

Use this instrument for **precise, accurate dissolved oxygen control** in your wastewater or aquaculture process!

Large dual display shows DO plus temperature also displays mode indicators, set points, and status messages

Readout in mg/l, ppm or % saturation

Select between three control types

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

0 to 2000 second time delay adjustment on all relays

minimizes false alarms

Key in salinity and barometric pressure manually

controller automatically calculates offset values

Separately adjustable high and low set point hysteresis bands

prevent rapid contact switching if your value is fluctuating near the set point

Protected against electromagnetic interference

Push button calibration

Select from one or two points

0-20/4-20 mA transmitter/recorder output

for remote monitoring and hard copy recording

Two level password protection

LED indicators signal control activities

monitor controller status from a distance

Nonvolatile memory

maintains set-up even when power fails



Top: All operations on this flexible controller are accessible from the front-panel keypad.

Near right: 1/2 DIN size fits into standard-size panel cutouts.

Far top: We offer industrial DO galvanic probes ideal for rugged applications.

Far bottom: Probe cleaning system automatically cleans your DO probe, minimizing bio-film formation problems.



Take control of your dissolved oxygen process! This advanced controller features independent 100% and 0% saturation calibrations to ensure high accuracy. Key in the salinity of your solution and the barometric pressure manually; the controller automatically corrects the readings to these offset values. This versatile unit is selectable for on/off or proportional control; normally activated or unactivated relays; normally open or closed relays; manual or automatic temperature compensation, and much more!

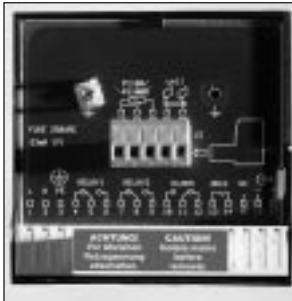
The controller's convenient 1/2 DIN size fits into standard panel cutouts; it includes mounting hardware for fast panel installation. The IP54 rated front panel keypad is weather resistant.

The DO 1000 Controller is supported by a full selection of OAKTON probes and other accessories. See the back of this sheet for ordering information and complete specifications.

Dual LCD shows DO reading and temperature simultaneously in large digits, 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



Rugged industrial DO galvanic probe for most processes are available at right.



DO 1000 Controller

Applications

Use this instrument for monitoring and control of dissolved oxygen and temperature in your wastewater treatment and applications. Use with valves, blowers, or aerators to ensure proper system operation.

astewater treatment and applications

Specifications

	mg/l (ppm)	% saturation	Temperature
Range	0.0 to 20.00 mg/l (ppm)	0.00 to 200.0%	0 to 50°C
Resolution	0.01 mg/l (ppm)	1%	0.1°C
Accuracy	±1.5% full scale	±1.5% full scale	±0.5°C

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

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 max load, programmable boundaries

Hysteresis (dead band): 0.1 to 1.0 mg/L; 1 to 10%

Relay delay: selectable, 0 to 2000 seconds

Input impedance: 10¹² M Ω

Electrical isolation: yes, galvanically

Pressure correction manual input from 555 to 808 mm Hg; automatic correction

Salinity correction manual input from 0.0 to 50.0 ppt; automatic correction

Temperature sensor: 100 | Platinum RTD, terminal strip

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

Calibration:

Dissolved Oxygen: 1 or 2 points (100% and 0% saturation)

Temperature: offset up to ±5°C

Password protection: two level protection with four digit password lock out; first level gives calibration access, second level allows set-up parameter changes

Display: dual LCD; 4-digit upper and 3-digit lower

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

Housing: IP54 front; NEMA 4X

Dimensions:

Unit only: 3.5" W x 3.5" H x 6.5" D (9.6 x 9.6 x 17.5 cm);

Boxed: 6.5" W x 6" H x 9.5" D (16.5 x 15.2 x 23.5 cm)

Panel cut-out: 3.5" W x 3.5" H (9.2 x 9.2 cm)

Weight: unit only 1.5 lbs (0.7 kg); boxed 2.5 lbs (1.2 kg)

Ordering Information

Controllers

Each controller includes panel mounting hardware.

Order power cord separately.

WD-35201-00 DO 1000 controller, 110 VAC, 48-62 Hz

WD-35201-05 DO 1000 controller, 220 VAC, 48-62 Hz

Probes

WD-35201-50 Industrial DO galvanic probe, 0 to 40 ppm

Probe Cleaning System

Minimize bio-film formation problems in submersible applications. The OAKTON Dissolved Oxygen Sensor Cleaning System is a simple way to keep your DO probe membrane clean for accurate readings and long life.

The nylon brush automatically sweeps off built-up material on sensor membrane and also creates a small temporary flow past the membrane, so that the internal electrolytes are not depleted by oxygen consumption at the membrane. Installation is simple in the adjustable mounting elbow. Requires 12 VDC power supply and timer. Order DO probe separately above.

WD-35201-60 DO sensor cleaning system

WD-35201-62 Timer for DO cleaning system.

Lets you set on/off intervals for cleaning system to activate

WD-35201-64 Power supply, 12 VDC. Plugs into 110 VAC outlet

Probe Accessories

WD-35640-71 Replacement electrolyte fluid, 500 ml

WD-35640-70 Replacement electrolyte powder, 58.5 g. Mix your own electrolyte solution. Makes 400 ml.

Has longer shelf life in unmixed form

WD-35640-74 Replacement HDPE membranes, 5/pack

WD-35640-75 Replacement HDPE membranes, 25/pack

WD-35640-76 Teflon[®] membranes, 25 pk, for harsh applications. Slower response time than HDPE membranes

WD-35640-79 Membrane installation tool. Required for replacement membrane installation

Accessories

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

WD-00653-00 Zero % calibration solution

Request the OAKTON Bulletin # pH D2 and pH D3 for information on our DIN pH/ORP controllers; request Bulletin # CON D2 for information on our DIN conductivity and resistivity controllers

ORDER FROM

PID ANALYZERS, LLC
25 Walpole Park Dr. South
Walpole, MA 02081

In USA or Canada call toll free: 1-800-724-5600 Tel. 508-660-5001; Fax 508-660-5040



Web: <http://www.hnu.com> E-mail: sales@hnu.com