

Soil temperature and humidity sensor

user manual



Product overview

Soil sensor. Please kindly read the manual before using the sensor, it can help you with perfect functions and services

The soil sensor is designed with a probe which is made of austenitic 304 stainless steel which has the features of good corrosion resistance and toughness. The mobile APP can view real time moisture data, and can work with our smart garden timer to realize automatic intelligent irrigation.

Product features

- 1、 Monitor real time soil moisture and temperature
- 2、 Mobile APP to view the historical record curve
- 3、 Linkage with our smart garden timer to realize automatic irrigation
- 4、 Powered by three AA batteries, low power consumption and strong battery life
- 5、 Using highly sensitive probe, fast response, stable and reliable, accurate measurement
- 6、 Quick plug in and easy to measure

Application scenes

This product is suitable for use in a wide range of horticultural settings, accurately meeting the soil temperature and humidity monitoring needs of all types of planting sites, and can be used to care for a wide range of plants and flowers. Examples include farmland growth, greenhouse planting, orchards and nurseries, gardens and lawns, potted plants, and home gardening.

Product parameters

Parameters	Parameter details
Power supply	3 pcs 1.5V AA batteries
Battery lifetime	Battery of 2000mAh can last for over 1 year
Moisture range	0~100%
Moisture accuracy	0~50%(±3%) , 50%~100%(±5%)
Temperature range	0°C~60°C
Temperature range	±1°C
Connected protocol	WIFI 2.400~2.4835Ghz IEEE802.11b/g/n
App response time	1、when the humidity value changes more than 8%, detect every 20 seconds, temperature value changes more than 2 °C, APP data reported immediately 2、When the data volatility is small or no change, APP will not report, only report data every 30 minutes
Protection level	IP67
Size	Length: 180mm width: 48mm probe length: 65mm

Note: These are the details of all measurable parameters, please take actual sensor data as final standard

App download: Tuya or Smartlife



(QR code for Tuya App)

Add devices to App:

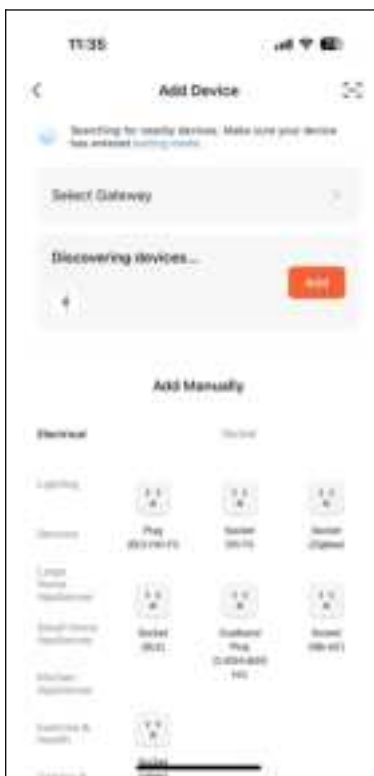
1、 Press button for 5 sec on soil sensor, switch to connecting status



2、 Confirm that the sensor is in pairing mode (indicator light flashing)



3、 Enter the Add Device interface and click “Add”.



4、 when the sensor is loaded click “Finish” at the button, that is, add successful



Product Notes

- 1、 Install the sensor, please insert the probe vertically into the soil
- 2、 The probe should be in full touch with the soil and compacted to ensure the accuracy of the data.
- 3、 The soil sensor only tests soil and mud, and is not applicable to flour, prickly pear, organic crumbs, liquid particles, etc.
- 4、 When the soil sensor is installed, please try to place the probe into the soil as a whole.
- 5、 The depth and tightness of the probe between soil will directly affect the value and lead to errors. In order to improve the accuracy, please use the method of multi-point testing to obtain the average value.
- 6、 When using, be careful not to touch the stone, and do not use too much force to push the probe, otherwise the probe will be easily damaged.
- 7、 After the measurement, the probe must be cleaned with paper or cloth in time
- 8、 When the sensor is not in use and stored, do not rub or scratch the probe directly with your hands, keep it clean and dry, and away from magnetic objects and other metal objects.
- 9、 Please follow the waste battery recycling process for battery recycling to avoid environmental pollution.

Test Considerations

- 1、How much the moisture is the best: The dry, sandy and fertile soil is not good for accuracy data. In the dry or fertile soil, splash some water around the sensor and wait for half hour to test. 40%-70% moisture is the best.
- 2、 Different data for each test: The depth, density, humidity and other values in each layer of soil are different, and they will directly affect the data accuracy. It is necessary to perform multiple measurements at different locations and take the average value. When measuring, it needs to be at the same level of depth, and the soil around the probe must be evenly distributed and fully compacted and in close contact with the probe surface. Before each remeasurement, thoroughly clean the probe with a paper or abrasive cloth.
- 3、 The actual wireless communication distance and actual usage is affected by installation spot from WIFI router: indoor ≤ 10 metres, outdoor ≤ 20 metres

Warranty Card

Product name _____

Product model _____

Serial number _____

Date of manufacture _____

Client's name _____

Contact number _____

Customer address _____

Warranty content _____

After sales: _____ Customer signature _____

☐ Satisfy ☐ Dissatisfied

Warranty and After Sales:

- 1.The warranty period of the host circuit is one year, and the warranty period of the probe is half a year.
- 2.During the warranty period, if the fault occurs under normal use in accordance with the instruction manual (judged by the company's official staff), it will be repaired free of charge.
- 3.During the warranty period, if one of the following situations occurs, it must be repaired as a fee:
 - ① This warranty and valid proof of purchase cannot be provided.
 - ② Malfunctions and damages caused by misuse and improper repairs by users
 - ③ Damage caused by transportation, handling, or dropping after receiving the product.
 - ④ Damage caused by other unavoidable bad factors.
 - ⑤ Malfunction or damage caused by equipment soaking.
- 4.Only the above warranties are made, and no other express or implied warranties are made (including implied warranties of merchantability, reasonableness and adaptability for a specific application and application, etc.), whether in the contract, negligence On, or otherwise, the company is not responsible for any special, incidental or consequential damages

FCC Statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

To satisfy FCC RF exposure requirements, a separation distance of 20cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.