product catalogue 2019

libelium

FOLLOW THESE STEPS TO FIND YOUR LIBELIUM SOLUTION

1 What are you looking for?

You can select from three different options depending on your needs

- Try our technology for IoT
  Out-of-the-Box IoT Vertical Kits
- Ready to install solution
  Waspmote Plug & Sense!
- Research and development
  Waspmote OEM

2 Configure your selection

Select the components step by step from the top menu

- 1° Customize your device
  Sensors + Connectivity + Power Options

+

- 2º Decide the way to access the data
  Extracting the Data

+

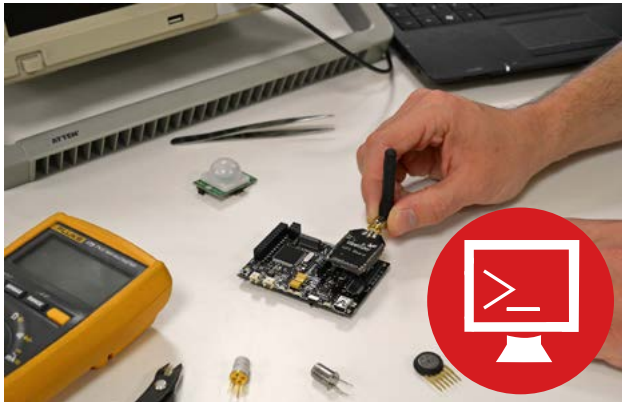
- 3° Choose Support & Training options
  Support Section

3 Make note of your product reference

Complete the form with the chosen references to place your order

- Make note
  Product reference
- Complete the
  Order Form
- Send to your
  Sales Agent

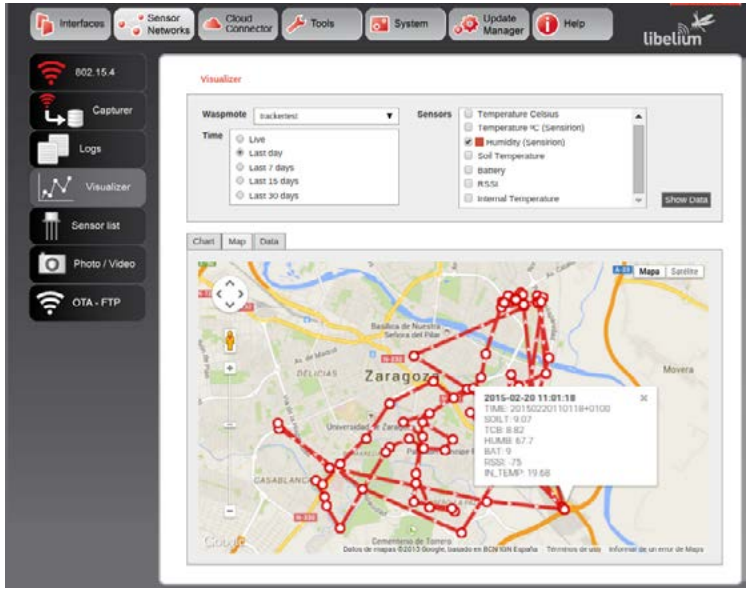
WHAT ARE YOU LOOKING FOR?

You are	Testing IoT Market!	Looking for a ready to install solution	Doing research and development
			
You need to	• Decide quickly the components to test • Use your time to check if technology meets your requirements, not programming • Maximize your budget: test the market with the minimum risk	• Reduce your time to market. • Save in development costs • Focus on the solution	• Get the maximum flexibility in programming • Use your extra time to save on support options
The best option	**Out-of-the-Box IoT Vertical Kits** • Out-of-the-Box working demos • Data visualization tool • Includes online consultancy bonus View Section	**Waspmote Plug & Sense!** • Encapsulated and robust solution ready to install outdoors • Factory programmed and configured devices • Customized online support View Section	**Waspmote OEM** • Select the components one by one to test at the laboratory • Free support through our forums and documentation • Join our Free Overview Webinars to get quick insights about our technology View Section

Technology to get new customers

If you are exploring IoT possibilities with a pilot project, setting up a demo to engage with potential customers or just comparing technology options, time is the most important factor.

We have created five different IoT Vertical Kits addressing the most dynamic IoT verticals and one evaluator kit to ensure you get started in as fast as possible. The vertical kits are factory programmed with basic codes, include a visualization plugin in Meshlium[1] and 2 hours of technical consultancy so that you can have a working demo just by powering on the devices.



1.- Visualization plugin only available in IoT Vertical Kits and Solution Kits with Meshlium. The service is valid for Libelium standard sensors..

Smart Cities IoT Vertical Kit

Application examples:

Application	Description	Sensors
Noise Urban Maps	Sound monitoring in bar areas and centric zones in real time	Noise / Soun Level (LeqA in dBA)
Smart Lighting	Intelligent and weather adaptive lighting in street lights	Luminosity (luxes accuracy)
Air Quality	Control of the pollution levels	CO , NO_2 , O_3
Weather Control	Monitor atmospheric conditions	Humidity, luminosity (Luxes), temperature, atmospheric pressure

List of items included in the Smart Cities IoT Vertical Kit:

Item	Ref.	Quantity
Plug & Sense! Smart Cities 802.15.4 *(EU version is provided for the European kit)*	SCPB-802	1
Plug & Sense! SEP 802.15.4 *(EU version is provided for the European kit)*	SEPB-802	1
Noise Level sensor probe	NLS	1
Luminosity (luxes accuracy)	9325-P	1
Temperature, Humidity and Pressure Sensor Probe	9370-P	1
Carbon Monoxide (CO) for low concentrations Sensor Probe (Calibrated)*	9371-LC-P	1
Nitric Dioxide high accuracy (NO_2) Sensor Probe (Calibrated)*	9376-HA-P	1
Ozone (O_3) Sensor Probe (Calibrated)*	9374-P	1
External solar panel (power accessory for Plug & Sense!)	PAPS-ESP	2
Outdoors USB cable	256369	2
International adapter	10280	3
Meshlium 4G 802.15.4 AP *(EU/BR, US or AU versions are provided, depending on kit)* *(EU/BR and US versions feature a GPS receiver)*	M4G-802	1
Technical consultancy 2 hrs	TC-2	1
P&S! Programming Service (kit of Marketplace)	PROG-Mktplace	1
Meshlium visualization interface	MVIS	1

Ref / Total Price		
	SCIVK-EU/	5,400 €
	SCIVK-USA/	5,400 €
	SCIVK-BR/	5,400 €
	SCIVK-AU/	5,400 €

Includes Meshlium Sensor Visualizer interface – 100 times free access limit. After 100 log-ins a license fee can be acquired to keep on using it.
We do not provide these codes, the nodes are already programmed in Libelium. Do not overwrite the code.
**Calibrated gas sensors are manufactured once the order has been placed to ensure maximum durability of the calibration feature. Manufacturing process and delivery may take from 4 to 6 weeks. Lifetime of calibrated gas sensors is 6 months working at maximum accuracy. We strongly encourage our customers to buy extra gas sensor probes to replace the original ones after that time to ensure maximum accuracy and performance.*

We provide prices in USD to US customers. Please submit your RFQ, and we will provide you with the USD prices.

