

INTERFACE SOIL AND MOISTURE SENSOR WITH ARDUINO UNO

OBJECTIVES

- Interface soil moisture sensor with NodeMCU
- View the sensor readings of the soil moisture sensor

THINGS

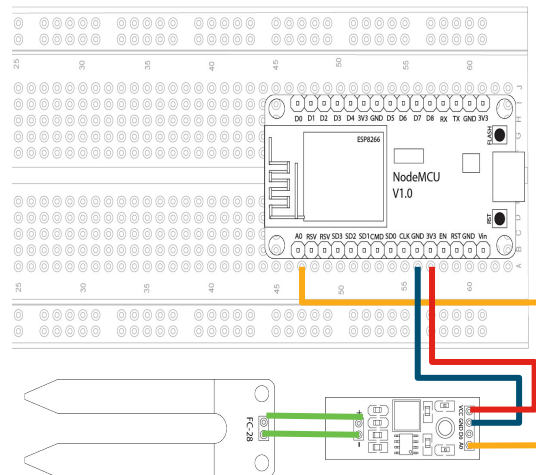
1. NodeMCU board (quantity: 1 no.)
2. Micro USB cable A to B (quantity: 1 no.)
3. Breadboard (quantity: 1 no.)
4. Soil moisture sensor (quantity: 1 no.)
5. Jumper wire – male to female (quantity: 3 no.)
6. Arduino IDE on your computer

LET'S BEGIN!

The **Moisture sensor** is used to measure the water content(moisture) of soil.When the soil is having water shortage,the module output is at high level, else the output is at low level.This sensor reminds the user to water their plants and also monitors the moisture content of soil.It has been widely used in agriculture,land irrigation and botanical gardening.

The Soil Moisture Sensor uses capacitance to measure dielectric permittivity of the surrounding medium. In soil, dielectric permittivity is a function of the water content. The sensor creates a voltage proportional to the dielectric permittivity, and therefore the water content of the soil.

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SOIL MOISTURE SENSOR	VCC	GND	A0
NodeMCU	3V3	GND	A0

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TA DA!



```
COM5
LOW MOISTURE! - Please water the soil
Moisture OK
```

Autoscroll Show timestamp No line ending 115200 baud Clear output

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FINAL CODE

```
void setup()
{
  Serial.begin(115200);
}

void loop()
{
  Serial.println(analogRead(A0));
  delay(100);
}
```