

WIRELESS SOIL MOISTURE SENSOR

SMH-P

DESCRIPTION

The **SMH-P** wireless sensor designed to indicate soil moisture of home plants. The sensor determines plant available water and sends you a message about this to your smartphone or PC via the Internet by the **Pushsafer** service.

There are three states of the sensor, depending on soil moisture:

- Soil moisture is below normal;
- Soil moisture is normal;
- Soil moisture is above normal.



INSTALLATION AND SETUP OF THE SENSOR

You will need a 5V DC power supply to turn the sensor on. A smartphone charger or portable charger, such as POWER BANK USB 5V/1.2A, 18650, is suitable for this purpose.

1. Install the sensor in the soil of the plant at a predetermined depth.
2. Create an account on the service <https://www.pushsafer.com/>. Install the **Pushsafer** app on your smartphone or PC. Copy your "**Your private key**".
3. Connect power to the sensor. After a few seconds, the sensor indicator will start flashing - the sensor is ready for setup.
4. To setup the sensor, connect to the Wi-Fi access point of the sensor "**SMH-P**" (password: "**11111111**") using a smartphone, tablet or laptop. Then open the web page "**192.168.4.1**" using a browser. You will see the **Green Sensors** settings window on a display.



Green Sensors

SMH-P Sensor

Parameter	Value
Available water	10

Sensor setup:

Plant_Name:

Min:

Max:

Time, minutes:

WiFi setup:

SSID:

Password:

PushsaferKey:

5. **Available water** displayed at the top.
6. Next is the **Sensor setup** section. In the **Plant Name** field - you can write down the name of the plant (example: "Cactus"). The **Min** - the minimum value below which the sensor transmits the message "Soil moisture below normal". The **Max** - the maximum value above which the sensor transmits the message "Soil moisture above normal". If the value is in the range above **Min** and below **Max**, then the sensor transmits the message "Soil Moisture is OK". The sensor sends a message only when its state changes.
7. The **Time** value determines the frequency of measurements. The optimal is one time in 60 minutes.
8. Enter the required parameters. Click the **Submit** button to save changes.
9. Next is the **Wi-Fi setup** section. In the **SSID** and **Password** fields, enter the name and password of your home Wi-Fi network. In the **PushsaferKey** field, copy your "Your private key". Click the **Submit** button to save changes.

10. The sensor will automatically enter to the operating mode within 3 minutes after submit changes.
11. **! Important:** If you do not perform any actions to change its parameters for 3 minutes during sensor setup, the sensor will automatically turn off. In this case, to resume its setup, it is necessary to turn off the power of the sensor, and then turn it on again and go to step 4.

CHANGE SENSOR SETUP

! Important: *The sensor switches from operating mode to setup mode if there is no connection to the Wi-Fi network. A blinking sensor LED indicates that it is in setup mode.*

1. If you need to change the sensor setup again, follow these steps in sequence:
2. Power off the sensor.
3. Turn off your Wi-Fi router for a short time.
4. Turn on the power of the sensor and the sensor will enter the setting mode (the indicator of the sensor will blink).
5. Turn on your Wi-Fi router.
6. Make the necessary sensor setup.
7. The sensor will automatically enter to the operating mode within 3 minutes after submit changes.

SENSOR SPECIFICATIONS

- Supply voltage: DC 5V
- Current consumption: 500 mA/year
- Wi-Fi: 802.11b/g/n
- Temperature Range: 0 ÷ +50 °C
- Controller case dimensions: 36x27x15mm
- Sensor body dimensions: 60x24x14mm
- Sensor cable length: 60 cm*

* is possible change on request