Libelium Smart Parking Solution Kits with cloud partners

Application examples:

Application	Description	Sensors
Smart Parking	Detection of free parking spots	Electromagnetic field sensor. It is designed to be installed on the surface of parking spaces and to detect the arrival and departure of vehicles with an electromagnetic field sensor. It includes a polyamide casing

Item	Ref.	Price
Libelium-Yazamtec SmartParking Sigfox Solution Kit EU	SP-YAZ-SF-SK-EU	2,850 €
Libelium-Yazamtec SmartParking Sigfox Solution Kit US	SP-YAZ-SF-SK-US	2,850 €
Libelium-Yazamtec SmartParking Sigfox Solution Kit AU / APAC / LATAM	SP-YAZ-SF-SK-AAPL	2,850 €

Licenses for Sigfox connectivity are included, as well as the subscription for the partner's cloud service.

10 x

List of items included in the Libelium Smart Parking Solution Kits, LoRaWAN version:

Item	Ref.	Quantity
Smart Parking node *(versions are provided, depending on kit)*	SP-EU SP-US SP-APLA-AU SP-APLA-AS	10
Smart Parking USB Programmer	SP-USB	1
Smart Parking Installation Key	SP-IK	1
Magnet for contactless reset	10342	1
Smart Parking Configuration Service	SP-CFG	1
Technical consultancy 2 hrs	TC-2	1

Item	Ref.	Price
Libelium-Simfony LoRaWAN Smart Parking SK BS Multitech EU	SP SIMFONY LORAWAN SK-EU	4,250 €
Libelium-Simfony LoRaWAN Smart Parking SK BS Multitech US	SP SIMFONY LORAWAN SK-US	4,250 €
Libelium-Simfony LoRaWAN Smart Parking SK BS Multitech APLA AU	SP SIMFONY LORAWAN SK-APLA AU	4,250 €
Libelium-Simfony LoRaWAN Smart Parking SK BS Multitech IN	SP SIMFONY LORAWAN SK-IN	4,250 €
Libelium-Simfony LoRaWAN Smart Parking SK BS Multitech APLA AS	SP SIMFONY LORAWAN SK-APLA AS	4,250 €
Libelium-Yazamtec-Loriot LW Smart Parking SK BS Multitech EU	SP-YAZ-Loriot-LW-SK-EU	4,250 €
Libelium-Yazamtec-Loriot LW Smart Parking SK BS Multitech US	SP-YAZ-Loriot-LW-SK-US	4,250 €
Libelium-Yazamtec-Loriot LW Smart Parking SK BS Multitech APLA AU	SP-YAZ-Loriot-LW-SK-APLA AU	4,250 €
Libelium-Yazamtec-Loriot LW Smart Parking SK BS Multitech IN	SP-YAZ-Loriot-LW-SK-IN	4,250 €
Libelium-Yazamtec-Loriot LW Smart Parking SK BS Multitech APLA AS	SP-YAZ-Loriot-LW-SK-APLA AS	4,250 €
Libelium-Yazamtec-TTN LW Smart Parking SK BS Multitech EU	SP-YAZ-TTN-LW-SK-EU	4,250 €
Libelium-Yazamtec-TTN LW Smart Parking SK BS Multitech US	SP-YAZ-TTN-LW-SK-US	4,250 €
Libelium-Yazamtec-TTN LW Smart Parking SK BS Multitech APLA AU	SP-YAZ-TTN-LW-SK-APLA AU	4,250 €
Libelium-Yazamtec-TTN LW Smart Parking SK BS Multitech IN	SP-YAZ-TTN-LW-SK-IN	4,250 €
Libelium-Yazamtec-TTN LW Smart Parking SK BS Multitech APLA AS	SP-YAZ-TTN-LW-SK-APLA AS	4,250 €

Licenses for LoRaWAN connectivity are included, as well as the subscription for the partner's cloud service.

10 x

List of items included in the Libelium Smart Parking Solution Kits, LoRaWAN version:

Item	Ref.	Quantity
Smart Parking node *(versions are provided, depending on kit)*	SP-EU SP-US SP-APLA-AU SP-IN SP-APLA-AS	10
Smart Parking USB Programmer	SP-USB	1
Smart Parking Installation Key	SP-IK	1
Magnet for contactless reset	10342	1
Smart Parking Configuration Service	SP-CFG	1
Technical consultancy 2 hrs	TC-2	1
Multitech LoRaWAN Base Station		1

Smart Agriculture IoT Vertical Kit

Application examples:

Application	Description	Sensors
Wine Quality Enhancing	Monitoring soil moisture in vineyards to control the amount of sugar in grapes and grapevine health	Soil moisture, soil temperature, humidity, leaf wetness, atmospheric pressure
Greenhouses	Control micro-climate conditions to maximize the production of fruits and vegetables	Soil moisture, soil temperature, humidity, leaf wetness, atmospheric pressure
Golf Courses Irrigation	Selective irrigation in dry zones to reduce the water resources required in the green	Soil moisture (3 levels of depth)
Compost	Control of humidity and temperature levels in alfalfa, hay, straw, etc. to prevent fungus and other microbial contaminants	Humidity, soil moisture, soil temperature

List of items included in the Smart Agriculture IoT Vertical Kit:

Item	Ref.	Quantity
Plug & Sense! Smart Agriculture-PRO 868/900 *EU [868], US, BR or AU [900] versions are provided, depending on kit)*	SAPB-868/900	1
Plug & Sense! Smart Agriculture 868/900 *EU [868], US, BR or AU [900] versions are provided, depending on kit)*	SAB-868/900	1
Temperature, Humidity and Pressure probe	9370-P	2
Soil moisture 1.5 m sensor probe	9248-P	1
Soil moisture 4.5 m sensor probe	9324-P	2
Solar radiation (PAR) sensor probe	9251-P	1
Soil/Water temperature (Pt-1000) sensor probe	9255-P	1
Soil temperature (DS18B20) Probe	86949-P	1
Leaf wetness sensor probe	9249-P	2
WS-3000 (anemometer + wind vane + pluviometer) sensor probe	9256-P	1
External solar panel (power accessory for Plug & Sense!)	PAPS-ESP	2
Outdoors USB cable	256369	2
International adapter	10280	3
Meshlium 4G 868/900 AP *(EU/BR, US or AU versions are provided, depending on kit)* *(EU/BR and US versions feature a GPS receiver)*	M4G-868/900	1
Technical consultancy 2 hrs	TC-2	1
P&S! Programming Service (kit of Marketplace)	PROG-Mktplace	1
Meshlium visualization interface	MVIS	1

Ref / Total Price	
SAIVK-EU/	4,150 €
SAIVK-US/	4,150 €
SAIVK-BR/	4,150 €
SAIVK-AU/	4,150 €

Includes Meshlium Sensor Visualizer interface – 100 times free access limit. After 100 log-ins a license fee can be acquired to keep on using it.
We do not provide these codes, the nodes are already programmed in Libelium. Do not overwrite the code.

Smart Agriculture Xtreme IoT Vertical Kits

Application examples:

Application	Description	Sensors
Wine Quality Enhancing	Monitoring soil moisture and temperature, humidity and leaf wetness sensors, allows to control the grapevine health and grape quality, as well as to control micro-climate conditions to maximize the production	Ambient parameters (weather conditions, radiation...), soil moisture, conductivity and temperature, leaf wetness
Greenhouses	Production of 4th generation of crops: baby leaves, strawberries, tomatoes...	Radiation, air temperature and humidity, leaf wetness, soil moisture, conductivity and temperature
Parks and Gardens	Controlling the irrigation system and the usage of water resources	Soil moisture, conductivity and temperature
Fruit Production	Improving crops production and reducing pests: olive, orchards, bananas...	Ambient parameters (weather conditions, radiation...), soil moisture, conductivity and temperature, leaf wetness

List of items included in the Smart Agriculture Xtreme IoT Vertical Kit:

Item	Ref.	Quantity
Plug & Sense! Smart Agriculture Xtreme 868/900 *EU [868], US, BR or AU [900] versions are provided, depending on kit)*	SAXB-868/900	2
Weather station GMX-240 (W-PO) probe	9463-P	1
Vapor pressure, humidity, temperature and pressure in soil and air probe	9471-P	2
Conductivity, water content and soil temperature 5TE probe	9402-P	2
Leaf wetness Phytos 31 probe	9466-P	2
Solar radiation (PAR) probe for Smart Agriculture Xtreme	9251-PX	1
External solar panel (power accessory for Plug & Sense!)	PAPS-ESP	2
Outdoors USB cable	256369	2
International adapter	10280	3
Meshlium 4G 868/900 AP *(EU/BR, US or AU versions are provided, depending on kit)* *(EU/BR and US versions feature a GPS receiver)*	M4G-868/900	1
Technical consultancy 2 hrs	TC-2	1
P&S! Programming Service (kit of Marketplace)	PROG-Mktplace	1
Meshlium visualization interface	MVIS	1

Includes Meshlium Sensor Visualizer interface – 100 times free access limit. After 100 log-ins a license fee can be acquired to keep on using it.
We do not provide these codes, the nodes are already programmed in Libelium. Do not overwrite the code.

Ref / Total Price	
	SAXIVK-EU – 7,350 €
	SAXIVK-US – 7,350 €
	SAXIVK-BR – 7,350 €
	SAXIVK-AU – 7,350 €

List of items included in the Smart Agriculture Xtreme Basic IoT Vertical Kit:

BASIC

Item	Ref.	Quantity
Plug & Sense! Smart Agriculture Xtreme 868/900 *EU [868], US, BR or AU [900] versions are provided, depending on kit)*	SAXB-868/900	1
Weather station GMX-240 (W-PO) probe	9463-P	1
Vapor pressure, humidity, temperature and pressure in soil and air probe	9471-P	1
Conductivity, water content and soil temperature 5TE probe	9402-P	1
Leaf wetness Phytos 31 probe	9466-P	1
Solar radiation (PAR) probe for Smart Agriculture Xtreme	9251-PX	1
External solar panel (power accessory for Plug & Sense!)	PAPS-ESP	1
Outdoors USB cable	256369	1
International adapter	10280	2
Meshlium 4G 868/900 AP *(EU/BR, US or AU versions are provided, depending on kit)* *(EU/BR and US versions feature a GPS receiver)*	M4G-868/900	1
Technical consultancy 2 hrs	TC-2	1
P&S! Programming Service (kit of Marketplace)	PROG-Mktplace	1
Meshlium visualization interface	MVIS	1

Includes Meshlium Sensor Visualizer interface – 100 times free access limit. After 100 log-ins a license fee can be acquired to keep on using it.
We do not provide these codes, the nodes are already programmed in Libelium. Do not overwrite the code.

Ref / Total Price	
	SAXBIVK-EU – 5,600 €
	SAXBIVK-US – 5,600 €
	SAXBIVK-BR – 5,600 €
	SAXBIVK-AU – 5,600 €

Smart Environment IoT Vertical Kit

Application examples:

Application	Description	Sensors
Forest Fire Detection	Monitoring of combustion gases and preemptive fire conditions to define alert zones	CO, CO_2, temperature, humidity
Air Pollution	Control of CO2 emissions, pollution from cars and toxic gases generated in factories or farms	CO, CO_2
Indoor Air Quality	Monitoring of gas levels and environmental conditions inside chemical plants to ensure workers and goods safety	CO, CO_2, temperature, humidity

List of items included in the Smart Environment IoT Vertical Kit:

Item	Ref.	Quantity
Plug & Sense! Smart Environment-PRO 868/900 *EU [868], US, BR or AU [900] versions are provided, depending on kit)*	SEPB-868/900	1
Plug & Sense! Smart Agriculture 868/900 *EU [868], US, BR or AU [900] versions are provided, depending on kit)*	SAB-868/900	1
Temperature, Humidity and Pressure Sensor Probe	9370-P	1
Carbon Monoxide (CO) for low concentrations Sensor Probe (Calibrated)*	9371-LC-P	1
Carbon Dioxide (CO_2) Sensor Probe (Calibrated)*	9372-P	1
WS-3000 (anemometer + wind vane + pluviometer) sensor probe	9256-P	1
External solar panel (power accessory for Plug & Sense!)	PAPS-ESP	2
Outdoors USB cable	256369	2
International adapter	10280	3
Meshlium 4G 868/900 AP *(EU/BR, US or AU versions are provided, depending on kit)* *(EU/BR and US versions feature a GPS receiver)*	M4G-868/900	1
Technical consultancy 2 hrs	TC-2	1
P&S! Programming Service (kit of Marketplace)	PROG-Mktplace	1
Meshlium visualization interface	MVIS	1

