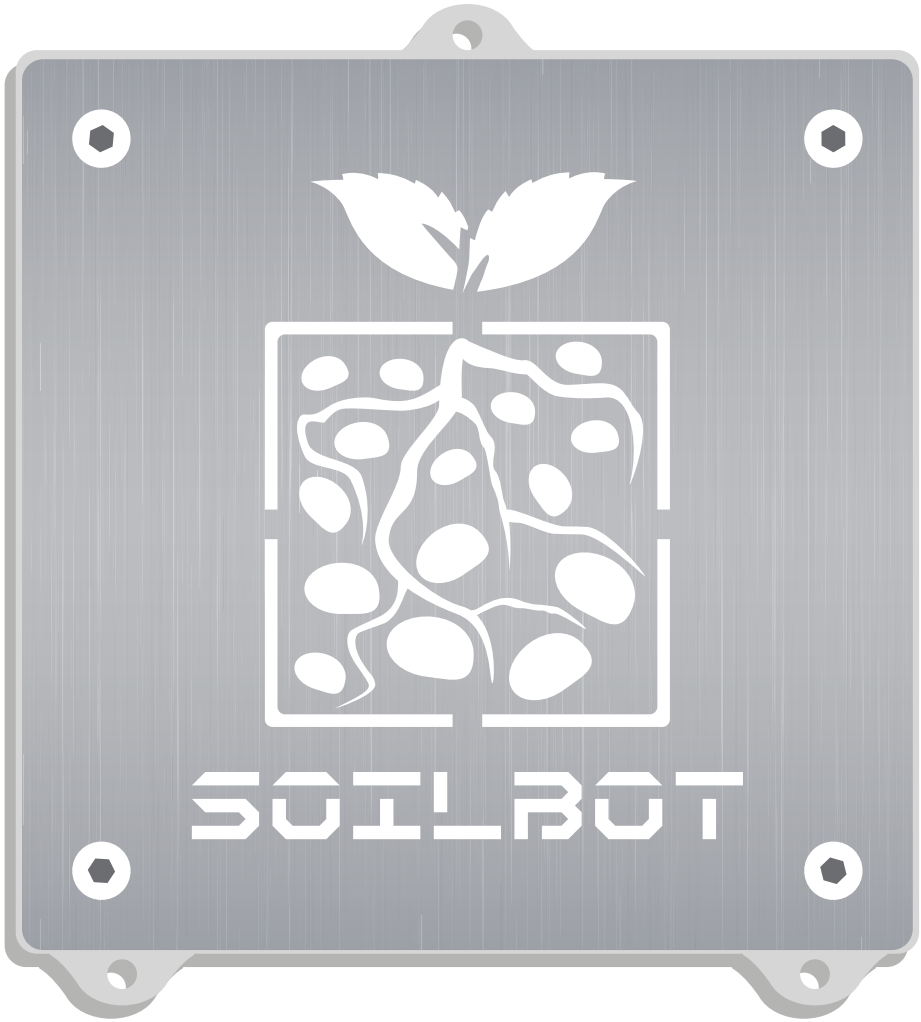
OPENGROW.

