

OAKTON®

pH/ORP/°C

pH 1000 & pH 800 Controllers

PID 
ANALYZERS

pH Control

pH 800 offers economical, reliable on/off control;
pH 1000 features on/off, proportional pulse length, or proportional pulse frequency control.

Large dual display shows pH (or ORP) and temperature features clear multiple annunciators, set points, and status messages

Two set point, two SPDT relay operation
choose from lo/lo, lo/hi, hi/lo or hi/hi control

Symmetrical mode operation
eliminates electrical noise problems when used with solution ground

0 to 2000 second time delay adjustment on all relays
minimizes false alarms

Separately adjustable high and low set point hysteresis bands
prevent rapid contact switching if your pH or ORP value is fluctuating near the set point

Push button two-point calibration, plus a separate electrode offset adjustment

0-20/4-20 mA recorder output

Nonvolatile memory
maintains set-up even if power fails

pH 800 features:
On/Off control

±0.01 pH accuracy for precise on/off control

pH 1000 features:
Three control types

choose on/off, proportional pulse length or proportional pulse frequency control

Separate alarm relay

alerts you to set points exceeded for a specific length of time or a failed temperature sensor

Two level password protection

first level allows quick access to calibration;
second level lets you change set-up parameters



Top: pH 1000 controller

Bottom left: OAKTON offers a large assortment of industrial pH and ORP electrodes. See the back of sheet for more details.

Bottom right: pH 800 shown mounted in 'DIN size panel

3 year warranty

CE ISO 9001
vendor
CERTIFIED

Choose the pH 800 controller for reliable, easy-to-use on/off control or the pH 1000 controller, with three control types, for more complicated applications! On/off control shuts your pump or valve on or off when your process passes its set points. Two separately programmable relays are ideal for acid feed/base feed applications. The pH 1000 also offers proportional pulse length or proportional pulse frequency control. Use proportional control to gradually increase or decrease your pump's or valve's response, depending on the amount by which your process has passed the set point. Both controllers are also selectable for pH or ORP control; normally activated or unactivated relays; manual or automatic temperature compensation, and much more!

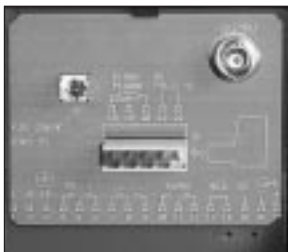
Convenient 'DIN size fits into standard panel cutouts; mounting hardware included for fast panel installation. The IP54 rated front panel keypad is weather resistant. Controllers are supported by a full selection of OAKTON calibration buffers and industrial electrodes. See the back of this sheet for ordering information and complete specifications.

OAKTON® ...setting the standard, again and again®

Dual LCD shows pH or mV reading and temperature simultaneously, plus clear mode and function annunciators.



Removable power blocks on back for power supply, temperature input and cold contact SPDT relay terminals.



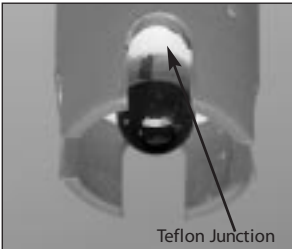
Splash-resistant, IP54 rated membrane keypad with audible clicks that confirm button press.



Mounting hardware (included) allows easy surface mounting to all panels and protective enclosures.

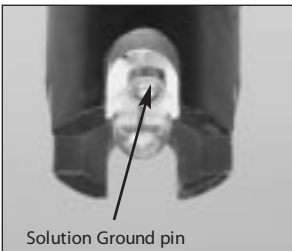


New Teflon Junction electrodes resist dogging. Polymer gel reference electrolyte withstands harsh applications.



Teflon Junction

New Teflon junction electrodes with solution ground are ideal for tough wastewater and plating applications. Solution ground pin eliminates electrical noise problems.



Solution Ground pin

pH 800 & pH 1000 pH/ORP Controllers

¥ Applications ¥

Industrial applications: Ideal for chemical processing, food processing, aquarium, pharmaceutical, hydroponics and waste control industries.

Water purification/treatment: Use for batch and on-line control of incoming process water, rinse water treatment, recirculating and waste water treatment.

Regulatory compliance: Hook these controllers to a recorder to document data for regulatory compliance.

General applications: Useful for any batch or on-line type application that requires accurate pH or ORP control.

Hold function: Contact closure shuts off control functions. Use with manual, float, or flow switches for safety control.

¥ Specifications ¥

	pH 800	pH 1000
Control type	on/off	on/off; proportional pulse length; proportional pulse frequency
Inputs	one glass bulb pH electrode	one, selectable glass bulb or antimony (use antimony electrodes for systems with high hydrofluoric acid content)
Output:	2 SPDT relays, 6 A @ 110 VAC, 250 VAC max	
Current	isolated 0-20 / 4-20 mA, 600 max load	isolated 0-20/4-20 mA, 600 max. load, programmable boundaries
Alarm	ñ	1 SPDT relay, 6 A @ 110 VAC, 250 VAC max
Pulse	ñ	pulse length (0.5 to 20 sec) or pulse frequency (60-120 pulses per min.)