Ref / Total Price	
SEIVK-EU/	4,500 €
SEIVK-US/	4,500 €
SEIVK-BR/	4,500 €
SEIVK-AU/	4,500 €

Includes Meshlium Sensor Visualizer interface – 100 times free access limit. After 100 log-ins a license fee can be acquired to keep on using it.
We do not provide these codes, the nodes are already programmed in Libelium. Do not overwrite the code.
**Calibrated gas sensors are manufactured once the order has been placed to ensure maximum durability of the calibration feature. Manufacturing process and delivery may take from 4 to 6 weeks. Lifetime of calibrated gas sensors is 6 months working at maximum accuracy. We strongly encourage our customers to buy extra gas sensor probes to replace the original ones after that time to ensure maximum accuracy and performance.*

Smart Water IoT Vertical Kit

Application examples:

Application	Description	Sensors
Water treatment plants	Monitor the quality of water in treatment plants	pH, ORP, DO, Conductivity, Salinity
Water quality monitoring in irrigation	Tanks and lakes can be monitored to ensure the quality in irrigation for Agriculture	pH, ORP, DO
Fishfarmings	The efficiency in fishfarming production can be increased by monitoring the quality of water	pH, ORP, DO, Conductivity, Salinity
Chemical leakages	Detect leakages and wastes of factories in rivers. Extreme pH values signal chemical spills.	pH, DO
Swimming pool remote measurement	Control remotely the swimming pool conditions	pH, ORP

List of items included in the Smart Water IoT Vertical Kit:

Item	Ref.	Quantity
Plug & Sense! Smart Water 868/900 *(EU [868], US, BR or AU [900] versions are provided, depending on kit)*	SWB-868/900	2
Conductivity Sensor Probe	9326-P	2
pH Sensor Probe	9328	2
Oxidation Reduction Potential Sensor Probe	9329	2
Conductivity Calibration Kit, K=0.1	9339	1
Conductivity Calibration Kit, K=1	9340	1
Conductivity Calibration Kit, K=10	9341	1
ORP Calibration Solution	9344	1
pH Calibration Kit	9343	1
Dissolved Oxygen Sensor Probe	9327	2
DO Calibration Kit	9342	1
External solar panel (power accessory for Plug & Sense!)	PAPS-ESP	2
Outdoors USB cable	256369	2
International adapter	10280	3
Meshlium 4G 868/900 AP *((EU/BR, US or AU versions are provided, depending on kit)* *(EU/BR and US versions feature a GPS receiver)*	M4G-868/900	1
Technical consultancy 2 hrs	TC-2	1
Plug & Sense! Programming Service (kit of Marketplace)	PROG-mktplace	1
Meshlium visualization interface	MVIS	1

Ref / Total Price		
	SWIVK-EU/	5,200 €
	SWIVK-US/	5,200 €
	SWIVK-BR/	5,200 €
	SWIVK-AU/	5,200 €

Includes Meshlium Sensor Visualizer interface – 100 times free access limit. After 100 log-ins a license fee can be acquired to keep on using it.
We do not provide these codes, the nodes are already programmed in Libelium. Do not overwrite the code.
(*) Soil/Water temperature (Pt-1000) included in Plug & Sense! Smart Water.

Smart Water Xtreme IoT Vertical Kit

Application examples:

Application	Description	Sensors
Water treatment plants	Monitor the quality of water in treatment plants	pH, ORP, DO, Conductivity, Salinity, Suspended Solid and Turbidity
Water quality monitoring in irrigation	Tanks and lakes can be monitored to ensure the quality in irrigation for Agriculture	pH, ORP, DO
Fishfarmings	The efficiency in fishfarming production can be increased by monitoring the quality of water	pH, ORP, DO, Conductivity, Salinity
Chemical leakages	Detect leakages and wastes of factories in rivers. Extreme pH values signal chemical spills.	pH, DO
Swimming pool remote measurement	Control remotely the swimming pool conditions	pH, ORP

List of items included in the Smart Water Xtreme IoT Vertical Kit:

Item	Ref.	Quantity
Plug & Sense! Smart Water Xtreme 868/900 *(EU [868], US, BR or AU [900] versions are provided, depending on kit)*	SWXB-868/900	1
pH, ORP and temperature PHEHT sensor probe	9485-P	1
Conductivity, salinity and temperature C4E sensor probe	9486-P	1
Optical dissolved oxygen and temperature OPTOD sensor probe	9488-P	1
Suspended solid, turbidity, sludge blanket and temperature MES5 sensor probe	9490-P	1
pH Calibration Kit	9343	1
ORP Calibration Solution	9344	1
Conductivity Calibration Kit, K=0.1	9339	1
Conductivity Calibration Kit, K=1	9340	1
Conductivity Calibration Kit, K=10	9341	1
DO Calibration Kit	9342	1
Turbidity calibration solution, 4000 NTU	72465	1
Storage solution for PHEHT probe	72464	1
External solar panel (power accessory for Plug & Sense!)	PAPS-ESP	1
220V - USB adapter	6006	1
Outdoors USB cable	256369	1
International adapter	10280	2
Meshlium 4G 868/900 AP *((EU/BR, US or AU versions are provided, depending on kit)* *(EU/BR and US versions feature a GPS receiver)*	M4G-868/900	1

Item	Ref.	Quantity
Technical consultancy 2 hrs	TC-2	1
Plug & Sense! Programming Service (kit of Marketplace)	PROG-mktplace	1
Meshlium visualization interface	MVIS	1

Includes Meshlium Sensor Visualizer interface – 100 times free access limit. After 100 log-ins a license fee can be acquired to keep on using it.
We do not provide these codes, the nodes are already programmed in Libelium. Do not overwrite the code.