INSTALLATION MANUAL



SoilBot

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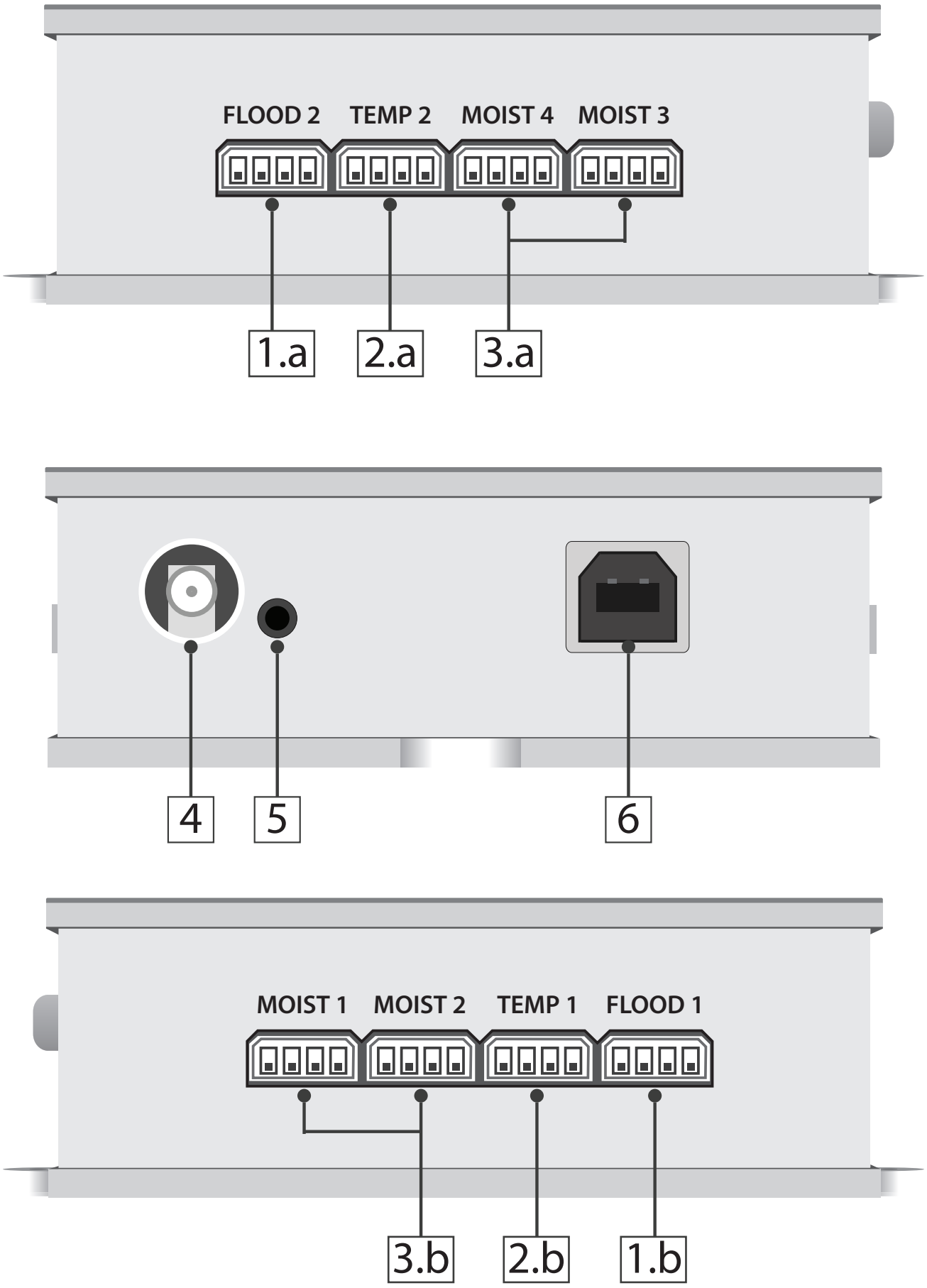
