DFR0300-H Gravity Series Analog Sensor/Meter

Product Overview
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For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

DFRobot DFR0300-H Gravity Series Analog Sensor/Meter is used to measure high electrical conductivity liquid, such as seawater, or concentrated brine, with a range up to 100ms/cm. The DFR0300-H analog sensor/meter supports 3V to 5V wide voltage input and is compatible with 5V and 3.3V main control boards. This sensor/meter features an excitation source that adopts an AC signal, which reduces the polarization effect, improves the precision, and prolongs the life of the probe. The software library uses a single-point calibration method and can automatically identify standard buffer solutions. This sensor can be combined with the main control board and the software library to create an electrical conductivity meter. This DFR0300-H sensor/meter is suitable for the water quality application of mariculture, including marine fisheries and marine aquariums.
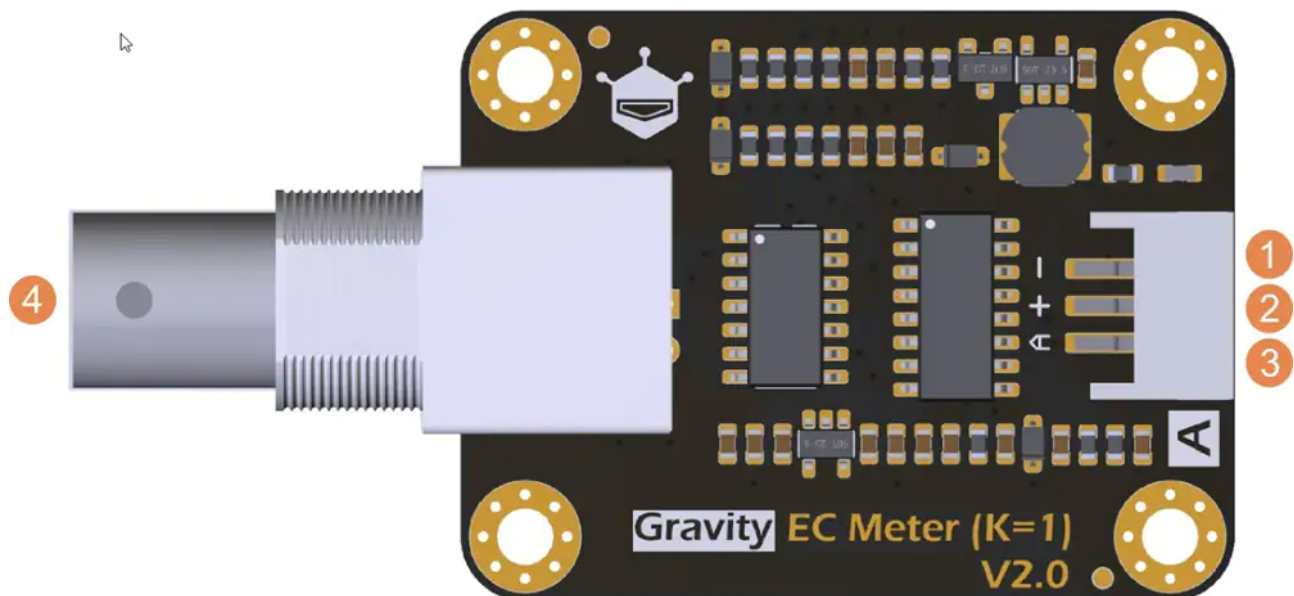
Features

- 3V to 5V wide voltage input, 0V to 3.2V output voltage, which is compatible with 5V and 3.3V main board
- AC excitation source, effectively reduce polarization
- Gravity connector and BNC connector, plug and play, no welding
- Software library supports single-point calibration and automatically identifies standard buffer solution, integrates temperature compensation algorithm
- Uniform size and connector, convenient for the design of mechanical structures

Specifications

- Signal conversion board:
  - 3V to 5V supply voltage
  - 0V to 3.2V output voltage
  - BNC probe connector
  - PH2.0 to 3Pin signal connector
  - ±5% F.S measurement accuracy
  - 42mm x 32mm/1.65" x 1.26" board size
- Electrical conductivity probe:
  - Laboratory-grade probe type
  - 10 ± 2 cell constant
  - 10ms/cm to 100ms/cm support detection range
  - 0°C to 40°C temperature range
  - >0.5 years probe life (Actual life is related to the frequency of use and scene)
  - 100cm ± 2cm cable length

Board Overview

Mouser Part Number

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To learn more, visit https://www.mouser.com/new/dfrobot/dfrobot-analog-sensor/