Ref / Total Price	
	SWXIVK-EU – 10,950 €
	SWXIVK-US – 10,950 €
	SWXIVK-BR – 10,950 €
	SWXIVK-AU – 10,950 €

List of items included in the Smart Water Xtreme Basic IoT Vertical Kit:

Item	Ref.	Quantity
Plug & Sense! Smart Water Xtreme 868/900 *(EU [868], US, BR or AU [900] versions are provided, depending on kit)*	SWXB-868/900	1
pH, ORP and temperature PHEHT sensor probe	9485-P	1
Conductivity, salinity and temperature C4E sensor probe	9486-P	1
Optical dissolved oxygen and temperature OPTOD sensor probe	9488-P	1
pH Calibration Kit	9343	1
ORP Calibration Solution	9344	1
Conductivity Calibration Kit, K=0.1	9339	1
Conductivity Calibration Kit, K=1	9340	1
Conductivity Calibration Kit, K=10	9341	1
DO Calibration Kit	9342	1
Storage solution for PHEHT probe	72464	1
External solar panel (power accessory for Plug & Sense!)	PAPS-ESP	1
220V - USB adapter	6006	1
Outdoors USB cable	256369	1
International adapter	10280	2
Meshlium 4G 868/900 AP *((EU/BR, US or AU versions are provided, depending on kit)* *(EU/BR and US versions feature a GPS receiver)*	M4G-868/900	1
Technical consultancy 2 hrs	TC-2	1

Item	Ref.	Quantity
Plug & Sense! Programming Service (kit of Marketplace)	PROG-mktplace	1
Meshlium visualization interface	MVIS	1

Includes Meshlium Sensor Visualizer interface – 100 times free access limit. After 100 log-ins a license fee can be acquired to keep on using it.
We do not provide these codes, the nodes are already programmed in Libelium. Do not overwrite the code.

Ref / Total Price	
	SWXBIVK-EU – 6,000 €
	SWXBIVK-US – 6,000 €
	SWXBIVK-BR – 6,000 €
	SWXBIVK-AU – 6,000 €

Air Quality Index IoT Vertical Kit

Application examples:

Application	Description	Sensors
Air Quality Index monitoring	Monitor the overall quality of the air with maximum accuracy and according to international standards	Temperature, Humidity and Pressure, Carbon Monoxide (CO), Ozone (O_3), Nitric Dioxide (NO_2), Sulfur Dioxide (SO_2), Particle Matter (PM1 / PM2.5 / PM10) - Dust

List of items included in the Air Quality Index IoT Vertical Kit:

Item	Ref.	Quantity
P&S! SE-PRO 802.15.4 *(EU version is provided for the European kit)*	SEPB-802	1
Temperature, Humidity and Pressure	9370-P	1
Carbon Monoxide (CO) for low concentrations (Calibrated)*	9371-LC-P	1
Ozone (O_3) (Calibrated)*	9374-P	1
Nitric Dioxide high accuracy (NO_2) (Calibrated)*	9376-HA-P	1
Sulfur Dioxide high accuracy (SO_2) (Calibrated)*	9377-HA-P	1
Particle Matter (PM1 / PM2.5 / PM10) - Dust	9387-P	1
External solar panel (power accessory for Plug & Sense!)	PAPS-ESP	1
Outdoors USB cable	256369	2
International adapter	10280	3
Meshlium 4G 802.15.4 AP *(EU/BR, US or AU versions are provided, depending on kit)* *(EU/BR and US versions feature a GPS receiver)*	M4G-802	1
Technical consultancy 2 hrs	TC-2	1
Plug & Sense! Programming Service (kit of Marketplace)	PROG-mktplace	1
Meshlium visualization interface	MVIS	1

Ref / Total Price	
AQIIVK-EU/	5,350 €
AQIIVK-US/	5,350 €
AQIIVK-BR/	5,350 €
AQIIVK-AU/	5,350 €

Includes Meshlium Sensor Visualizer interface – 100 times free access limit. After 100 log-ins a license fee can be acquired to keep on using it.
We do not provide these codes, the nodes are already programmed in Libelium. Do not overwrite the code.
**Calibrated gas sensors are manufactured once the order has been placed to ensure maximum durability of the calibration feature. Manufacturing process and delivery may take from 4 to 6 weeks. Lifetime of calibrated gas sensors is 6 months working at maximum accuracy. We strongly encourage our customers to buy extra gas sensor probes to replace the original ones after that time to ensure maximum accuracy and performance.*

Smart Industrial Protocols IoT Vertical Kit

Application examples:

Application	Description
Connect any sensor to an existing industrial bus (RS-485 in this kit)	Plug & Sense! can be configured to work as a node in the network, inserting sensor data into the industrial bus already present
Add wireless connectivity to wired buses	Plug & Sense! can be configured to read the information coming from the bus and send it to Meshlium using any of the wireless radio modules available (802.15.4 in this kit)
Connect industrial devices to the Cloud	Plug & Sense! can be configured to read the information coming from the bus and send it directly to the Cloud using 4G or WiFi radio modules (not present in this kit). Additionally, Meshlium offers different cloud connectors that flow data directly to cloud platforms.

List of items included in the Smart Industrial Protocols IoT Vertical Kit:

Item	Ref.	Quantity
Plug & Sense! 4-20 mA 802.15.4 (Industrial ready) *(EU version is provided for the European kit)*	420B-802-IIPP	1
Plug & Sense! AC 802.15.4 (Industrial ready) *(EU version is provided for the European kit)*	ACB-802-IIPP	1
RS-485 / Modbus Module	RS-485-PS	2
Temperature, Humidity and Pressure	9370-P	1
Terminal box probe (accessory for Plug & Sense!)	9270-P	6
DB9 probe (accessory for Plug & Sense!)	DB9-P	2
220V adapter (power accessory for Plug & Sense!)	PAPS-220V	2
Outdoors USB cable	256369	2
International adapter	10280	3
Meshlium 4G 802.15.4 AP *(EU/BR, US or AU versions are provided, depending on kit)* *(EU/BR and US versions feature a GPS receiver)*	M4G-802	1
Technical consultancy 2 hrs	TC-2	1
Meshlium visualization interface	MVIS	1

Ref / Total Price	
	SIPIVK-EU – 3,250 €
	SIPIVK-US – 3,250 €
	SIPIVK-BR – 3,250 €
	SIPIVK-AU – 3,250 €

This kit does NOT include any programming service because the software cannot be standardized: each code will depend much on the chosen industrial device. That means the user will need to implement the code for the Plug & Sense! units.

Includes Meshlium Sensor Visualizer interface – 100 times free access limit. After 100 log-ins a license fee can be acquired to keep on using it. Meshlium Visualizer will show sensor data only if the codes create data frames as specified in the Technical Guides.

More and New kits available at The IoT Marketplace!

The IoT Marketplace
Make it real

Interested in complete IoT kits?