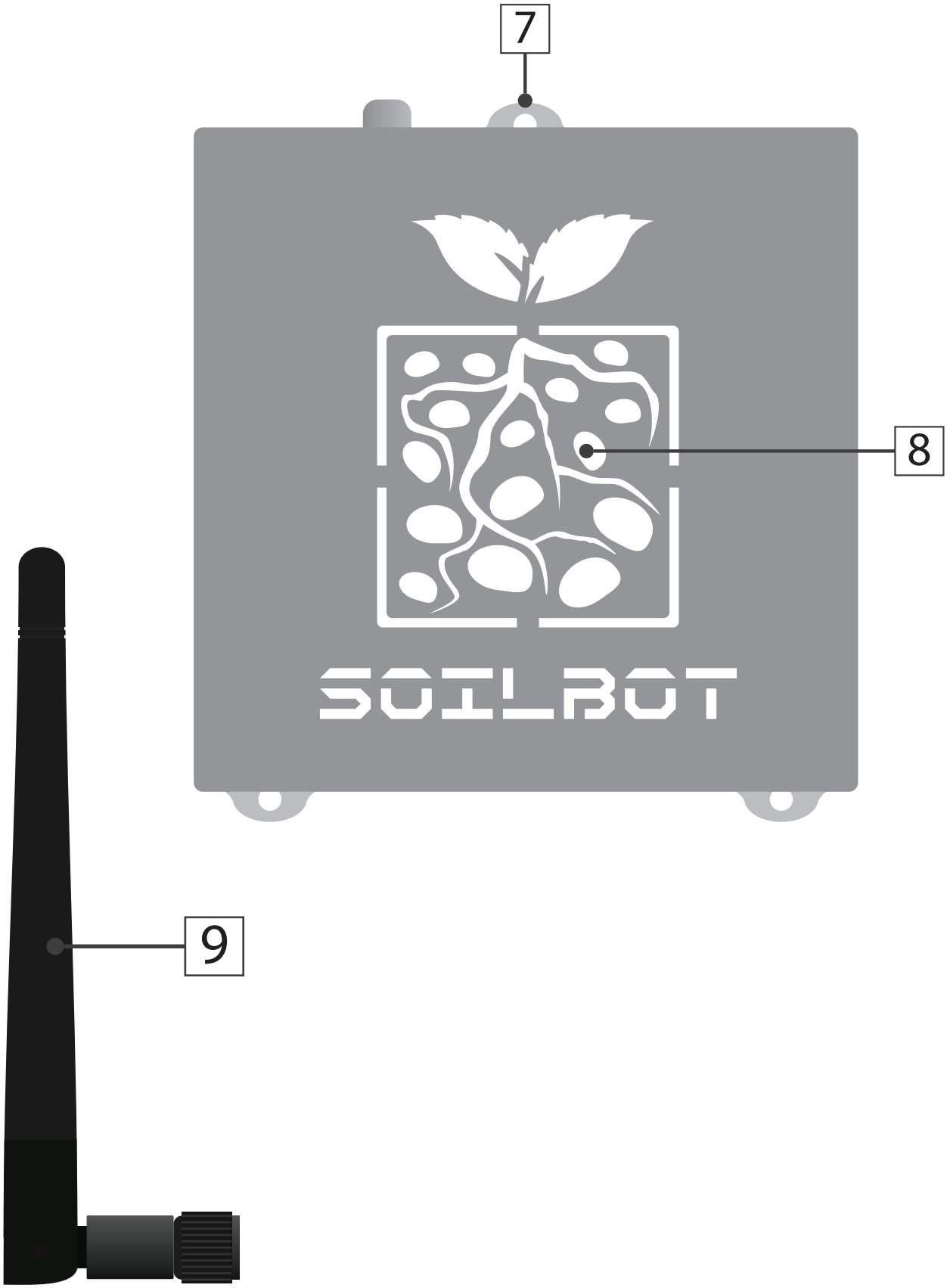
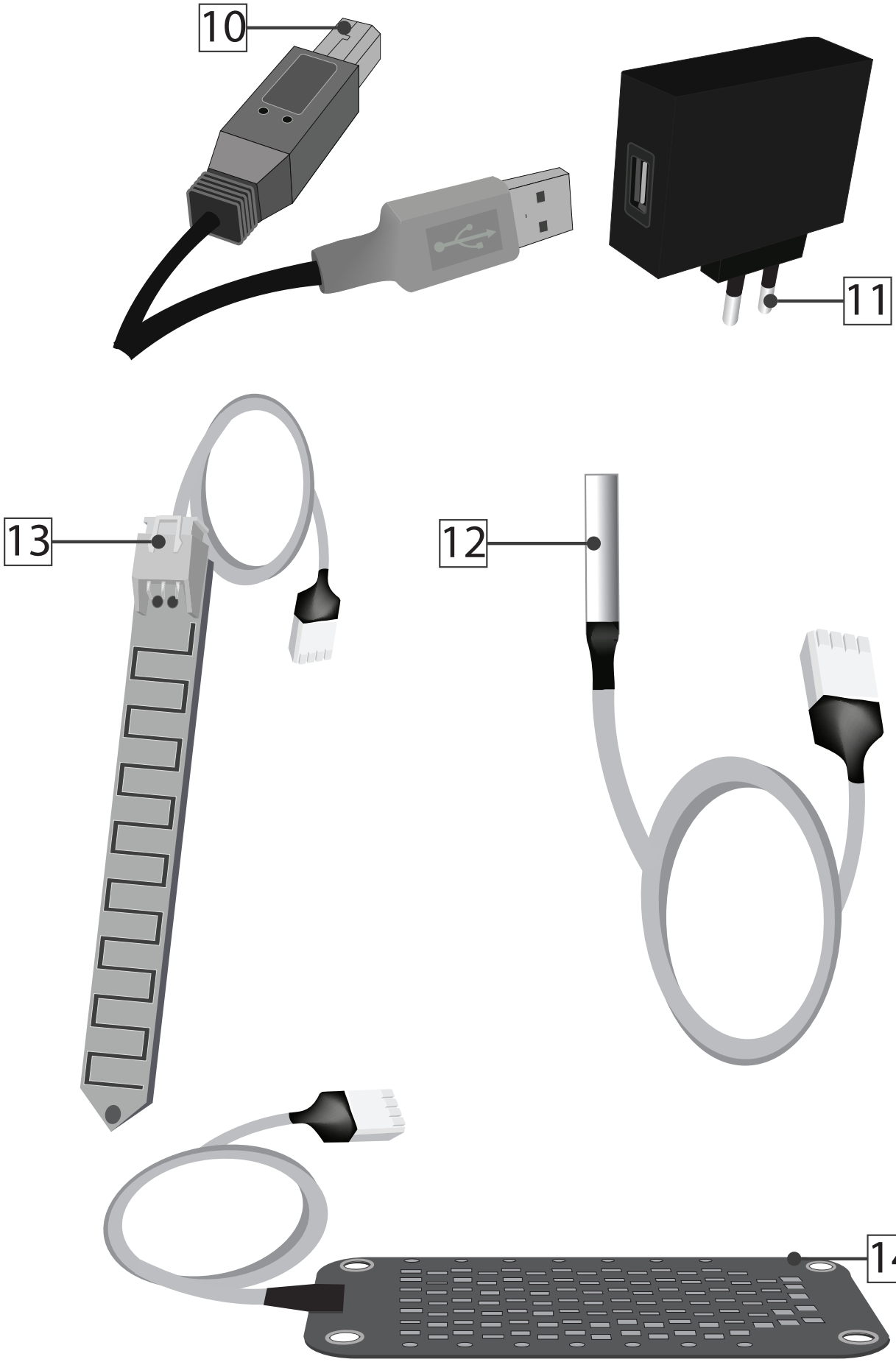

