

OAKTON®

pH/ORP/°C

pH 200 1/8 DIN Controller

Sturdy, economical pH/ORP controllers for acid and/or base feed; designed with the features and reliability of a much more expensive instrument!

pH Control

Two set point, two SPDT relay operation

for low/high, high/low, low/low, or high/high control, or use one relay to operate an alarm

Scrolling, 14-segment LED

guides user easily through set-up functions

All-push button operation from the front panel

no need to remove the faceplate

Reliable power supply from 85 to 250 V AC/DC

withstands voltage fluctuations

Symmetrical mode operation

eliminates electrical noise problems when used with solution ground

Adjustable hysteresis (dead band)

Prevents rapid contact switching near set-point

Selectable automatic or manual temperature compensation

Push-button calibration

two-point pH calibration; single-point temperature offset; and single-point ORP calibration

View previous calibration points

and electrode slope/offset for electrode diagnosis

Two level password protection

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

Removable terminal strips

offer quick and easy connections

Built-in memory backup

retains set-up even if power fails, and lets you configure unit before installation

4-20 mA output

for remote monitoring or hard copy recording



Above: Controller shown actual size

ISO 9001
CERTIFIED 3 year warranty

Far right: OAKTON offers a large selection of industrial pH and ORP electrodes, including new clog-resistant Teflon® junction electrodes.

Near right: Controller includes hardware for mounting into standard 1/8 DIN panels.

Below: Removable terminal strips allow for easy connections in the field.



These sturdy, compact controllers withstand voltage fluctuations from 85 to 250V AC/DC! These reliable controllers are ideal for installation where electrical fluctuations are common, or install a series of them throughout areas of differing electrical conditions. The many advanced features listed at left make this economical controller a great value!

The 1/8 DIN housing is ready to install in standard panels and NEMA rated boxes. This controller includes mounting hardware for fast panel installation. Controllers accept electrodes with BNC connectors and 100 Pt RTD ATC elements.

The pH 200 controller is supported by a full selection of OAKTON calibration buffers, probes, and accessories. See the back of this sheet for ordering information and complete specifications.

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

Bright 14-segment LED display lets you see reading even in low light conditions.



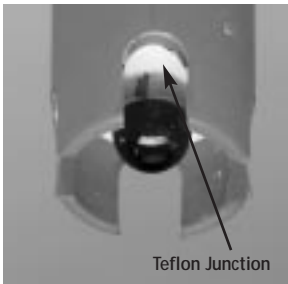
Removable terminal strips on back of unit offer quick and easy connections for power supply, temperature input, and cold contact SPDT relay terminals. BNC connector for pH electrode.



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

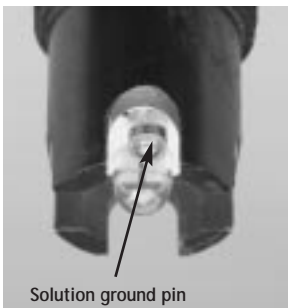


New Teflon Junction electrodes resist clogging. Polymer gel reference electrolyte withstand harsh applications.



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 200 Controller

• Applications •

Industrial Applications: Use to treat batches of incoming process water, rinse water treatment, recirculating water treatment, and wastewater. Suitable for pH or ORP control of plating tanks and chemical processing tanks. Ideal as a low cost monitor with alarms for batch and process applications.

Aquaculture: Use for pH or ORP control in fish ponds.

General Applications: Ideal for virtually any batch type application where pH or ORP control or adjustment is needed. Use as ORP monitor for ozone systems and general purpose pH monitor for all types of water treatment and chemical processes.

• Specifications •

Type	pH	mV	Temperature
Range	0.00 to 14.00 pH	-999 to 1000 mV	0 to 110°C
Resolution	0.01 pH	1 mV	0.1°C
Accuracy	±0.01 pH	±2.0 mV	±0.5°C
Calibration	one to two points: pH 1.68; 4.01; 6.86; 7.00; 9.18; 10.01; 12.45	offset to ±150 mV	offset to ±10°C

Control type: on/off

Number of inputs: one

Number of set points: two (high/high; low/low; high/low or low/high)

Output

Control: 2 SPDT nonpowered relays, 6A @110 VAC; 250 VAC max.

