115V
HI 710221-2	dual setpoint, on/off and PID controls, analog output, 230V
HI 710222-1	dual setpoint, on/off and PID controls, RS485 output, 115V
HI 710222-2	dual setpoint, on/off and PID controls, RS485 output, 230V

## SOLUTIONS

HI 7030L	12880 $\mu\text{S}/\text{cm}$ calibration solution, 500 mL
HI 7031L	1413 $\mu\text{S}/\text{cm}$ calibration solution, 500 mL
HI 7033L	84 $\mu\text{S}/\text{cm}$ calibration solution, 500 mL
HI 7034L	80000 $\mu\text{S}/\text{cm}$ calibration solution, 500 mL



The HI 700 series of regulators 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. HI 710 includes all of the features of the HI 700 and adds TDS measurement.

SPECIFICATIONS	HI 700	HI 710
EC	0.0 to 199.9 $\mu\text{S}/\text{cm}$ ; 0 to 1999 $\mu\text{S}/\text{cm}$ 0.00 to 19.99 mS/cm; 0.0 to 199.9 mS/cm	
Range	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
Resolution	0.1 $\mu\text{S}$ ; 1 $\mu\text{S}$ ; 0.01 mS; 0.1 mS; 0.1 °C 0.1 ppm; 1 ppm; 0.01 g/L (ppt); 0.1 g/L (ppt)	
Accuracy (@20°C/68°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	
TDS Conversion Factor	–	adjustable from 0.00 to 1.00
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.)	

For a complete list of Solutions, see the end of Conductivity Section 6.