FLOOD 2
TEMP 2
MOIST 4
MOIST 3
1.a
2.a
3.a
4
5
6
MOIST 1
MOIST 2
TEMP 1
FLOOD 1
3.b
2.b
1.b


7
8
9
SOILBOT


10
11
13
12
14

1.a/b Flood detector outlet

2.a/b Soil temperature sensor outlet

3.a/b Soil moisture sensor outlet

4 RF communications antenna outlet

5 Module reset button

6 Type-B USB power supply and Firmware update outlet

7 Perforations for vertical mounting

8 Status signal display

9 RF communications antenna

10 USB module connector

11 $220V_{AC}$ /$12V_{DC}$ transformer

12 Soil temperature sensor

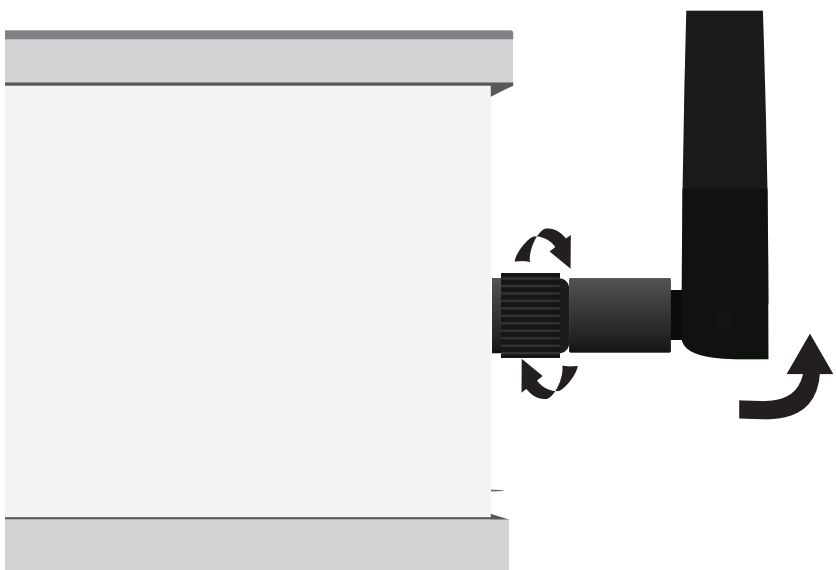
13 Resistive soil moisture sensor

14 Flood detector

INSTALLATION

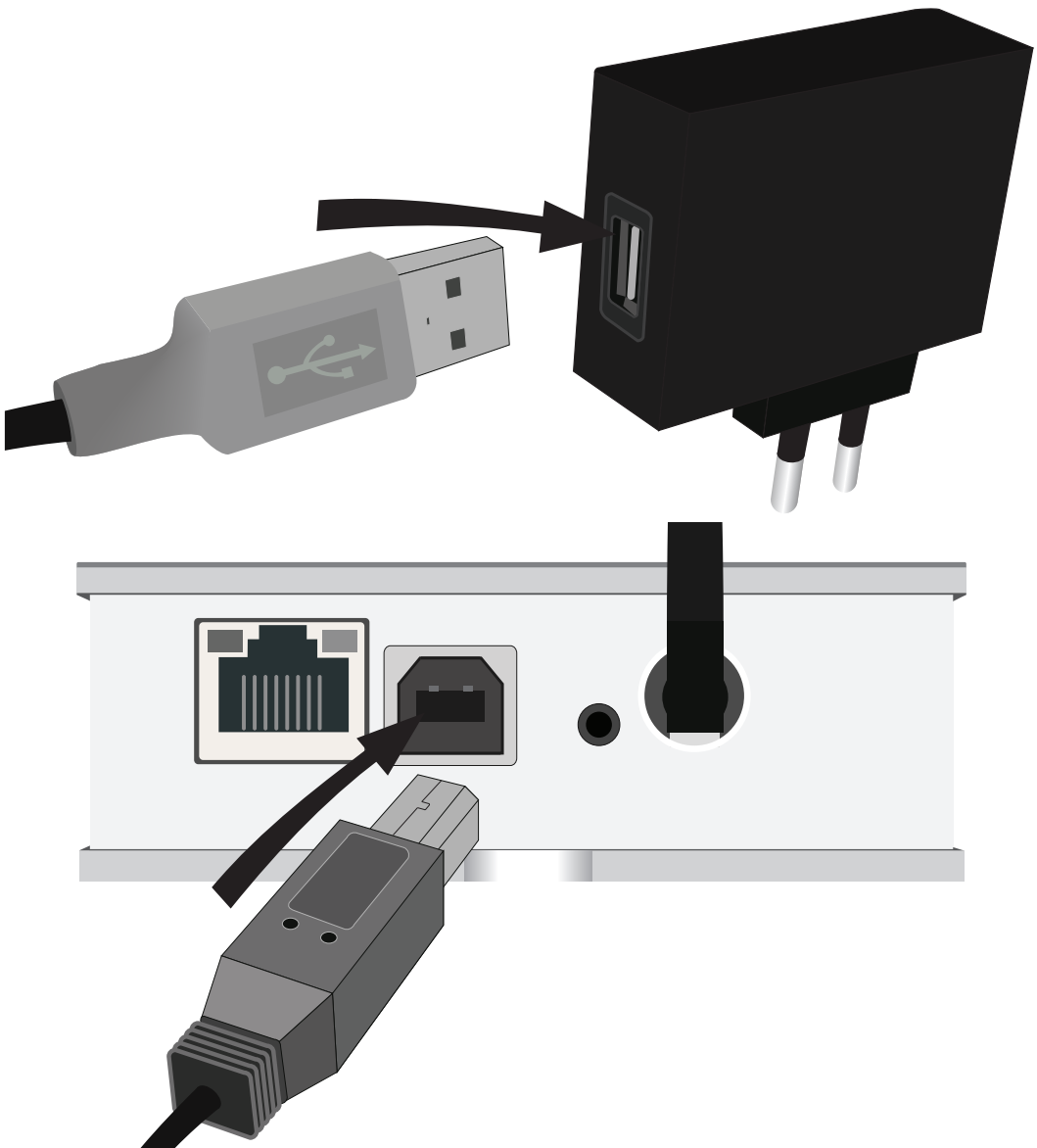
Peripherals connection

Screw the communication antenna (10) into the module outlet (6). For correct communication, turn the antenna in order to position it vertically according to the direction of the module.

