



## Hach Online Process ORP Sensor - General Purpose Digital ORP Sensor

**Product #:** DRD1P5.99

**AED Price:** Contact Hach

### The smart choice for accurate and reliable online process ORP measurement

General Purpose Online Process ORP Sensor with Integrated Digital Electronics for "Plug and Play" with Hach Digital SC Controllers - Platinum ORP Electrode, PEEK Housing, Convertible Mount, 10 m Cable

#### Exceptional Performance with the Differential Electrode Measurement Technique

This field-proven technique uses three electrodes instead of the two normally used in conventional ORP sensors. Process and reference electrodes measure the ORP differentially with respect to a third ground electrode. The end result is unsurpassed measurement accuracy, reduced reference junction potential, and elimination of sensor ground loops. These sensors provide greater reliability, resulting in less downtime and maintenance.

#### Lower Maintenance Needs with the Double Junction Salt Bridge

The double junction salt bridge creates a barrier to contamination which minimizes the dilution of the internal standard cell solution. The result is lower maintenance needs and a longer time period between calibrations.

#### Extended Working Life with the Replaceable Salt Bridge/Protector

The unique, replaceable salt bridge holds an extraordinary volume of buffer to extend the working life of the sensor by protecting the reference electrode from harsh process conditions. The salt bridge simply threads onto the end of the sensor if replacement is needed.

#### Reliability with Built-in Encapsulated Preamp

Encapsulated construction protects the sensor's built-in preamp from moisture and humidity, ensuring reliable sensor operation. The preamp in the pHD analogue sensor produces a strong signal, enabling the sensor to be located up to 1000 m (3280 ft.) from the analyser.

#### Innovative Technology

The former GLI, now a Hach Company brand, invented the Differential Electrode Technique for pH measurement in 1970. The pHD sensor series takes this field-proven technology to a new level.

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### Specifications

Accuracy:	± 0.5 °C
Body Material:	PEEK
Cable connection:	Digital
Cable length:	10 m
Calibration method:	one point manual
Communication:	MODBUS
Compliance:	Hazardous Location, Maritime, CE
Diameter:	35.4 mm
Drift:	2 mV per 24 hours, non-cumulative

Electrode type:	General Purpose
Flow:	max. 3 m/s
Housing material:	PEEK
Length:	271.3 mm
Material:	Titanium
Material (electrode):	Platinum
Measuring range:	-1500 to +1500 mV ORP
Mounting:	Convertible
Operating temperature range:	-5 to 70 °C (23 to 158 °F) pH and ORP  Before initial pH calibration, calibrate the temperature measurement when the sensor is in water or buffer which is at approximately the same temperature as the pH buffers.
Pressure range:	max. 10.7 bar Sensor only (pressure range of mounting hardware to be checked separately)
Repeatability:	± 2 mV
Sensor thread:	1" NPT at both ends
Sensor type :	Digital
Temperature accuracy:	± 0.5 °C (± 0.9 °F)
Temperature sensor:	NTC 300 Ω thermistor for temperature readout, not for temperature compensation
Warranty:	24 months
Weight:	0.316 kg