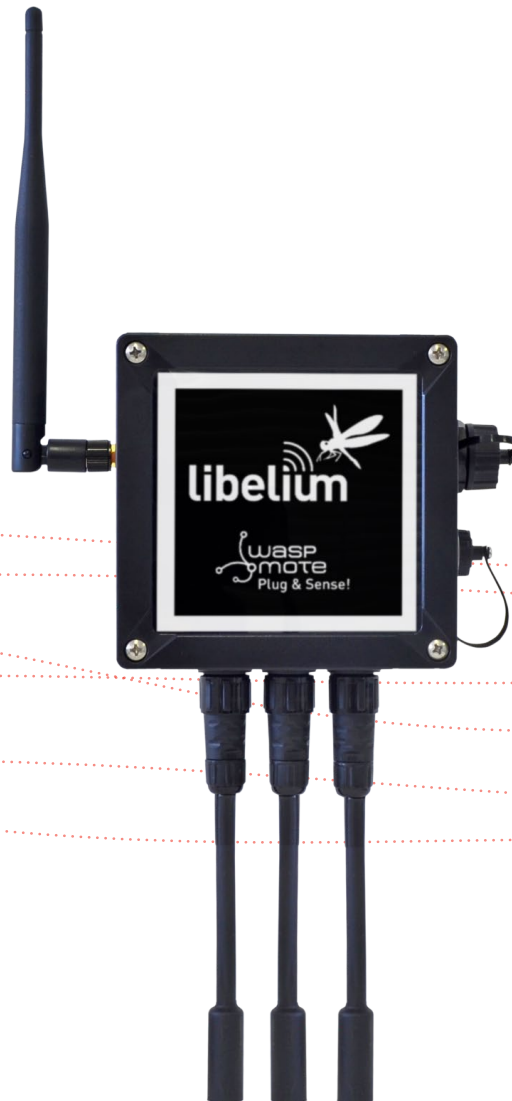# Libelium Smart Agriculture IoT Vertical Kit