Type	pH	mV	Temperature
Range	0.00 to 14.00 pH	±1000 mV	0.9 to 125.0°C
Resolution	0.01 pH	1 mV	0.1°C
Accuracy	±0.01 pH	1 mV	±0.1°C

Hysteresis: (dead band) 0.1 to 1.0 pH, 10 to 100 mV, or 1 to 10%

Relay delay: selectable, 0 to 2000 seconds

Input impedance: 10⁶ M |

Electrical isolation: yes, galvanically

Temperature sensor: 100 | or 1000 | Platinum RTD, terminal strip

Temperature compensation: Automatic/manual from 0.9 to 125°C

Calibration:

pH 800: up to two points: pH 1.00, 4.01, 6.86, 7.00, 9.00, 9.18, 10.00

pH 1000: up to two points: pH 1.68, 4.01, 6.86, 7.00, 9.18, 10.00, 12.45

ORP: select from two methods: offset for ORP mV calibration,

or calibrate at two points (20% and 80%) for ORP % calibration

Temperature: offset up to ±5°C

Password protection (pH 1000 only): two level protection with four-digit password lockout; first level gives calibration access, second level allows set-up parameter changes

Display: dual-line LCD; 4-digit upper and 3½-digit lower

Operating temperature: 14 to 140°F (0 to 60°C)

Housing: IP54 front; 1½ DIN size

Dimensions: Unit only: 3½" W x 3½" H x 6½" D;

Boxed: 6½" W x 6" H x 9½" D; Panel cut-out: 3½" W x 3½" H

Weight: Unit only 1.5 lbs (0.7 kg); Boxed 2.5 lbs (1.2 kg)

¥ Ordering Information ¥

Controllers

WD-35108-00 pH 800 controller, 120 VAC, 48-62 Hz

WD-35108-05 pH 800 controller, 220 VAC, 48-62 Hz

WD-35200-00 pH 1000 controller, 120 VAC, 48-62 Hz

WD-35200-05 pH 1000 controller, 220 VAC, 48-62 Hz

WD-35100-90 Power cord; 3 ft with bare leads,

3 prong U.S. plug, 110 VAC



Semi-Domed Bulb Electrodes

Unique surface design provides protection from particulates while increasing flow across the junction for cleaning. Ceramic junction gives toughness along with steady electrolyte flow. Graphite body probes act as solution ground. Advantage of controller's high-impedance symmetrical mode. Double junction; sealed KCl/AgCl reference. 10-ft cable, BNC connector, stripped ends for ATC element.

WD-35807-00 pH electrode, Kynar body, ¾" NPT thread

WD-35807-05 pH electrode, Kynar body, 1" NPT thread

WD-35807-10 pH electrode,

graphite body (acts as solution ground), ¾" NPT thread

WD-35807-15 pH electrode,

graphite body (acts as solution ground), 1" NPT thread



Teflon Junction Electrodes

Teflon junction and polymer gel reference electrolyte resist dogging. Low cost; excellent for simple wastewater applications. Double junction. Permanently encapsulated combination electrodes w/CPVC body; ¾" NPT threads on both ends. Install in a tee fitting or on a submersion pipe for tank mounting. 10-ft cable, BNC connector.

WD-35807-30 Teflon Junction pH electrode

WD-35807-35 Teflon Junction pH electrode, includes 100 ohm Pt 100 ATC element



Teflon Junction Electrodes with Solution Ground

Clog-resistant Teflon junction. Rytan body offers excellent chemical resistance. Solution ground pin eliminates ground loop and electrical noise problems. Great for tough wastewater and plating applications. Double junction. Permanently encapsulated combination electrodes; ¾" NPT threads on both ends. Install in a tee fitting or on a submersion pipe for tank mounting. 10-ft cable, BNC connector.

WD-35807-25 pH electrode

WD-35807-20 pH electrode with Pt 100 ATC element



In-Line/Submersible Electrodes

Permanently encapsulated combination electrodes; CPVC body; ¾" NPT threads on both ends. Install in a tee fitting or on a submersion pipe for tank mounting. Double junction. Sealed KCl/AgCl reference. 10-ft cable, BNC connector, stripped ends for ATC element.

WD-35801-08 pH electrode

WD-35801-21 ORP electrode; Pt band sensor

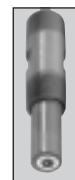


Submersible Electrodes

These combination electrodes are permanently encapsulated in a 3-ft L x 1" OD ABS pipe. Install in a tank. Double junction. Sealed KCl/AgCl reference. 10-ft cable, BNC connector, stripped ends for ATC element.

WD-35806-01 pH electrode

WD-35806-02 ORP electrode; Pt band sensor



Self-Cleaning Flat pH Electrodes

Flat electrode surface prevents solids build-up. Feature CPVC housing with ¾" NPT(M) on both ends; double junction; sealed KCl/AgCl reference; 10 ft vinyl cable; BNC connector; stripped ends for ATC element.

WD-35806-21 pH electrode

WD-35806-22 ORP electrode

¥ ORDER FROM ¥

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