

Part Number: SEN0114

Description: Gravity: Analog Soil Moisture Sensor For Arduino

INTRODUCTION

A soil moisture sensor can read the amount of moisture present in the soil surrounding it. It's an ideal for monitoring an urban garden, or your pet plant's water level. This is a must have component for a <u>IOT garden / Agriculture</u>!

The new soil moisture sensor uses Immersion Gold which protects the nickel from oxidation. Electroless nickel immersion gold (ENIG) has several advantages over more conventional (and cheaper) surface platings such as HASL (solder), including excellent surface planarity (particularly helpful for <u>PCB</u>'s with large BGA packages), good oxidation resistance, and usability for untreated contact surfaces such as membrane switches and contact points.

This soil moisture arduino sensor uses the two probes to pass current through the soil, and then it reads that resistance to get the moisture level. More water makes the soil conduct electricity more easily (less resistance), while dry soil conducts electricity poorly (more resistance). This sensor will be helpful to remind you to water your indoor plants or to monitor the soil moisture in your garden.

To ease the difficult of using this sensor, a <u>Gravity</u> Interface is adapted to allow plug & play. The <u>Arduino IO expansion shield</u> is the best match for this sound senor connecting to your <u>Arduino</u>. As this sensor can work at 3.3V which make it compatible with <u>Raspberry Pi</u>, <u>intel edison</u>, joule and curie.

Note: If you are going to place the sensor to very humid soil, that would make it very easy to get the sensor surface erosion within several days, hence we suggest to use this one <u>Analog</u> <u>Capacitive Soil Moisture Sensor- Corrosion Resistant</u> instead.



SPECIFICATION

- Power supply: 3.3v or 5v
- Output voltage signal: 0~4.2v
- Current: 35mA
- Pin definition:
- Analog output(Blue wire)
- GND(Black wire)
- Power(Red wire)
- Size: 60x20x5mm(2.36x0.79x0.2")
- Surface finish:Immersion Gold

SHIPPING LIST

- Moisture sensor x1
- Analog Sensor Cable x1