Quick Start Guide

The IoT Marketplace
— Make it real —

libelium

INDEX

1. Identify the products

2. Open the box

3. Identify Meshlium device and antennas

868/900/2400 MHz
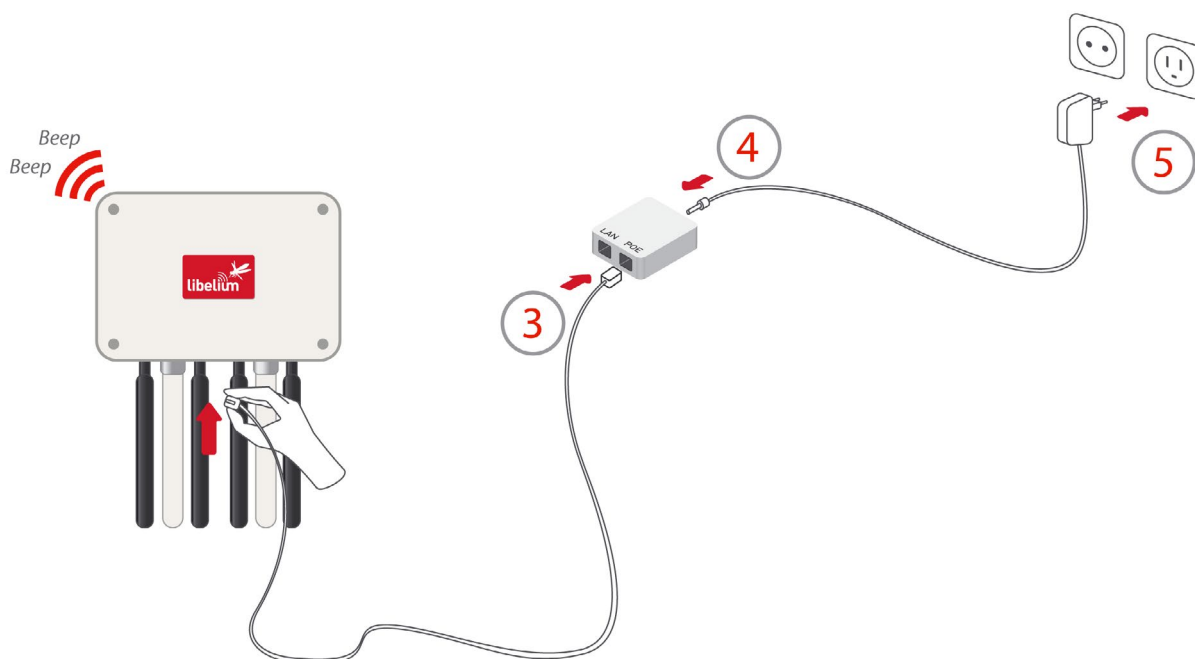
Wi-Fi™ 2.4 GHz

4G 800/900/1800/1920

4. Antennas set up

Antennas *

a) Dipole 5 dBi (Bluetooth, WiFi, XBee-PRO 802.15.4).

b) 4G / GPS (3 antennas for EU, US or BR models; 2 antennas for AU models).
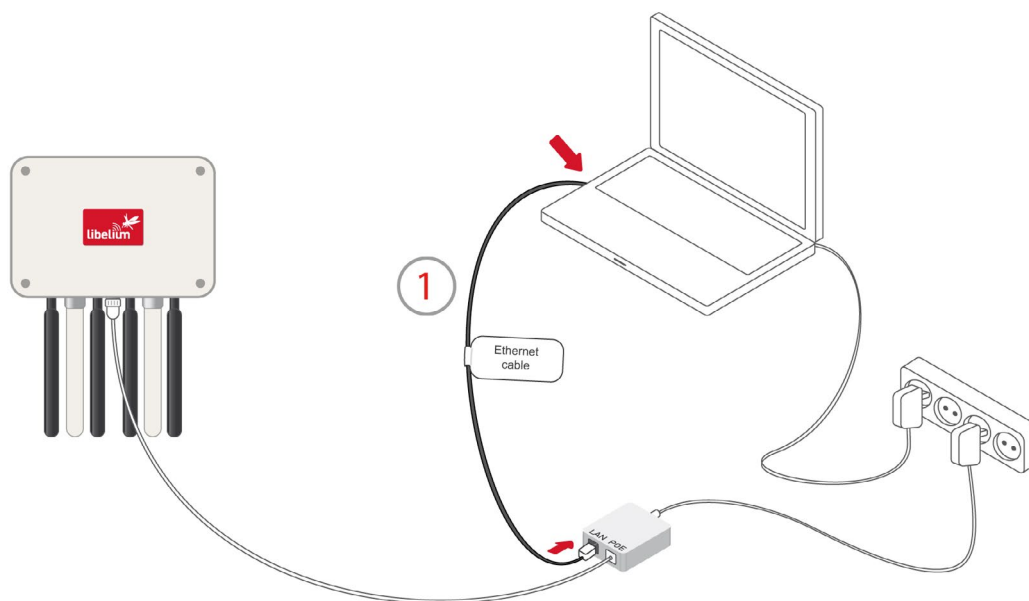
c) Dipole 4.5 dBi (XBee 868LP, XBee-PRO 900HP).

(*) Number and type of antennas depend on the model purchased.

5. Power set up

6. Internet set up

Wifi Access:

- Connect to Meshlium Wifi AP
  - Meshlium_XXXX,
  - no password needed

- Access Meshlium IP 10.10.10.1/MeshliumManager using a Web Browser (IE, Chrome, Firefox)
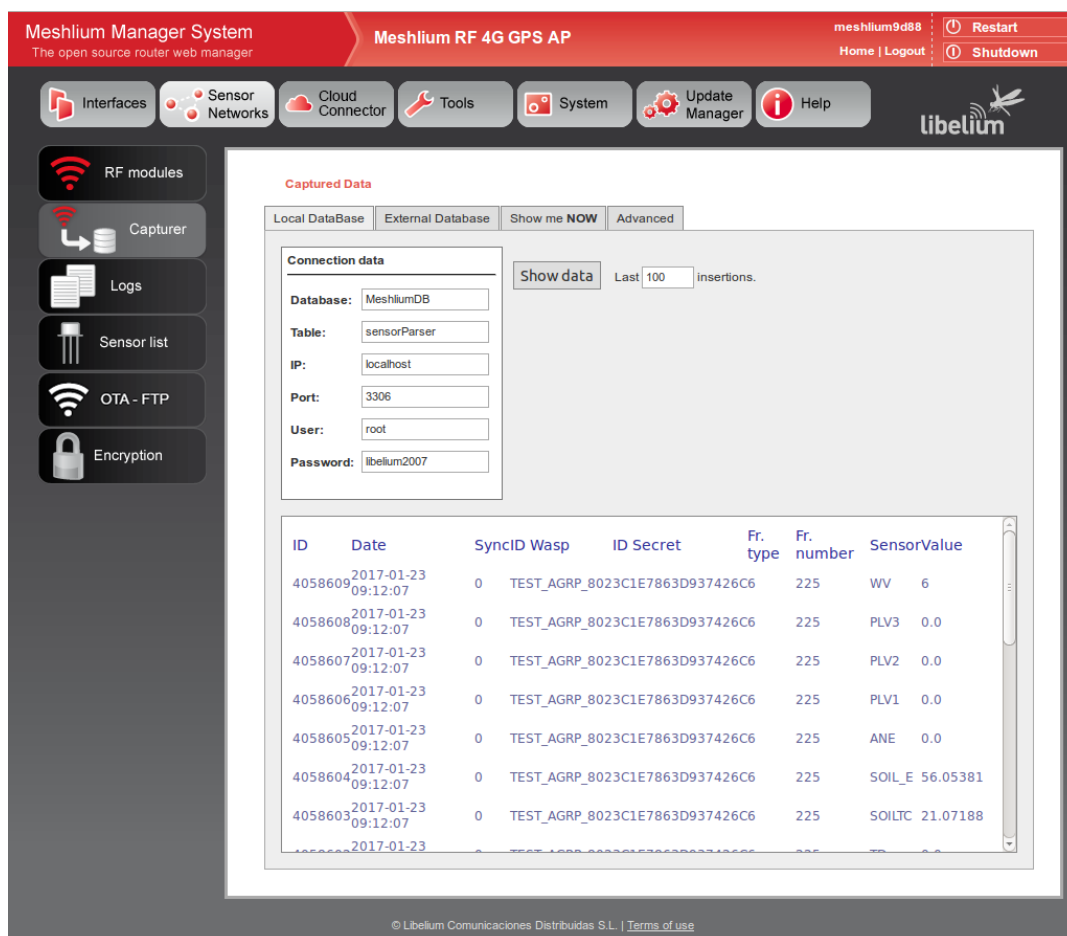 - User: admin
  - Password: libelium

Ethernet Access:

- Access Meshlium assigned IP/MeshliumManager using a Web Browser (IE, Chrome, Firefox)
  - User: admin
  - Password: libelium

