

acniti LLC 1-2-9 Nyoidani Minoh Osaka 562-0011 Japan



## dissolved oxygen controller

Dissolved Oxygen Control System: DO controller for applications that require a high accuracy of dissolved oxygen levels such as aquaculture and water treatment aeration. In combination with the DO controller achieve an optimal environment with energy savings by running the equipment for the minimum time required by the settings.









### dissolved oxygen controller

#### control and analyze high levels of dissolved oxygen

- High quality and accurate DO monitor with control system
- Measures dissolved oxygen levels until 40 PPM
- Dissolved Oxygen monitor with ability to log DO measurement, data can be easily transferred via a USB stick.
- Dissolved Oxygen Control System

#### control on do levels

In the product line of control and monitoring, acniti delivers a DO controller and monitoring system. Acniti also offers a Nanobubble sensor system which approximates the bubble concentration in your process water. The controller and monitoring system is developed to work with any of our nanobubble generators and the oxiti oxygen concentrators. The DO controller is especially important for industries where too much of dissolved oxygen can do harm, for example in fish cultivation, shrimp and koi carps. The cost of energy in aeration applications is a big deal. Often aeration is the highest energy consumer, so running your systems fewer hours means savings, compared to using timers or do manual control.

### operate during set times

The DO controller consists of a DO sensor, a PLC a start stop output for the oxygen concentrator, a start stop output for a small pump if a larger pump in the setup is required a dry contact to start stop the pump is also available. In the DO controller set the DO value, below the set-point the Ultrafine bubble mixer will run until the set-point is achieved. In the PLC, you can set a delay interval of 2 minutes to 16 minutes between starting and stopping the ultrafine bubble mixer to avoid that it turns on and off frequently. The controller can also be used without a DO sensor, without a DO sensor there is a possibility to set a day program and run it in certain hours. The DO controller comes in a wall-mounted enclosure with a door of fiberglass reinforced, non-saturated polyester. Protection category IP 56 or IP 66. High stability thanks to use of fiber-glass reinforced plastic. The DO sensor is a membrane covered galvanic oxygen probe with built-in transmitter. The probe is connected to a DC supply and draws a current of between 4 and 20 mA corresponding to the oxygen concentration.

### monitor oxugen levels

For research and historic data, the DO controller can log data at a set interval time. The shortest interval is 1 second, the longest interval is over 2 hours. Transfer data easily to a USB flash drive by simply inserting the stick into the PLC. The unit has a capability of storing 10,000 measurement, when the maximum number of measurements is reached the oldest data entry will be overwritten.



## do-controller

	Description	Metric	<b>Imperial</b>
1	Model name	DO-controller	DO-controller
2	Model number	tool_sensor-do- controller_sensor	tool_sensor-do- controller_sensor
	Ambient	Metric	Imperial
3	Ambient temperature maximum	55 °C	131 °F
4	Relative humidity minimum	10 %	10 %
5	Relative humidity maximum	95 %	95 %
	Electrical	Metric	Imperial
6	Unit phase Ø voltage	100 - 240 VAC	100 - 240 VAC
7	Unit power consumption	30 watts	30 watts
8	Control	PLC controller with timer and DO sensor input	PLC controller with timer and DO sensor input
	Dimensions & weight	Metric	Imperial
9	Dim. (w) x (d) x (h)	200 x 190 x 340 mm	7.9 x 7.5 x 13.4 inch
10	weight	5.5 Kg	12.1 lbs.
11	Shipping dim. (w)x(d)x(h)	30 x 40 x 30 cm	12 x 16 x 12 inch
12	Shipping weight	7.5 Kg	17 lbs.
	Remarks		
13	Other remarks	Weight excluding sensor only the control box	
		✓ Measurement of DO levels from 0 - 40 PPM	



# polaris handheld dissolved oxygen sensor

	Description	Metric	Imperial
1	Model name	polaris handheld dissolved oxygen sensor	polaris handheld dissolved oxygen sensor
2	Model number	DO_sensor_Polaris	DO_sensor_Polaris