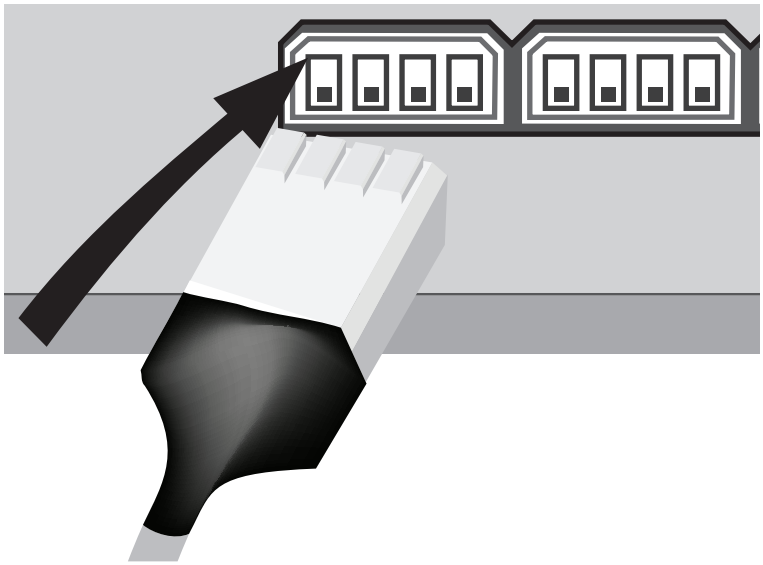


Place the module on a firm surface, far from flood-prone areas. It is recommended that the module be mounted on a wall in order to more easily handle the sensor wires.

Once the module has been mounted, connect one end of the USB cable to the 230VAC / 5VDC transformer and the other end to the module's type-B USB outlet. Connect the transformer to a 230VAC electrical outlet.



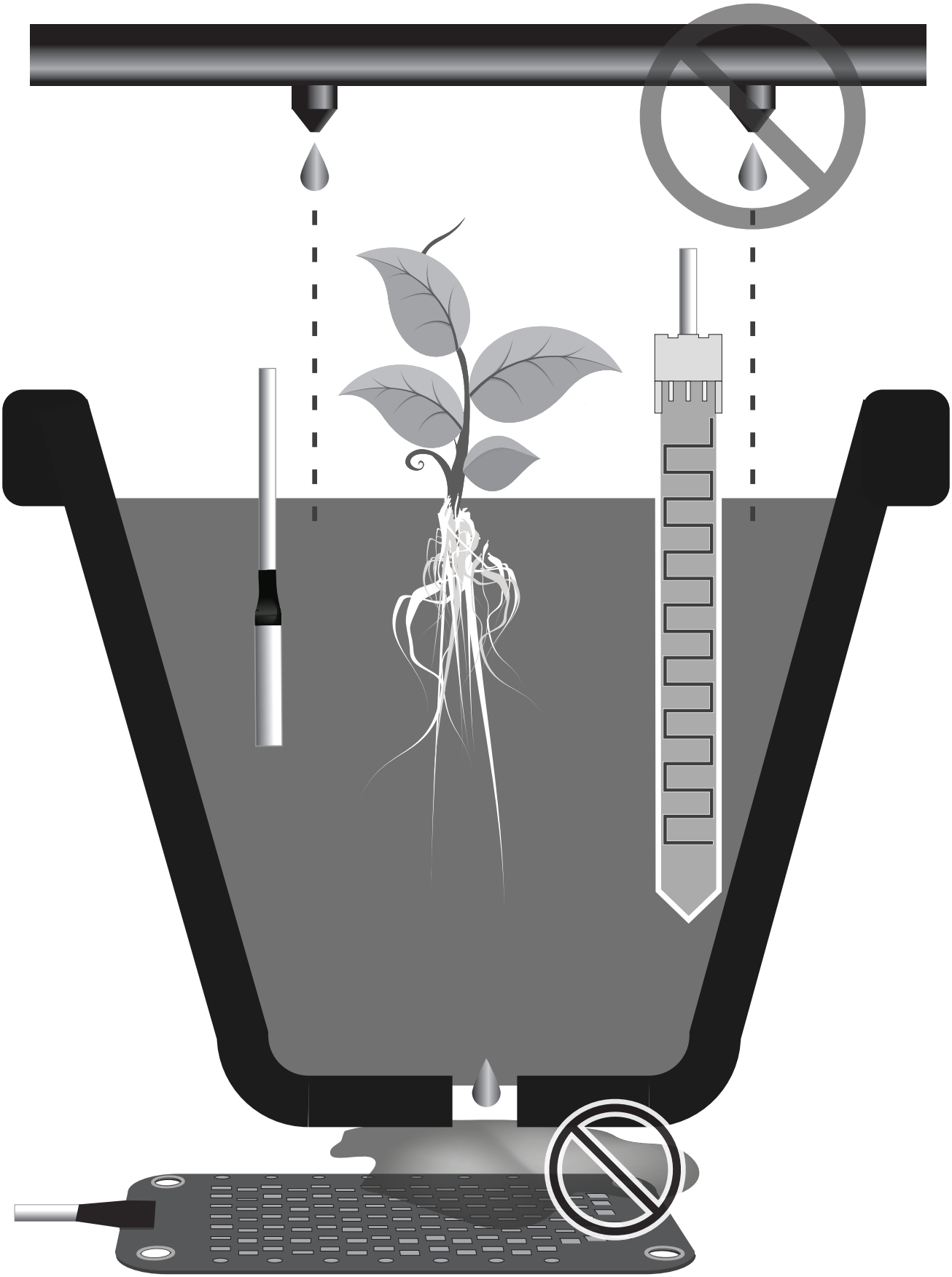
Connect the flood detector (14), the soil temperature sensor (12) and the soil moisture sensors (13) respectively, to the module outlets (1, 2, 3).