- Meshlium will use DHCP to get the IP address from your router, check in your router the IP address given.
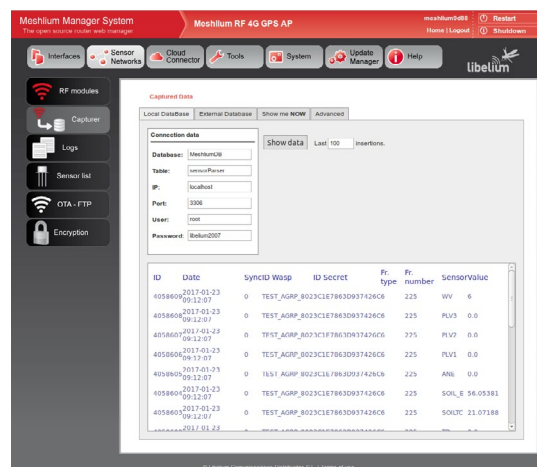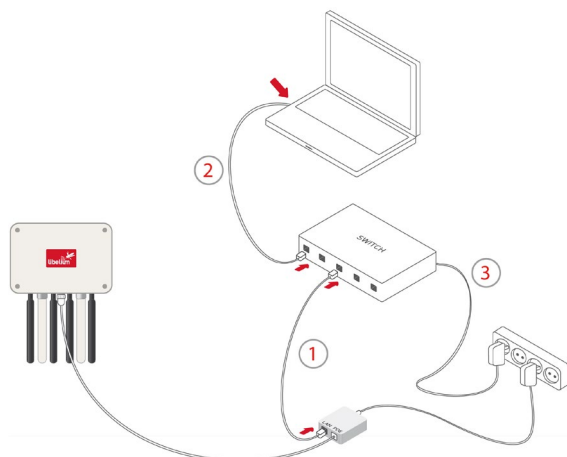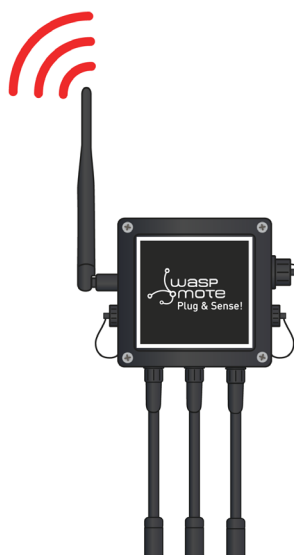
7. Checking data received at Meshlium

8. Now you can receive data

9. Get Ready to send Data

10. Open the box

11. Recharge Plug & Sense!

12. Antennas set up

13. Identify Plug & Sense! family

Smart Environment

Smart Environment PRO

Ambient Control

Smart Agriculture

Smart Cities PRO

Smart Water

Smart Water Ions

Smart Security

4-20 mA Current Loop

Smart Parking

Radiation Control

14. Check conecction diagram

Smart Agriculture IoT Vertical Kit

Get started in the IoT!

Plug & Sense!

- (1) Plug & Sense! Smart Agriculture PRO 868/900 PRO 5dBi   x1
- (2) Plug & Sense! Smart Agriculture 868/900 PRO 5dBi   x1

Sensor Probes

- (3) Temperature, Humidity and Pressure Sensor Probe   x2
- (4) Soil temperature (DS18B20) Probe   x1
- (5) Soil moisture 1.5 m   x1
- (6) Soil moisture 4.5 m   x2
- (7) Leaf wetness Sensor Probe   x2
- (8) WS-3000 (anenometer + wind vane + pluviometer) Probe   x1
- (9) Solar radiation Sensor Probe   x1
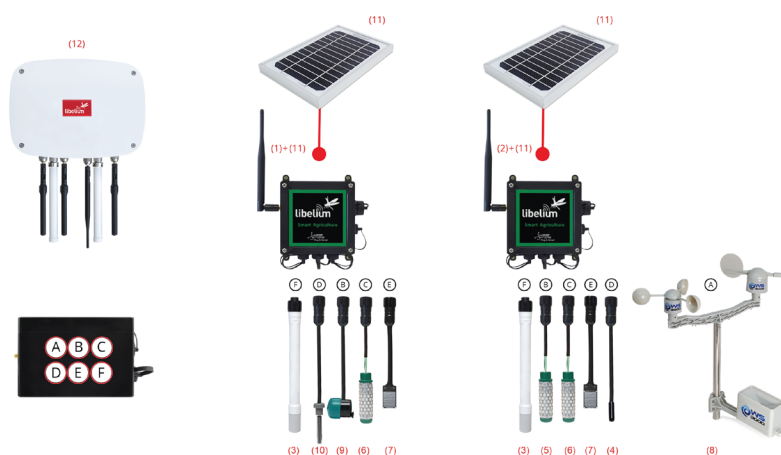- (10) Soil/Water temperature (Pt-1000) Sensor Probe   x1