Check our out-of-the-box kits containing programmed sensor devices connected to the best Cloud applications for use in pilots or proof of concept projects in the minimum time to market.

Get fully integrated solutions from hardware sensors to cloud applications to speed up IoT adoption.

www.the-iot-marketplace.com

Evaluator Kit

This kit is designed to compare different radio technologies or create customized demos. It contains the most demanded products in our catalogue, so that you do not need to spend lots of time configuring your order. Four different versions are available for the markets of Europe, US&Canada, Brazil and Australia.

To ensure you start testing the products as soon as possible, we include 1 attendee place at Libelium Basic Training Course where you will learn from installing the IDE to program Waspmote (more info about training courses on section Support).

Finally, we also include a 3-hour package of online technical consultancy, to solve quickly any doubt you may have when getting your hands on Waspmote. Both training courses and consultancy hours are driven by Libelium R&D engineers.

List of items included in the Evaluator Kit:

	Item	Pieces
Communication	Waspmote 802.15.4 5 dBi *(EU version of the radio is provided for the European kit)*	4
	Waspmote Gateway 802.15.4 5 dBi *(EU version of the radio is provided for the European kit)*	1
	GSM / GPRS Module	1
	GPS Module	1
	4G Module *(EU/BR, US or AU versions are provided, depending on kit) (EU/BR and US versions feature a GPS receiver)*	1
	Bluetooth Module PRO 5 dBi	1
	RS-485 Serial / Modbus Module, DB9 cable	1
	WiFi module SMA5	1
Sensor Boards	Events Board	1
	Smart Cities PRO Board	1
	Agriculture PRO Board	1
	Smart Water	1
	4-20 mA (Current Loop)	1
	Expansion Radio Board Module	2

	Item	Pieces
Sensors	Temperature, humidity and pressure sensor	2
	Presence sensor (PIR)	1
	Luminosity (Luxes accuracy) sensor	1
	Oxygen (O_2) [Calibrated]	1
	Ultrasound sensor (indoor)	1
	Soil / Water temperature sensor	1
	Soil moisture sensor	1
	Solar radiation (PAR) sensor	1
	Weather Station WS-3000 (anemometer + wind vane + pluviometer)	1
	Conductivity	1
	PH	1
Accessories	Rigid Solar Panel 7V – 500mA	2
	6600 mAh rechargeable battery	4
	MicroSD 16GB card pack (5 units)	1
	Conductivity calibration kit, K=1	1
	pH calibration kit	1

	Item	Pieces
Support	Attendee place at Libelium Basic Training Course*	1
	Technical consultancy – 3 hours package	1

Ref/Price		
	WEVA-EU/ 3,300 €**	~~4,600 €~~
	WEVA-USA/ 3,300 €**	~~4,600 €~~
	WEVA-BR/ 3,300 €**	~~4,600 €~~
	WEVA-AU/ 3,300 €**	~~4,600 €~~

** Please check our website or Support section for training courses calendar.*
*** When purchased as a kit, you save almost 35% on the retail price of these separate items.*

Now that you have configured your hardware, go to the Orders section to place your order.

View Section

MySignals SW and HW Complete Kits (eHealth Medical Development Platform): new version

MySignals is a development platform for medical devices and eHealth applications. You can use MySignals to develop your eHealth web, Android or iOS applications or even to add your own sensors to build new medical devices.

MySignals Kits include more than 17 sensors which can be used to monitor biometric signals; now they can be plugged on-the-fly. All the data gathered by MySignals is encrypted and sent via secure HTTPS to the user's private account at Libelium Cloud through WiFi or Bluetooth. The data can be displayed on the node's TFT screen or on a tablet or smartphone with Android or iPhone apps. Developers may use their own Cloud too to store the information.

Libelium offers an API's for developers to access the information. The API Cloud allows to access to the user's private account and get the information previously stored, to be displayed on a third party platform (data can also be stored in a third party Cloud).

More info at :
http://www.my-signals.com

MySignals SW Complete Kit includes:

- MySignals SW (new version)
- Snore Sensor [PRO]
- Patient Position Sensor [PRO]
- ECG Sensor [PRO]
- EMG Sensor [PRO]
- GSR Sensor [PRO]
- Airflow (Breathing) Sensor [PRO]
- Body Temperature Sensor [PRO]
- Spirometer Sensor [PRO]
- Glucometer Sensor [PRO]
- Blood Pressure Sensor (Sphygmomanometer) [PRO]
- SPO2 Sensor [PRO] (Basic User Cloud plan)

MySignals SW Complete Kit.	Ref.	Price
Europe version	MS-SW-E KIT	1,647 €
America version	MS-SW-A KIT	1,647 €
UK version	MS-SW-UK KIT	1,647 €

MySignals SW BLE Complete Kit includes:

- MySignals SW (new version)
- Snore Sensor [PRO]
- Patient Position Sensor [PRO]
- ECG Sensor [PRO]
- EMG Sensor [PRO]
- GSR Sensor [PRO]
- Airflow (Breathing) Sensor [PRO]
- Body Temperature Sensor [PRO] – Wireless [PRO] (battery included)
- Spirometer Sensor [PRO]
- SPO2 Sensor – Wireless [PRO] (batteries included)
- Blood Pressure Sensor (Sphygmomanometer) – Wireless [PRO] (rechargeable battery included)
- Glucometer Sensor – Wireless [PRO] (batteries included)
- Weight Sensor – Wireless [PRO] (batteries included)
- Alarm/Emergeny Button – Wireless [PRO] (battery included)

MySignals SW BLE Complete Kit.	Ref.	Price
Europe version	MS-SW-BLE-E KIT	1,778 €
America version	MS-SW-BLE-A KIT	1,778 €
UK version	MS-SW-BLE-UK KIT	1,778 €

MySignals HW Complete Kit includes:

- MySignals HW
- Snore Sensor [PRO]
- Patient Position Sensor [PRO]
- ECG Sensor [PRO]
- EMG Sensor [PRO]
- GSR Sensor [PRO]
- Airflow (Breathing) Sensor [PRO]
- Body Temperature Sensor [PRO]
- Spirometer Sensor [PRO]
- Glucometer Sensor [PRO]
- Blood Pressure Sensor (Sphygmomanometer) [PRO]
- SPO2 Sensor [PRO]

MySignals HW Complete Kit.	Ref.	Price
Europe version	MS-HW-E KIT	1,212 €
America version	MS-HW-A KIT	1,212 €
UK version	MS-HW-UK KIT	1,212 €

This Kit needs an Arduino Uno.

