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## Gravity: Analog Dissolved Oxygen Sensor / Meter Kit For Arduino

SKU:SEN0237-A



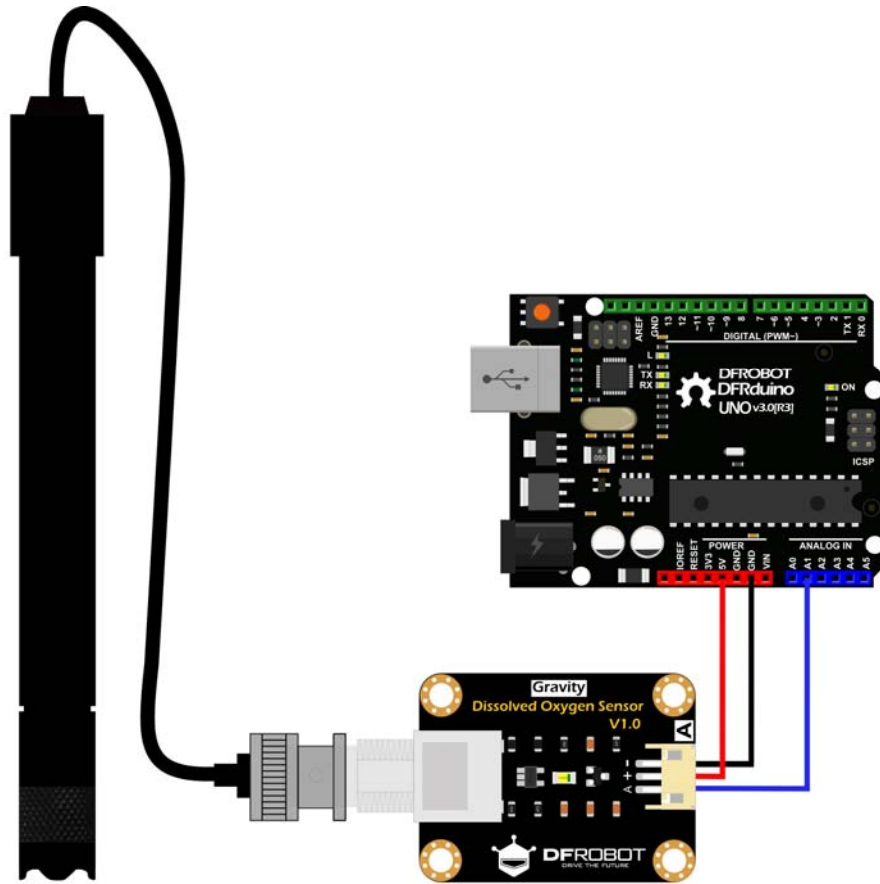
### *INTRODUCTION*

This is a dissolved oxygen sensor kit, which is compatible with Arduino microcontrollers. This product is used to measure the dissolved oxygen in water, to reflect the water quality. It is widely applied in many water quality applications, such as aquaculture, environment monitoring, natural science and so on.

There's an old saying regarding to keeping fish, "Good fish deserves good water". Good water quality is very important to the aquatic organisms. Dissolved oxygen is one of the important parameters to reflect the water quality. Low dissolved oxygen in water will lead to difficulty in breathing for aquatic organisms, which may threaten their lives. We launched a new opensource dissolved oxygen sensor kit, which is compatible with Arduino. This product is used to measure the dissolved oxygen in water, to reflect the water quality. This sensor kit helps you quickly to build your own dissolved oxygen detector.

The probe is a galvanic probe, no need of polarization time, and stay available at any time. The filling solution and membrane cap is replaceable, leading to the low maintenance cost. The signal converter board is plug and play, and has the good compatibility. It can be easily integrated to any control or detecting system.

This product is easy to use with high compatibility. With open-source code and detailed tutorial provided, this product is very suitable for your water projects in detecting the dissolved oxygen concentration for the aquatic organisms.



Arduino Dissolved Oxygen (DO) Sensor Connection Diagram

**SPECIAL INSTRUCTION:**

Due to the International Import and Export Policy, the corrosive solution (acid & alkaline solution) is not allowed to deliver by air transportation. The filling solution is not included in the kit. You have to purchase it from local shop or deploy the solution by yourself, refer to Wiki FAQ-Q4. It can't work without filling solution! Please be caution with the purchase!

**Note:**

1. The filling solution is 0.5 mol/L NaOH solution. You need to pour it in the membrane cap before use. Please be caution with the operation because the solution is corrosive. Please wear gloves! If the solution accidentally drops onto the skin, wash your skin with plenty of water immediately.
2. The oxygen permeable membrane in the membrane cap is sensitive and fragile. Be caution when handling with it. Fingernail and other sharp objects should be avoided.
3. The DO sensor will consume a little oxygen during the measurement. Please gently stir the solution and let the oxygen to be distributed evenly in the water.



## *FEATURES*

### **Dissolved Oxygen Probe :**

1. Galvanic probe, no need polarization time
2. Filling solution and membrane cap is replaceable, low maintenance cost

### **Signal Converter Board :**

1. 3.3~5.5V wide-range power supply, compatible with most Arduino microcontroller
2. 0~3.0V analog output, compatible with all microcontrollers with ADC function.
3. Gravity interface, plug and play, easy to use

## *SPECIFICATION*

### **Dissolved Oxygen Probe**

- Type: Galvanic Probe
- Detection Range: 0~20mg/L
- Response Time: Up to 98% full response, within 90 seconds (25°C)
- Pressure Range: 0~50PSI
- Electrode Service Life: 1 year (normal use)
- Maintenance Period: Membrane Cap Replacement Period: 1~2 months (in muddy water); 4~5 months (in clean water) Filling Solution Replacement Period: Once every month
- Cable Length: 2 meters
- Probe Connector: BNC **Signal Converter Board**
- Operating Voltage: 3.3~5.5V
- Output Signal: 0~3.0V
- Cable Connector: BNC
- Signal Connector: Gravity Analog Interface (PH2.0-3P)
- Dimension: 42mm \* 32mm

## *SHIPPING LIST*

- Galvanic Dissolved Oxygen Probe with Membrane Cap x1
- Spare Membrane Cap x1
- Signal Converter Board x1
- Gravity Analog Sensor Cable x1

- Waterproof Gasket x2
- Screw Cap for BNC Connector x1
- Plastic Dropper x2

