



### PRODUCT DESCRIPTION

The Hayward HP60 and HR60 Series pH and ORP electrodes offer proven differential measurement technology, rebuildable design and easy NPT mounting. Built-in preamps allow the measured signal to be transmitted significantly further than that with passive sensors. These electrodes feature standard 5-wire connectivity, built-in temperature element and a rugged Ryton® body. Match with the Hayward HMC200 multi-parameter controller or most any 5-wire pH/ORP transmitters/controllers.

The Hayward HP65 and HR65 Series pH and ORP electrodes offer a 2-wire blind analogue output signal (4-20 mA), rugged Ryton body, integral temperature sensor and a replaceable salt bridge for unmatched service life in tough applications. Match with the Hayward HMC300 web-enabled controller or wire directly into most PLCs and SCADA systems.

All Hayward pH and ORP electrodes come with a standard 2-year warranty.

## NEW PRODUCT PREVIEW

# **HP/HR SERIES ELECTRODES**

### **KEY FEATURES**

- Differential-style provides added reading stability in challenging process applications
- Rebuildable design provides extended service life and lower cost of ownership
- NPT Threaded connections on both sides of the electrode
- Integral temperature element for compensated readings
- 15 ft cable standard extended cable optional
- 0 -14 pH measurement range (consult for 2 < and > 12)
- HP65 / HR65 provide blind 4-20 mA output
- Built-in preamp allows extended transmission range
- -2000 to + 2000 mV ORP Range
- −5 to + 95°C (23 to 203°F) Temperature Limits
- HP60 / HR60 Series feature 5- wire designs = mV output
- HP65 / HR65 Series feature two wire designs = 4-20 mA output

## **APPLICATIONS**

- Process Control
- Industrial and Municipal Water Treatment
- Plating
- Fume Scrubbers
- Power Generation
- Pulp and Paper
- Aquaculture
- Aquatics
- Food and Beverage

# **HP/HR SERIES ELECTRODES**

# **TECHNICAL INFORMATION**

Wetted Materials	Ryton (PPS) body, Kynar, Glass, Titanium (ORP), Palladium, Alloy, and Viton
Temperature Limits	−5 to + 95°C (23 to 203°F)
Maximum Pressure	100 psig at 150°F ( 65°C)
Maximum Flow Rate	10 ft (3 meters per second)
Automatic Temperature Compensation	PT1000 RTD
Sensor Cable*	15 ft (4.5 m) STD

	pH	ORP
Measuring Range	0 — 14 pH	-2000 to +2000 mV
Stability	0.03 pH units / day	2.0 mV / day
Sensitivity	0.01 pH	0.1 mV
Accuracy	+/- 0.02 pH	+/- 5 mV
Cable Conductors	HP60 - 5	HR60 - 5
	HP65 - 2	HR65 - 2

### **CONTROLLERS**

	HMC200	HMC300
HP60	X	
HR60	X	
HP65		Х
HR65		Х

# **CALIBRATION SOLUTIONS**

НМСРН4	pH 4 Buffer 500 mL
НМСРН7	pH 7 Buffer 500 mL
HMCPH10	pH 10 Buffer 500 mL

### SALT BRIDGE REPLACEMENT KIT

<sup>\*</sup>Longer cable lengths available.