# MAKER SOIL MOISTURE SENSOR

## Datasheet


Rev 1.0
January 2022

# 1. BOARD LAYOUT & FUNCTION

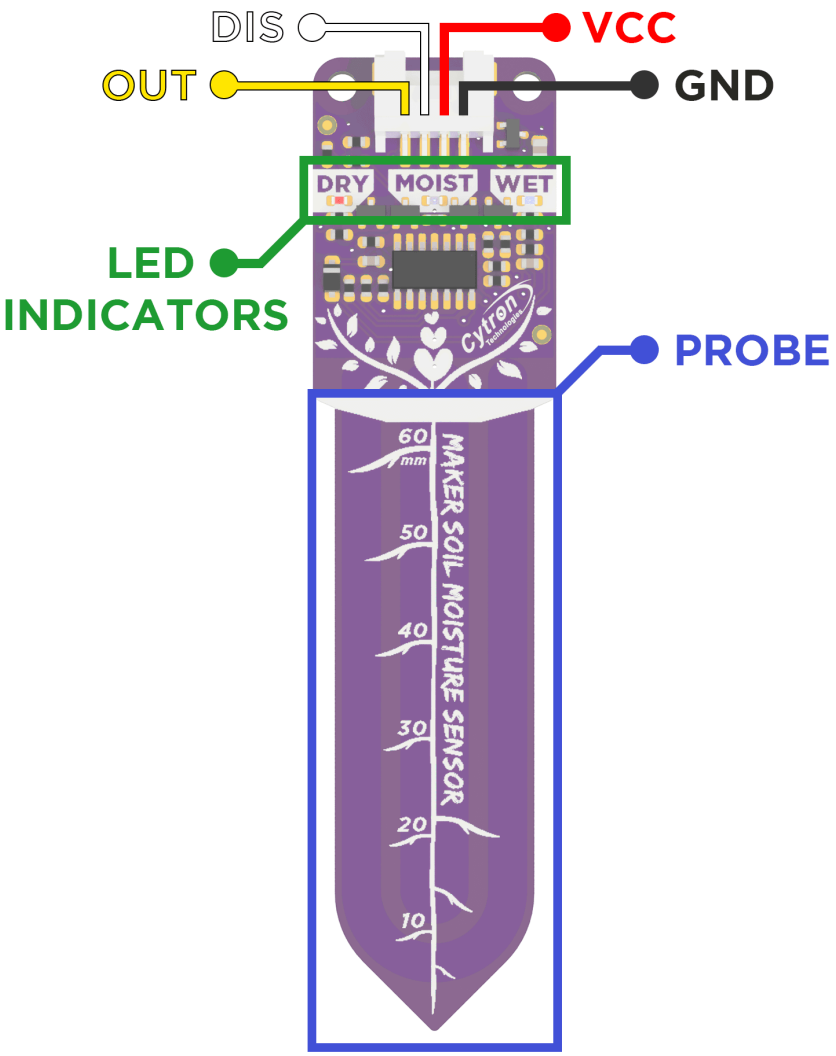


*Figure 1: MAKER-SOIL-MOISTURE Board Functions*

| Function | Description |
|---|---|
| **Grove Port** | • GND : Ground.<br>• VCC : Power input for the sensor.<br>• DIS : Disable pin. HIGH signal disables the sensor.<br>• OUT : Analog Output. Higher voltage = less moisture. |
| **LED Indicators** | Turns on depending on the value of the output. (See Table 2) |
| **Probe** | Capacitive probe used to detect the presence of water in soil. |

*Table 1: MAKER-SOIL-MOISTURE Board Functions*

 

## 2. SPECIFICATIONS

| No | Parameters | | Min | Max | Unit |
|---|---|---|---|---|---|
| 1 | VCC Voltage (VCC) | | 2.5 | 7.0 | VDC |
| 2 | Analog Output Voltage (OUT) | | 1.0 | 5.2 | V |
| 3 | Disable Pin Threshold Voltage (DIS) | | VCC - 0.8 | - | V |
| 4 | LED Turn On Output Voltage @VCC = 3.3V | Blue (WET) | 1.4 | 1.8 | V |
| | | Green (MOIST) | 1.8 | 2.1 | V |
| | | Red (DRY) | 2.1 | 2.3 | V |
| 5 | LED Turn On Output Voltage @VCC = 5.0V | Blue (WET) | 2.3 | 2.7 | V |
| | | Green (MOIST) | 2.7 | 3.1 | V |
| | | Red (DRY) | 3.1 | 3.6 | V |
| 6 | Current Consumption | VCC = 3.3V | 5.4 | 5.6 | mA |
| | | VCC = 5.0V | 3.6 | 3.7 | mA |
| 7 | Current Consumption (when Disabled) | VCC = 3.3V | 80 | 140 | µA |
| | | VCC = 5.0V | 140 | 180 | µA |

*Table 2: MAKER-SOIL-MOISTURE Absolute Ratings*

## 3. DIMENSION

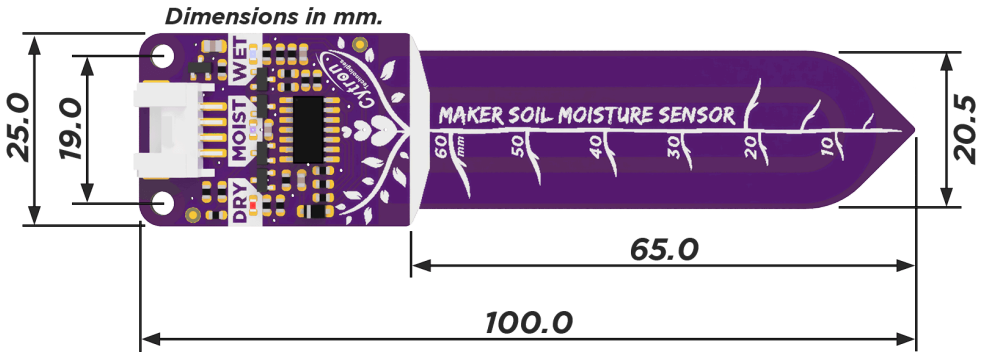


*Figure 2: MAKER-SOIL-MOISTURE Dimension*

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