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

Select between three control types for maximum flexibility choose on-off, proportional pulse length or proportional pulse frequency control

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

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

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 for remote monitoring and hard copy recording

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

Protected against electromagnetic interference

LED indicators signal control activities monitor controller status from a distance

Nonvolatile memory maintains set-up even if power fails

Customize this advanced controller to fit your exact application! Select from three control types: on/off, proportional pulse length, or proportional pulse frequency. Use on/off control to shut your pump or valve on or off when your process passes its set points. 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. This controller is also selectable for pH or ORP control; normally activated or unactivated relays; manual or automatic temperature compensation, and much more!

The controller’s convenient 1⁄4 DIN size fits into standard-size panel cutouts; it includes mounting hardware for fast panel installation. The IP54 rated front panel keypad is weather resistant.

The pH 1000 controller is supported by a full selection of OAKTON calibration buffers and industrial electrodes. See the back of this sheet for ordering information and complete specifications.
**pH 1000 pH/ORP Controller**

**Applications**

**Industrial applications:** Use this reliable and versatile pH/ORP controller for proportional or on/off control in chemical processing, food processing, aquarium, pharmaceutical, hydroponics and waste control industries.

**Water purification/treatment:** Use this controller 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**

**Type** | **pH** | **mV** | **Temperature**
--- | --- | --- | ---
Range | 0.00 to 14.00 pH | ±1000 mV | -9.9 to 125.0°C
Resolution | 0.01 pH | 1 mV | 0.1°C
Accuracy | ±0.01 pH | ±1 mV | ±1.1°C

**Control type:** three (on/off, proportional pulse length or proportional pulse frequency)

**Number of inputs:** one

**Number of set points:** two (high and low)

**Output:**
- Control: 2 SPDT relays, 6 A @ 110 VAC, 250 VAC max
- Alarm: 1 SPDT relay, 6 A @ 110 VAC, 250 VAC max
- Pulse: pulse length (0.5 to 20 sec) or pulse frequency (60 to 120 pulses per min.)
- Current: isolated 0-20/4-20 mA, 600 Ω max load, programmable boundaries

**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:**
- pH: 106 MΩ
- mV: 106 MΩ

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

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

**Ordering Information**

**Controllers**
- WD-35200-00 pH 1000 controller, 120 VAC, 48-62 Hz .......... $595.00
- WD-35200-05 pH 1000 controller, 220 VAC, 48-62 Hz .......... $595.00
- WD-35100-90 Power cord; 14 to 140°F (-10 to 60°C) .......... $6.95

**pH Calibration Buffer Solutions**
- Each bottle contains one pint premixed calibration solution. Accuracy ±0.01 pH at 25°C. Shpg wt 1.1 lbs (0.6 kg).
- WD-00654-00 pH 4.01 buffer .................. $6.95
- WD-00654-04 pH 7.00 buffer .................. $6.95
- WD-00654-08 pH 10.00 buffer .................. $6.95

**In-Line/Submersible Electrodes**

**Self-Cleaning Flat pH Electrodes**
- Flat electrode surface prevents solids build-up. Feature CPVC housing with 1/4 OD ABS pipe—install in a tee fitting or on a submersion pipe for tank mounting. Sealed KCIAgCl reference. Have 10-ft cable, BNC connector, stripped ends for ATC element.
- WD-35806-22 Self-cleaning flat ORP electrode; double junction, Pt band sensor .......... $143.10

**Submersible Electrodes**
- These combination electrodes are permanently encapsulated in a 3-ft L x 1/4 OD ABS pipe—install in a tank. Sealed KCIAgCl reference. Have 10-ft cable, BNC connector, stripped ends for ATC element.
- WD-35806-01 Submersible pH electrode; double junction ........................................ $139.80
- WD-35806-02 Submersible ORP electrode; double junction, Pt band sensor .......... $169.60