Current: 4 to 20 mA output, isolated

Hysteresis (dead band): adjustable; 0.0 pH to 2.0 pH units or 0 to 300 mV

Input impedance: 10¹²Ω

Temperature compensation:

Automatic or manual, from 0 to 100°C

Password protection: two level, calibration and setup parameters

Display: LED, four digit, 14-segment

Power: 85 to 250 VAC/DC, 50/60 Hz

Connectors: pH/ORP: BNC plug

Temperature: 2 or 3 wire 100 Ω Platinum RTD, stripped ends

Operating temperature: 0 to 50°C, 10 to 95% RH

Dimensions:

Unit only: ½ DIN: 1.875" x 3.75" x 6" (48 x 96 x 150 mm)

Boxed: 2.5" x 4.125" x 6.5" (66 x 105 x 165 mm)

Panel cut-out: ½ DIN (91 mm x 45 mm)

Weight: Unit only: 0.4 lb (180 g); Boxed: 0.5 lb (220 g)

• Ordering Information •

pH Controllers

Include mounting hardware; power cord not included.

WD-35102-00 pH 200 controller

WD-35100-90 Power cord; 3 ft with bare leads, 3 prong U.S. plug, 110 VAC

pH Calibration Buffer Solutions

Accuracy ±0.01 pH at 25°C. Shpg wt 1.1 lbs (0.6 kg).

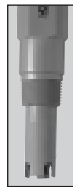
WD-00654-01 pH 1.68 buffer, 1 pint

WD-00654-00 pH 4.01 buffer, 1 pint

WD-00654-04 pH 7.00 buffer, 1 pint

WD-00654-08 pH 10.00 buffer, 1 pint

WD-00654-12 pH 12.45 buffer, 1 pint



Teflon Junction Electrodes

Teflon junction and polymer gel reference electrolyte resist clogging. Low cost; excellent for simple wastewater applications. Double junction.

These permanently encapsulated combination electrodes have a CPVC body and ¼" 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 and Ryton body offer excellent chemical resistance. Solution ground pin eliminates ground loop and electrical noise problems. Great for tough wastewater and plating applications. Double junction.

These permanently encapsulated combination electrodes have ¼" NPT threads on both ends. Install in a tee fitting or on a submersion pipe for tank mounting. Ryton body. 10-ft cable, BNC connector

WD-35807-25 Teflon Junction pH electrode

WD-35807-20 Teflon Junction pH electrode includes 100 ohm Pt 100 ATC element



In-Line/Submersible Electrodes

Permanently encapsulated combination electrodes; CPVC body and ¼" 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 In-line pH electrode

WD-35801-21 In-line ORP electrode; Pt band sensor



Submersible Electrodes

Combination electrodes; permanently encapsulated in a 3-ft L x 1" OD ABS pipe—install in a tank. Double junction. Sealed KCl/AgCl reference. Have 10-ft cable, BNC connector, stripped ends for ATC element.

WD-35806-01 Submersible pH electrode

WD-35806-02 Submersible ORP electrode; Pt band sensor



Self-Cleaning Flat pH Electrodes

Flat electrode surface prevents solids build-up. CPVC housing with ¼" 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 Self-cleaning flat electrode

WD-35806-22 Self-cleaning ORP electrode



Semi-Domed 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. Double junction; sealed KCl/AgCl reference. 10-ft cable, BNC connector, stripped ends for ATC element.

WD-35807-00 Semi-domed bulb electrode, Kynar® body, ¼" NPT thread

WD-35807-05 Semi-domed bulb electrode, Kynar® body, 1" NPT thread

WD-35807-10 Semi-domed bulb electrode, graphite body (acts as solution ground), ¼" NPT thread

WD-35807-15 Semi-domed bulb electrode, graphite body (acts as solution ground), 1" NPT thread

• ORDER FROM •