HI1006-18 • HI1016-18
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pH and Temperature Industrial Smart Probes

HI510 Compatible

Hanna® is committed to developing and deploying digital solutions with a positive impact on the environment and climate.

Please scan the QR code or follow the link to download the pH smart series user manual.
https://manuals.hannainst.com/HI1006-18

Thank you for choosing Hanna Instruments!

Hanna® **industrial pH** probes are intended for industrial process control when paired with the HI510 Universal Process Controller. Housed in a rugged, chemically resistant PVDF body, **Smart technology** enables probe optimization for different temperature applications and ranges. The probe manages temperature compensation and buffer calibration measurement settings. Data captured on the probe is automatically updated on the controller via digital input.

Application

Suitable for a wide range of industrial, municipal, and chemical process applications (batch or continuous).

HI510 Controller Supported Probe Series and Configurations

HI10 XX – Y8ZZ pH & Temperature

XX	06	**PTFE** junction			
	16	**Ceramic** junction			
Y	Glass sensor		Titanium Matching Pin	pH range	Temperature range
	1	Low temperature		0.00 to 12.00 pH	–5.0 to 80.0 °C (23.0 to 176.0 °F)
	3	High temperature		0.00 to 14.00 pH	0.0 to 100.0 °C (32.0 to 212.0 °F)
	4	Fluoride resistant		0.00 to 10.00 pH	–5.0 to 60.0 °C (23.0 to 140.0 °F)

HI20 XX – Y8ZZ ORP & Temperature

XX	04	**PTFE** junction		
	14	**Ceramic** junction		
Y		Sensor type	mV range	Temperature range
	1	**Platinum**	± 2000 mV	–5.0 to 100.0 °C (23.0 to 212.0 °F)
	2	**Gold**		

HI7630 – Y8ZZ Conductivity & Temperature

Y	2	**Two-electrode** cell conductivity, AISI 316 stainless steel cell constant k ≈ 0.1/cm	EC 0.000 µS/cm to 30.00 mS/cm TDS 0.000 mg/L to 15.00 g/L (TDS factor 0.5) RES 34 Ω • cm to 99.99 MΩ • cm Temperature 0.0 to 50.0 °C (32.0 to 122.0 °F)
	4	**Four-ring** conductivity, platinum on glass, cell constant k ≈ 1.0/cm	EC 0.0 µS/cm to 999.9 mS/cm TDS 0.0 mg/L to 400.0 g/L (TDS factor 0.5) RES 1.00 Ω • cm to 9.99 MΩ • cm Seawater Salinity 400.0 %NaCl, 42 psu, 80 ppt Temperature 0.0 to 100.0 °C (32.0 to 212.0 °F)

HI7640 – 18ZZ Galvanic Dissolved Oxygen & Temperature

Galvanic sensor	Concentration 0.00 to 50.00 mg/L (ppm) Saturation 0.0 to 500.0 % Temperature –5.0 to 50.0°C (23.0 to 122.0 °F)

HI7640 – 58ZZ Optical Dissolved Oxygen & Temperature

Optical sensor	Concentration 0.00 to 50.00 mg/L (ppm) Saturation 0.0 to 500.0 % Temperature –5.0 to 50.0°C (23.0 to 122.0 °F)

8	**Smart probe**, with RS485 connection	
ZZ	00 supplied with DIN connector (without cable) 05, 10, 15, 25, 50 fixed cable length (in meters)	

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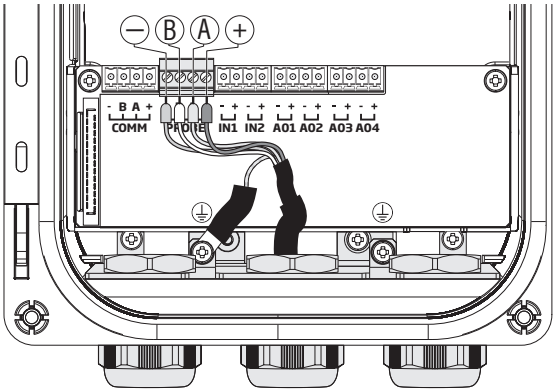
https://manuals.hannainst.com/HI510

Probe wiring

1. Disconnect the controller from power. Run the probe cable through the conduit opening.
2. Connect the probe leads to the removable terminal connector marked PROBE. Follow lead markings (–/+) to ensure correct wiring position for output leads.
3. Carefully put the wired terminal connector into place on the board.
4. Position excess cable through the cable gland before tightening the nut.
5. Remove the ground screw and hardware located below the PROBE connector. Attach the ground lead (⏚).

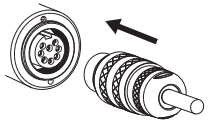


Probe cabling color code

Marking	Attached Cable	Patch Cable	Functionality
–	GREEN	BLACK	0 V
B	WHITE	WHITE	RS485 D–
A	YELLOW	BLUE	RS485 D+
+	BROWN	RED	5 V
⏚	GREEN-YELLOW	GREEN-YELLOW	PROTECTIVE GROUND

Probe connection

Align the pins and key then push the plug into the socket. Rotate the collar to lock in place.



Patch cables may be purchased separately to connect between the probe and controller up to 50 meters (164 ft).

All Hanna instruments conform to the CE European Directives and our production facilities are ISO 9001 certified. Probes are warrantied for six months against defects in workmanship and materials when used for their intended purpose and maintained according to instructions. For technical information e-mail us at tech@hannainst.com. Visit www.hannainst.com for more information about Hanna Instruments and our products.

Please retain for future use.

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