Introduce the temperature sensor two centimetres deep in the soil and spike the moisture sensors in the soil, leaving the tip two centimetres above the soil surface.

In order to avoid incorrect calculations, place the moisture sensor far from the irrigation source.

Lastly, place the flood detector in the soil near the pots, avoiding its exposure to the excess water drained from irrigation.



The moisture sensors for substrate and flood detectors have resistive technology and are vulnerable to corrosion caused by electrolysis.

Within the measure possible, maintain the flood detectors dry. Do not forget to dry them again once they have been exposed to water.

Both moisture sensors and flood detectors are replaceable. If your sensors have been greatly affected by corrosion, contact our technical support for more information.

Position the soil moisture sensors in different areas or pots. Use the sensors to monitor and control different crops.

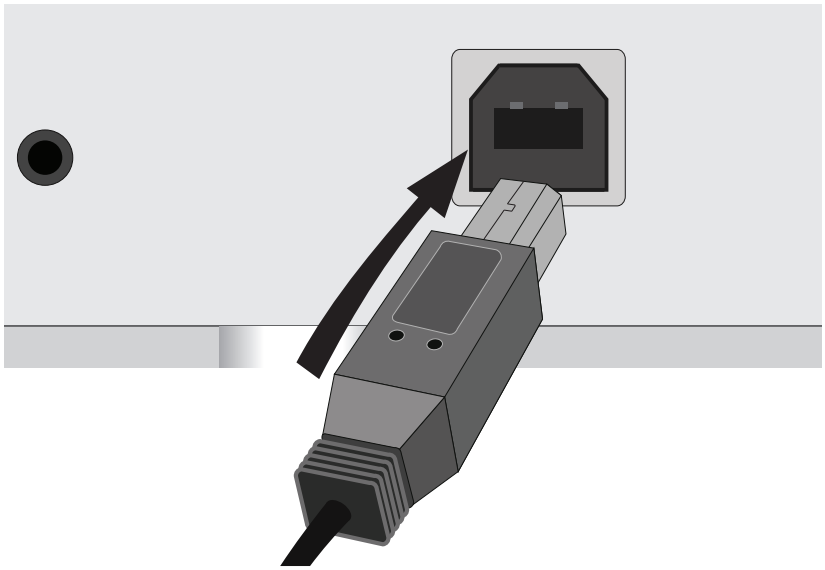
UPDATES ②

Firmware Updates

TKeep in mind that some software updates will require updating your devices' Firmware.

All updates will provide crucial improvements, ensuring your system's performance.

