



pHD sc: Digital pH sensor with glass differential electrode, sc compatibility, PEEK®, Convertible Mount

Product #: DPD1P1
USD Price: \$1,182.00
Ships within 3-5 weeks

Accurate real time pH probe for inline pH monitoring in water or general process applications

Hach's patented differential electrode measurement technique ensures more accurate pH readings, providing increased reliability to reduce downtime and maintenance for measuring pH over traditional pH sensors.

Our DPD1P1 digital pH probe is Convertible Mount complete with a 10m cable and compatible with Hach SC controllers.

This instrument connects to Claros, Hach's innovative Water Intelligence System, enabling you to seamlessly connect and manage instruments, data, and process – anywhere, anytime. The result is greater confidence in your data and improved efficiency in your operations. To unlock the full potential of Claros, insist on Claros Enabled instruments.

Differential pH Sensor With Encapsulated Preamp: Using three electrodes versus the traditional two increases accuracy in this digital pH probe. Reference junction potential is reduced along with elimination of sensor ground loops.

This field-proven technique uses three electrodes instead of the two normally used in conventional pH sensors. Process and reference electrodes measure the pH 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 process pH sensors provide greater reliability, resulting in less downtime and maintenance.

Extended pH Sensor Life: Replaceable salt bridge holds higher volumes of buffer which extends pH sensor life and protects the junction reference electrode.

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.

Durable Material Build For Aggressive Solutions: PEEK® is used in construction of the body for chemical compatibility with most process applications for in line pH monitoring.

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.

Versatile Mounting Options: pH sensors are available in four mounting styles – convertible, insertion, immersion, and sanitary for real time pH monitoring. The DPD1P1 is convertible build. Order our digital pHD today!

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

Patented Technology

The former GLI, now a Hach Company brand, invented the Differential Electrode Technique for pH measurement in 1970. The pHD sensor series (U.S. Patent Number 6395158B1, dated May 28, 2002) takes this field-proven technology to a new level.

Specifications

Accuracy: ± 0.02 pH
Body material: PEEK®
Cable Connection: Digital

Cable Length:	10m (33 ft.)
Calibration Method:	Two point automatic, one point automatic, two point manual, one point manual
Communication:	Modbus
Drift:	0.03 pH per 24 hours, non-cumulative
Electrode Type:	General Purpose
Flow Rate:	3 m (10 ft.) per second, maximum
Length:	271.3 mm
Mounting:	Convertible
Operating Temperature Range:	Analog Sensor with Digital Gateway: -5 - 105 °C
pH Range:	0 - 14 pH
Pressure Range:	Maximum 10.7 bar . 6.9 bar for Digital Sensor at 70°C, and 6.9 bar for Analog Sensor at 105°C.
Range:	-2.0 - 14.0 pH
Region:	Global
Repeatability:	± 0.05 pH
Sensitivity:	± 0.01 pH
Sensor Cable:	4 10 m (33 ft.) polyurethane, 4-conductor cable with one shield, rated to 105°C (221°F)
Sensor Thread:	1" NPT
Storage Conditions:	4 - 70°C, 0 - 95% relative humidity (non-condensing)
Temperature Accuracy:	±0.5 °C
Temperature Compensation:	Automatic with NTC 300 # thermistor, or manually fixed at a user-entered temperature, additional selectable temperature correction factors (ammonia, morpholine, or user-defined pH/°C linear slope) available for pure water automatic compensation 0.0 - 50 °C
Temperature Sensor:	NTC 300 # thermistor for automatic temperature compensation and analyzer temperature readout
Transmission Distance:	100 m (328 ft.), maximum
Weight:	0.316 kg
Wetted Materials:	PEEK or Ryton (PVDF), salt bridge of matching material with Kynar junction, glass process electrode, titanium ground electrode, and Viton® O-ring seals (pH sensor with optional HF-resistant glass process electrode has 316 stainless steel ground electrode, and perfluoroelastomer wetted O-rings; consult factory for other available wetted O-ring materials)

Required Accessories

- SC1000 Multi-parameter Universal Controller Display Module (without GSM/GPRS) (Item LXV402.99.00002)
- SC1000 Probe Module, 6 sensors, Prognosys Module, Modbus RS485, 100-240V AC, no power cord (Item LXV400.99.1H082)
- SC1000 Probe Module, 8 sensors, Prognosys Module, 100-240V AC, no power cord (Item LXV400.99.1G092)
- SC1500 Controller, 6 SENS 8mA OUT 110V/COND EXT MOD (Item LXV446.99.103N1)
- SC1500 Controller, 6 SENS 8mA OUT 110V/COND 4 REL/C EXT MOD (Item LXV446.99.1R3S1)
- SC4200c Controller, North American Cellular Modem, mA out, 2 digital Sensors, w/o plug (Item LXV524.99.01120)
- SC4200c Controller, North American Cellular Modem, Profibus, 2 digital Sensors, w/o plug (Item LXV524.99.01720)