

HI2004-18 • HI2014-18  
HI2004-28 • HI2014-28

## ORP and Temperature Industrial Smart Probes

*HI510 and HI520 Universal Process Controller compatible*

HI20X4-18 and HI20X4-28 are ORP and temperature probes designed for use with the Hanna Instruments® HI510 or HI520. The system is designed to monitor and control disinfection chemicals or follow and control a critical oxidation (or reduction) reaction. mV measurements are auto-compensated for barometric pressure and temperature.

- HI2004-18 and HI2014-18 platinum-sensor series are designed to provide the best response over a wide range of applications. Used in reducing processes such as chlorine dosing in pools and spas or chromate reduction.
- HI2004-28 and HI2014-28 gold-sensor series are designed for oxidative processes such as cyanide oxidation in the mining industry.

The probe features a flat tip (ideal for solutions containing aggressive chemicals) which virtually eliminates dirt deposits and significantly reduces maintenance.

Suitable for continuous measurement of ORP required for monitoring and/or controlling oxidizers and reducing agents in water treatment monitoring, industrial effluent treatment, and swimming pools, the probe can be submersed/immersed using the 3/4" NPT threads, or installed directly in-line or in a flow cell installation, using the lower sensor threads.

The probe is also available with an integral connector that permits cable connections after installation.

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

- Rugged, chemically-resistant PVDF body
- 3/4" NPT external thread
- 6 bar (87 psi) maximum pressure at 25 °C (77 °F)
- Built-in temperature sensor for measurement
- Digital probe stores model, firmware, serial number, and calibration information
- Minimum maintenance



Specifications	example HI2004-18zz	
ORP	Range	-2000 to +2000 mV
	Resolution	1 mV
	Accuracy	±2 mV
	Calibration	Single point, value can be adjusted ±60 mV around measured mV
Temperature	Range	-5.0 to 100.0 °C (23.0 to 212.0 °F)
	Resolution	0.1 °C; 0.1 °F
	Accuracy	±0.5 °C; ±1.0 °F
	Calibration	Single point offset (controller setting)
Temperature Source	Automatic (from Probe) Manual	
Body	PVDF	
Junction	PTFE	
Sensor	Material	platinum
	Body	glass
	Tip shape	flat
	Diameter	22 mm (0.9")
	Insertion length	21 mm (0.8")
Maximum Pressure	6 bar	
Threaded Connection	3/4" NPT external thread for mounting	
Wetted Parts	Probe body	PVDF
	Sensor body	glass
	O-ring	NBR
	Junction	PTFE
	Matching pin	titanium
Protection Rating	IP68	
Cable Length	zz, see Ordering Information	

**PTFE junction:** Minimizing the potential for clogging and chemically resistant, PTFE is ideal for samples with high content of suspended solids or for high-pressure installations.

**Ceramic junction:** Porous chemically resistant plug that connects the reference electrode to the process electrically.

#### Ordering Information

Each probe is supplied with quick reference guide with probe quality certificate.

**HI20** x x - y 8 z z

#### Choose your configuration:

xx	<b>04</b>	PTFE junction
	<b>14</b>	Ceramic junction
y	<b>1</b>	Platinum sensor; -5.0 to 100.0 °C (23.0 to 212.0 °F); ±2000 mV
	<b>2</b>	Gold sensor; -5.0 to 100.0 °C (23.0 to 212.0 °F); ±2000 mV
8	Smart probe, with RS485 connection	
zz	<b>00</b>	supplied with DIN connector (without cable). See page 15.58 (HI510 and HI520 accessories section) for patch cable ordering codes.
	<b>05, 10, 15, 25, 50</b>	fixed cable length (in meters)

#### Dimensions