Connect the type-B USB cable (14) to your device's USB outlet (7) and follow the procedures indicated in the firmware update manual available through direct access to Guides on your desktop.



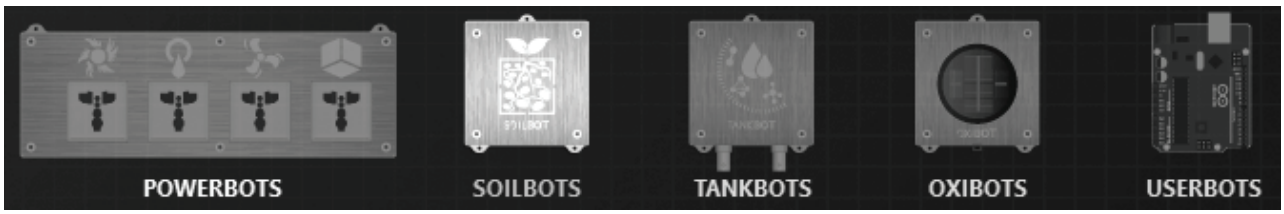
COMMUNICATIONS ③

Connection to GroNode

First, install GroNode and the control software successfully. Follow the procedures indicated in the GroNode user manual.

Once GroNode has been connected to the software, access GroLab through the menu.

If the module has been successfully located automatically by GroNode, it will appear on the top menu.



If you have more modules of the same type, a list of them will appear on the software's right side menu. Add up to a total of four modules of each type for each GroNode.

Problems or losses in communication

GroNode was designed to communicate with the other modules through radio frequency signals. The range of action is 25 metres indoors and 100 metres outdoors depending on space conditions.

If the control software does not find your module or frequently loses communication it is possible that you have exceeded the distance between your modules and GroNode.

Some load-bearing walls and electronic devices may interfere with the signal.

Check the configuration panel to ensure the modules are connected. A wireless signal icon will indicate if your module has a signal.

If you detect that the signal has been interrupted, with the module on, press the reset button (7) and wait a few seconds. Check the software to see if the communication has been re-established.

If the problem persists, perform a test run by placing the module next to GroNode and check the status of communication in the software. If communication has been successfully re-established, repeat this operation at different distances until you detect the maximum communication distance.

If GroNode does not detect your module even when next to each other, contact our technical support.

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Installation manuals available from the USB in English, Spanish, French, German, Polish and Russian.

Manuales de instalación disponibles desde el USB en inglés, español, francés, alemán, polaco y ruso.

Manuels d’installation disponibles à partir de l'USB en anglais, espagnol, français, allemand, polonais et russe.

Installationsanleitungen zur Verfügung vom USB in Englisch, Spanisch, Französisch, Deutsch, Polnisch und Russisch.

Instrukcje dostępne z USB w języku angielskim, hiszpańskim, francuskim, niemieckim, polskim i rosyjskim instalacji.

Инструкции по установке, доступные с USB на английском, испанском, французском, немецком, польском и русском языках.

Open Grow LDA guarantees the purchaser that the product is free from material and/or manufacturing defects. Open Grow LDA's liability is limited to the repair or replacement of any defective parts. Do not ship directly to Open Grow LDA without first consulting with us to verify the procedure that should be followed.

Contact our technical services at **support@opengrow.pt**

All Open Grow LDA products have a 2-year guarantee except for consumables (sensors and/or actuators of any type) and under normal use.

After the first 6 months the customer should prove that the breakdown is a result of a manufacturing defect.

The loss of the "GroNode" module's internal battery life as a result of its ageing is not considered a manufacturing defect. Follow the replacement procedure indicated in the user manual available on your application or request more information from the technical services.

A guarantee claim is non-transferable and only the original purchaser can submit one. To enforce the guarantee the customer must always provide the purchase invoice.

GUARANTEE DISCLAIMER:

Application of the guarantee is excluded should the breakdown of the defective part or parts be a result of the product's inadequate and/or negligent use. Understood as inadequate and/or negligent use is any use other than the one for which the product is meant and/or that is recommended in the instructions manual, not executing the maintenance operations recommended in the instructions manual, carrying out operations that are different from those mentioned and that compromise the quality of the product, modifications that are not performed by authorized repairers and/or with non-original or non-approved parts.

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