

Model 642 pH/ORP Sensor

MODEL 642	BASIC DESCRIPTION (Submersible pH Sensor)	
	Industrial submersible combination pH sensor with annular wood junction reference and protected rugged tip measuring 0 pH to 14 pH at 0 °C to 80 °C (32 °F to 176 °F). Self-pressurizing design with 30.5 cm (12 inch) CPVC body length, ¾ inch FNPT process connection and 3 m (10 ft) lead length with BNC fitting. Includes one instruction manual. For applications over 80 °C, options -7, -8, and -12 are required. Also consider model 648.	
	ADD	SENSOR OPTIONS
	-0	Solution ground connected
	-2	Low temperature pH glass (suggested when measuring below 5 °C or 40 °F)
	-3	High pH tip, for applications where 10 pH to 14 pH is common; 10 °C to 105 °C (50 °F to 221 °F)
	-4()	-4(P): Platinum ORP tip; -4(G): Gold ORP tip
	-5HF	H.F. resistant glass, 0 °C to 105 °C (32 °F to 221 °F), 0 pH to 12 pH. Requires option -12
	-6	Flat glass tip, 0 °C to 90 °C (32 °F to 194 °F), no flutes
	-7	Double junction reference; to inhibit ion contamination from the process
-8	Plastic reference; for long life & hot applications over 80 °C (176 °F).	
-12	PVDF body, maximum 130 °C (266 °F); limited by maximum temperature of pH glass	
-17	Hytec II porous junction; suggested for strong caustic or acid applications	
	ADD	MOUNTING OPTIONS
	-21(x)	1 inch MNPT, threaded for flow tee, specify insertion length below threads, (x) inch. Max. 8 inch, price per inch
	-23	2" flange 150 lbs. CPVC cemented to body 5" insertion length
	-24	1 inch MNPT outside back end thread for mounting (¾ inch FNPT inside)
	ADD	TEMPERATURE COMPENSATION OPTIONS
	-31	3K ohm RTD
	-32	100 ohm RTD, 3 wire
	-33	Micro TC
	-34	1000 ohm RTD
	-MC	Molex Connector, not available with option -32
	ADD	OPTIONS
	-40(###)	Internal Preamp (specify analyzer model). 105 °C max
	-VP	Variopin, 8 position male encapsulated
	-61	No BNC, tinned leads
	-63	Leads with ferrules
	-71(x)	Short sensor cable; length less than 3 m (10 ft), specify (x) feet.
	-72(x)	Long sensor cable; length greater than 3 m (10 ft), max 30 m (100 ft), specify (x) feet, price per foot.
	-73	Pulp modified tip, concave junction surface
	-77	Anti-coating treatment. (Note: For 100mL bottle, A1100228, sold separately)
	-78	Tip modified for chemical cleaner, not available with options -21, -23, -25 & -73
	-79	Chemical cleaner accessories including pump and nozzle, P/N A2100020. Requires a timer or -51 option in analyzer.
	-89	Stainless steel tag.
	RECOMMENDED CALIBRATION BUFFERS	
	Colored buffer 6-pack: 4, 7 & 10, P/N A1100054. For pure water see P/N A1100220-6P.	
	Buffer 4.0 pH, 500 mL bottle, red, P/N A1100051. For pure water see P/N A1100216.	
	Buffer 7.0 pH, 500 mL bottle, green, P/N A1100052. For pure water see P/N A1100217.	
	Buffer 10.0 pH, 500 mL bottle, blue, P/N A1100053. For pure water see P/N A1100218.	
Sample Order:		
642	-34	pH sensor with 1000 ohm RTD