

## Z 6379 Soil moisture sensor

This is a summary of the soil moisture sensor can be used to detect moisture, when the soil is dry, the sensor output analog value will decrease, and vice versa will increase. Using this sensor make an automatic watering device, when you are not at home or over a long period of time watering, it can sense whether your plant is thirsty. Prevent the plants to will know that this is caused by lack of water. With the Arduino controller to make your plants more comfortable, the garden is more intelligent.

Soil moisture sensor module, it is not a profound things, but if you need to use in the project to check for soil moisture, it will be your best choice.

By reading the current between the two electrodes changes, the sensor using two probes, the current through the soil, and then reads the resulting moisture content of the resistor. More in the case of water, the soil more easily power (decrease resistance), and dry soil poor electrical conductivity (resistance).

The sensor surface made of metal processing, can extend its life. Insert it into the soil, and then read it using the AD converter. With its help, the plant will remind you: I want to drink, please give me a little water to drink me.

### Technical Specifications

Supply voltage: 3.3V or 5V

Operating current: less than 20mA

Output voltage :0-2 .3 V [2.3V is completely immersed in water voltage value], 5V power supply, the greater the humidity, the greater the output voltage.

Sensor Type: Analog Output

Packing: static bag sealed

Interface definition: a foot signal, two legs, a three prong power is

Life: about 1 year (gold plated treatment, enhanced electrical conductivity and corrosion resistance)

Module size: 20X60mm

Arduino test code:

Test code:

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# Example code for the moisture sensor

# Connect the sensor to the A0 (Analog 0) pin on the Arduino board

```
# The sensor value description
# 0 ~ 300 dry soil
# 300 ~ 700 humid soil
# 700 ~ 950 in water
* /

void setup () {

    Serial.begin (57600);

}

void loop () {

    Serial.print ("Moisture Sensor Value:");
    Serial.println (analogRead (0));
    delay (100);

}
```