MySignals HW BLE Complete Kit includes:

- MySignals HW
- Snore Sensor [PRO]
- Patient Position Sensor [PRO]
- ECG Sensor [PRO]
- EMG Sensor [PRO]
- GSR Sensor [PRO]
- Airflow (Breathing) Sensor [PRO]
- Spirometer Sensor [PRO]
- Body Temperature Sensor – Wireless [PRO] (battery included)
- Spirometer Sensor [PRO]
- SPO2 Sensor – Wireless [PRO] (batteries included)
- Blood Pressure Sensor (Sphygmomanometer) – Wireless [PRO] (batteries included)
- Glucometer Sensor – Wireless [PRO] (batteries included)
- Weight Sensor – Wireless [PRO] (batteries included)
- Alarm/Emergeny Button – Wireless [PRO] (battery included)

MySignals HW BLE Complete Kit.	Ref.	Price
Europe version	MS-HW-BLE-E KIT	1,343 €
America version	MS-HW-BLE-A KIT	1,343 €
UK version	MS-HW-BLE-UK KIT	1,343 €

This Kit needs an Arduino Uno.

There are plans for regular users and for developers depending on what usage you want to give to MySignals.

User Cloud Plans

The user plans are meant to be used to test the performance of MySignals. These are the best plans if you want to try in a quick and easy way the MySignals Kit including all the sensors on different users as each one can have its own profile. All the data is sent to the Libelium Cloud, so users do not need to set up their own servers.

	Basic	PRO	Elite
Usage	Platform testing	Small Dev. Deployment	Professional Dev. Deployment
User profiles (members)	5	50	Unlimited
Departments	1	10	Unlimited
MySignals devices [1]	1	1	1
Database storage	0.1 GB (10 Million registers Approx)	2 GB (200 Million registers Approx)	6 GB[3] (600 Million registers Approx)
Traffic I/O[2]	2 GB	5 GB	15 GB[3]
Android / iOS Apps	✓	✓	✓
Point-to-point encryption	✓	✓	✓
Libelium Cloud access	✓	✓	✓
API Cloud (necessary to extract the information in third party servers)	X	X	X
Price	**99 €/year**	**199 €/year**	**499 €/year**

Important: You can always use MySignals at no cost in the standalone mode

**1 Note that each licence is per MySignals Device*
**2 To avoid illicit use of the network, there is a daily max transmission rate*
**3 For specific plans contact our Business Dev Team (sales@libelium.com)*

Developer Cloud Plans

The developers plans are the best option for users who want to store the data gathered by MySignals in their own servers. This type of plans allow to use the Cloud API to read the information from the Libelium Cloud and write it in their own Cloud platforms.

	Basic	PRO	Elite
Usage	Platform testing	Small Dev. Deployment	Professional Dev. Deployment
User Profiles (members)	5	50	Unlimited
Departments	1	10	Unlimited
MySignals Devices[1]	1	1	1
DB storage	0.1 GB (10 Million registers Approx)	2 GB (200 Million registers Approx)	6 GB[3] (600 Million registers Approx)
Traffic I/O[2]	5 GB	15 GB	50 GB[3]
Android / iOS Apps	✓	✓	✓
Encryption Point to Point	✓	✓	✓
Libelium Cloud Access	✓	✓	✓
API Cloud (Necessary to extract the information to a third party server)	✓	✓	✓
Price	**199€/year**	**299€/year**	**599€/year**

Important: You can always use MySignals at no cost in the standalone mode

**1 Note that each licence is per MySignals Device*
**2 To avoid illicit use of the network, there is a daily max transmission rate*
**3 For specific plans contact our Business Dev Team (sales@libelium.com)*

Now that you have configured your hardware, go to the Orders section to place your order.

View Section

Waspmote Plug & Sense!: technology ready to install

Waspmote Plug & Sense! is the the best option to use in commercial deployments. It has been designed with a robust waterproof enclosure that simplifies installation and maintenance process. Moreover, you can order them factory-programmed saving you development costs and time. The result is a ready to install and easy to deploy sensor device that reduces time to market in any application. You can focus on your customer and forget about the sensing part. Besides, the platform is market-ready because it is certified for the main regions in the world.

Any scenario	• 120+ sensors available, up to 6 sensors per sensor device • Communication: 802.15.4, 868 MHz, 900 MHz, WiFi, 4G, Sigfox and LoRaWAN • Industrial protocols: RS-485, Modbus, CAN Bus • GPS receiver
For real projects	• Robust waterproof IP65 enclosure • Solar powered, external panel option
Fast installation	• Factory-programmed and configured • Special holders and brackets to install in street lights and building fronts • On / Off external button • External socket for SIM card
Easy maintenance	• Remote firmware upgrades of multiple nodes at once (OTAP) • Replace or add a sensor probe in seconds • External, contactless device-reset with magnet
Fully certified	• CE (Europe) • FCC (US) • IC (Canada) • ANATEL (Brazil) • RCM (Australia) • PTCRB (cellular certification for US) • AT&T (cellular certification for US)

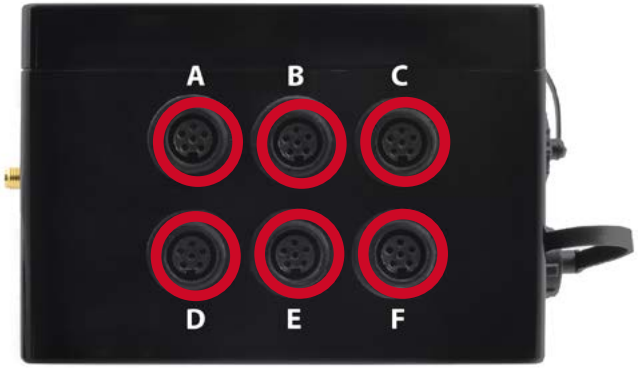
Configuring your Plug & Sense! device

You can customize any Waspmote Plug & Sense! model by choosing the radio, power option, sensors and optional accessories. Any Plug & Sense! always comes with a rechargeable 6600 mA·h battery included.

Since each sensor has different power requirements and dedicated circuitry, sensor probes can be attached only to certain sockets (named A - F in the figure). There is a sensors table in all the models explaining all the possible connections between sensor probes and sockets.