**Electrode use:**
- Selectable glass or antimony (use antimony electrodes for systems with hydrofluoric acid content)

**Temperature sensor:**
- 100 Ω or 1000 Ω Platinum RTD, terminal strip

**Temperature compensation:** Automatic/manual from -9.9 to 125°C

**Calibration:**
- pH: one or two points (select from pH 1.00, 4.01, 7.00, 9.00, 10.00)
- ORP: select from two methods: offset for ORP mV calibration, or calibrate at two points (20% and 80%) for ORP % calibration

**Temperature / Humidity:**
- Temperature: offset up to ±5°C

**Password protection:**
- 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 31/2-digit lower

**Password protection:**
- Two level protection with four-digit password

**Dimensions:**
- Unit only: 31/8"W x 31/8"H (9.2 x 9.2 cm)
- Boxed: 61/2"W x 6"H x 91/4"D (16.5 x 15.2 x 23.5 cm)

**Panel cut-out:**
- 31/8"W x 31/8"H (9.2 x 9.2 cm)

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

**In-Line/Submersible Electrodes**
- These permanently encapsulated combination electrodes have a CPVC body and 3/8" NPT threads on both ends. Install in a tee fitting or on a submersion pipe for tank mounting. Sealed KCIAgCl reference. Have 10-ft cable, BNC connector, stripped ends for ATC element.
- WD-35801-08 In-line/submersible pH electrode; double junction ........................................ $148.40
- WD-35801-21 In-line/submersible ORP electrode; double junction, Pt band sensor .......... $132.90

**Electrode use:**
- Selectable glass or antimony (use antimony electrodes for systems with hydrofluoric acid content)

**Temperature sensor:**
- 100 Ω or 1000 Ω Platinum RTD, terminal strip

**Temperature compensation:** Automatic/manual from -9.9 to 125°C

**Calibration:**
- pH: one or two points (select from pH 1.00, 4.01, 7.00, 9.00, 10.00)
- ORP: select from two methods: offset for ORP mV calibration, or calibrate at two points (20% and 80%) for ORP % calibration

**Temperature / Humidity:**
- Temperature: offset up to ±5°C

**Password protection:**
- 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 31/2-digit lower

**Password protection:**
- Two level protection with four-digit password

**Dimensions:**
- Unit only: 31/8"W x 31/8"H (9.2 x 9.2 cm)
- Boxed: 61/2"W x 6"H x 91/4"D (16.5 x 15.2 x 23.5 cm)

**Panel cut-out:**
- 31/8"W x 31/8"H (9.2 x 9.2 cm)

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

**In-Line/Submersible Electrodes**
- These permanently encapsulated combination electrodes have a CPVC body and 3/8" NPT threads on both ends. Install in a tee fitting or on a submersion pipe for tank mounting. Sealed KCIAgCl reference. Have 10-ft cable, BNC connector, stripped ends for ATC element.
- WD-35801-08 In-line/submersible pH electrode; double junction ........................................ $148.40
- WD-35801-21 In-line/submersible ORP electrode; double junction, Pt band sensor .......... $132.90

**Electrode use:**
- Selectable glass or antimony (use antimony electrodes for systems with hydrofluoric acid content)

**Temperature sensor:**
- 100 Ω or 1000 Ω Platinum RTD, terminal strip

**Temperature compensation:** Automatic/manual from -9.9 to 125°C

**Calibration:**
- pH: one or two points (select from pH 1.00, 4.01, 7.00, 9.00, 10.00)
- ORP: select from two methods: offset for ORP mV calibration, or calibrate at two points (20% and 80%) for ORP % calibration

**Temperature / Humidity:**
- Temperature: offset up to ±5°C

**Password protection:**
- 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 31/2-digit lower

**Password protection:**
- Two level protection with four-digit password

**Dimensions:**
- Unit only: 31/8"W x 31/8"H (9.2 x 9.2 cm)
- Boxed: 61/2"W x 6"H x 91/4"D (16.5 x 15.2 x 23.5 cm)

**Panel cut-out:**
- 31/8"W x 31/8"H (9.2 x 9.2 cm)

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