Power Options

- (11) 6600mA·h Rechargeable Battery + External Solar Panel   x2

Meshlium

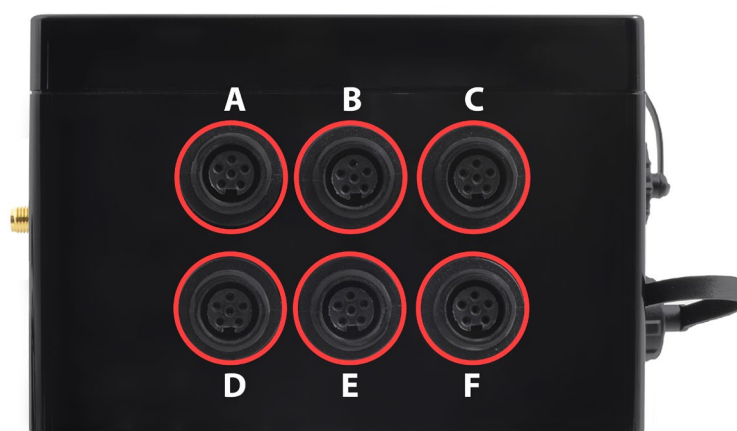- (12) Meshlium 4G 868/900 AP   x1

- Show a working demo to your customers within days
- Create an IoT laboratory for your students
- Test and discover the most suitable technology for your project

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www.libelium.com

Connection Diagram

*Pictures are for representation purpose only.

15. Sensors setup
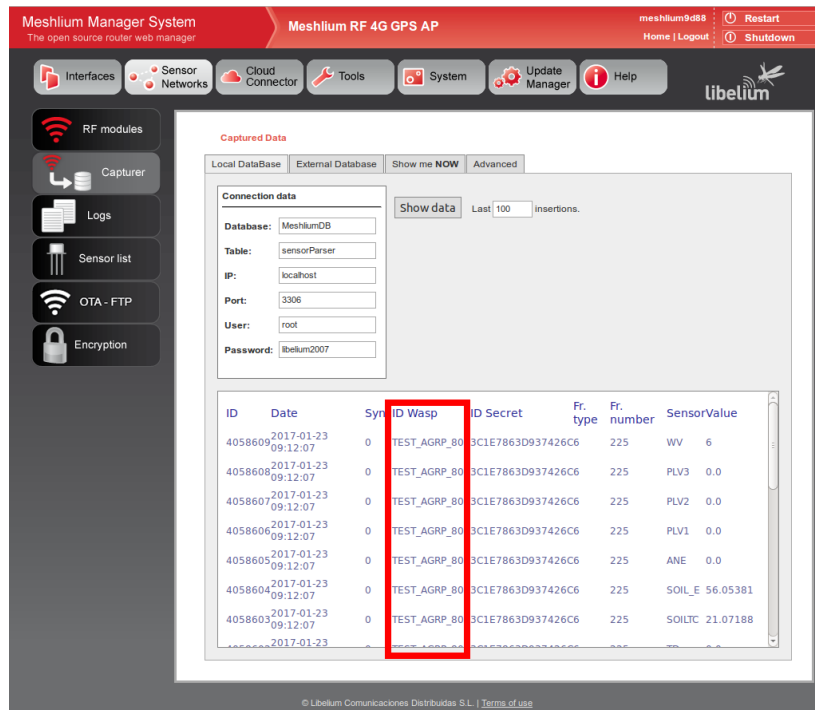
16. Connect sensors

17. Connect Solar Panel

18. Turn ON Plug & Sense!

19. Checking if data is received

- Access to Meshlium as explained before in page 5-6.
- To check that your Plug & Sense! is sending data, see the ID_Wasp. The ID_Wasp of each Plug & Sense! can be found in the details sticker.

20. Visualizing data

- Click Sensor Networks
- Click visualizer, select the variables and click show data button