

pH Range	0.00 to 14.00 pH
pH Resolution	0.01 pH
pH Accuracy	±0.05 pH
pH Calibration	pH buffer calibration: automatic, two-point (4.01, 7.01, 10.01 pH) pH process calibration: one-point, manual input
Temperature Compensation	automatic, -5.0 to 105.0°C (23.0 to 221.0°F) for pH

ORP Specifications

ORP Range	±2000 mV
ORP Resolution	1 mV
ORP Accuracy	±5 mV
ORP Calibration	ORP (mV) calibration: one-point, manual input

Temperature Specifications

Temperature Range	-5.0 to 105.0°C (23.0 to 221.0°F)
Temperature Resolution	0.1°C (0.1°F)
Temperature Accuracy	±1°C (±1.8°F)

Specifications

pH Dosing	proportional with adjustable set point and proportional band delay to start at power-on and overdosing protection
ORP Dosing	proportional with adjustable set point and proportional band delay to start at power-on and overdosing protection pH dosing interlocked
Alarms	high and low with enable/disable option for all parameters alarm is triggered when 5 consecutive readings are over/under threshold
Alarm System	intuitive alert system based on LEDs alarm filtering options alarm relay control based on user setup
Alarm Relay Output (1)	SPDT 5A/230 VAC activated by pH/ORP/temperature selectable alarm conditions
Analog Outputs	4 to 20 mA, sourcing, configurable

(3)	output impedance \leq 500 Ohm accuracy < 0.5 % FS galvanically isolated up to 50 V relative to earth ground
Auxiliary Inputs (3)	low level in acid/base tank (contact open) low level in chlorine tank (contact open) hold input (contact open)
Pump Control	automatic and manual modes adjustable flow rate from 0.5 to 3.5 L/h
Log Feature	automatic logging of pH, ORP, and temperature measurements, GLP and events including alarms, errors and power failure capacity for 60 days with 10 second sampling interval all data .csv files are transferred by USB flash drive
Password Protection	setup, calibration and log recall options features are password protected
Storage Interface	USB
GLP	calibration information including date and time for pH and ORP sensors
Digital Probe Input (1)	galvanic isolated digital input HI1036-1802 pH/ORP/temperature/matching pin combined probe with DIN waterproof connector
Power Supply	100 - 240 VAC
Power Consumption	10 VA
Environment	0 to 50 °C (32-122 °F); max 95% RH non-condensing
Dimensions	245 x 188 x 55 mm (73 mm with pumps); 9.6 x 7.4 x 2.2" (2.9" with pumps)
Weight	1700 g (60 oz)
Ordering Information	BL121-10: Swimming Pool & Spa Controller with HI1036-1802 combined pH/ORP/temperature digital electrode, with probe fittings and chemical injectors BL121-20: Swimming Pool & Spa Controller with panel mounted flow cell, HI1036-1802 combined pH/ORP/temperature digital electrode, with probe fittings and chemical injectors