Each socket supports **one sensor** at the **same time**

*Each socket supports **one sensor** at the **same time***



Sensor	Sockets					
	A	B	C	D	E	F
Temperature	✓					
Humidity		✓				
CO_2			✓			
NO_2				✓		
O_2					✓	
CO	✓					✓

In this example the CO Sensor can be connected to the socket A or F indistinctly

Choosing your Plug & Sense! model

Smart Agriculture

- Temperature, Humidity and Pressure
- Anemometer + Wind vane + Pluviometer
- Soil moisture (1.5, 4.5, 8 m)
- Soil temperature
- Leaf wetness
- Luminosity (Luxes accuracy)
- Ultrasound (outdoor IP67)

Smart Agriculture PRO

- Soil / Water temperature
- Solar radiation (PAR)
- Trunk diameter
- Stem diameter
- Fruit diameter
- Temperature, Humidity and Pressure
- Soil moisture (1.5, 4.5, 8 m)
- Leaf wetness
- Anemometer + Wind vane + Pluviometer
- Luminosity (Luxes accuracy)
- Ultrasound (outdoor IP67)

Smart Agriculture Xtreme

- Non-contact surface temperature measurement SI-411
- Leaf and flower bud temperature SF-421
- Conductivity, water content and soil temperature GS3
- Conductivity, water content and soil temperature 5TE
- Soil temperature and volumetric water content 5TM
- Vapor pressure, humidity, temperature, and atmospheric pressure in soil and air VP-4
- Soil water potentials MPS-6
- Leaf wetness Phytos 31
- Wind and precipitations
- Solar radiation (PAR) SQ-110
- Ultraviolet radiation SU-100
- Trunk diameter DC2
- Soil oxygen level SO-411
- Shortwave radiation SP-510
- Stem diameter DD-S
- Fruit diameter DF

- Temperature, Humidity and Pressure
- Luminosity (Luxes accuracy)
- Ultrasound (outdoor IP67)
- Weather station GMX-100 (PO)
- Weather station GMX-101 (R)
- Weather station GMX-200 (W)
- Weather station GMX-240 (W-PO)
- Weather station GMX-300 (T-H-AP)
- Weather station GMX-301 (T-H-AP-R)

- Weather station GMX-400 (T-H-AP-R)
- Weather station GMX-400 (PO-T-H-AP)
- Weather station GMX-500 (W-T-H-AP)
- Weather station GMX-501 (W-T-H-AP-R)
- Weather station GMX-531 (W-PT-T-H-AP-R)
- Weather station GMX-541 (W-PO-T-H-AP-R)
- Weather station GMX-550 (W-x-T-H-AP)
- Weather station GMX-551 (W-x-T-H-AP-R)
- Weather station GMX-600 (W-PO-T-H-AP)

Smart Environment PRO

- Particle Matter (PM1 / PM2.5 / PM10) Dust Sensor
- CO - H_2 - Cl_2
- CO_2 - H_2S - NH_3
- O_2 - HCl - SO_2
- O_3 - HCN
- NO - PH_3
- NO_2 - ETO
- CH_4 (and other combustible gases)
- Temperature, Humidity and Pressure
- Luminosity (Luxes accuracy)
- Ultrasound (outdoor IP67)

Smart Water

- Soil / Water temperature
- Conductivity
- Dissolved Oxygen
- pH
- Oxidation-Reduction Potential
- Turbidity

Smart Water Xtreme

- Optical dissolved oxygen and temperature OPTOD
- Titanium optical dissolved oxygen and temperature OPTOD
- pH, ORP and temperature PHEHT
- Conductivity, salinity and temperature C4E
- Inductive conductivity, salinity and temperature CTZN
- Turbidity and temperature NTU
- Suspended solids, turbidity, sludge blanket and temperature MES5
- Temperature, Humidity and Pressure
- Luminosity (Luxes accuracy)
- Ultrasound (outdoor IP67)
- Manta+ 40
- Chlorophyll
- BGA
- Nitrate
- Organic matter CDOM/FDOM

Smart Water Ions

- Ammonium (NH_4^+) NH_3
- Bromide (Br^-) - H_2
- Calcium (Ca^{2+}) - H_2S
- Chloride (Cl^-) - HCl
- Cupric (Cu^{2+}) - HCN
- Fluoride (F^-) - PH_3
- Iodide (I^-) - ETO
- Fluoroborate (BF_4^-)
- Lithium (Li^+)
- Nitrate (NO_3^-)
- Nitrite (NO_2^-)
- Magnesium (Mg^{2+})
- Perchlorate (ClO_4^-)
- Potassium (K+)
- Silver (Ag^+)
- Sodium (Na^+)
- pH
- Soil / Water Temperature

Smart Cities PRO

- Noise / Sound Level
- Particle Matter (PM1 / PM2.5 / PM10) – Dust Sensor
- CO
- CO_2
- O_2
- O_3
- NO
- NO_2
- SO_2
- Cl_2
- CH_4 (and other combustible gases)
- Temperature, Humidity and Pressure
- Luminosity (Luxes accuracy)
- Ultrasound (outdoor IP67)

Smart Parking	Smart Security	4 - 20 mA (Current Loop)	Radiation Control	Ambient Control	Traffic Congestion
- Magnetic field (3 axis): · X axis · Y axis · Z axis	- Temperature, Humidity and Pressure - Presence (PIR) - Horizontal liquid level (water / combustibles) - Water leakage (point / line) - Hall effect - Water flow small - Water flow medium - Water flow large - Relay Input-Output - Luminosity (Luxes accuracy) - Ultrasound (outdoor IP67)	- Sensors and instruments - Remote transducers - Monitoring processes - Data transmission in industrial ambients - The user can choose among a wide variety of standard sensors - Chloride - Sodium - Calcium - Ammonium	- Geiger tube [ß, γ] (Beta and Gamma)	- Temperature, Humidity and Pressure - Luminosity (LDR) - Luminosity (Luxes accuracy)	- As well as working as IoT gateway for the Waspmote and Plug & Sense! sensor nodes, Meshlium can detect WiFi and Bluetooth devices, like smart-phones and tablets. This enables the user to calculate the number of people passing through the range area.

Smart Agriculture

This model allows the deployment of any Precision Agriculture application. Due to the complexity of some sensors, there are two versions: Smart Agriculture and Smart Agriculture-PRO.

Communication options	Ref.	Price
Plug & Sense! SA 802.15.4 EU	SAB-802-EU	570 €
Plug & Sense! SA 802.15.4	SAB-802	570 €
Plug & Sense! SA WiFi	SAB-W	570 €
Plug & Sense! SA 868	SAB-868	571 €
Plug & Sense! SA 900 US	SAB-900-US	600 €
Plug & Sense! SA 900 BR	SAB-900-BR	600 €
Plug & Sense! SA 900 AU	SAB-900-AU	600 €
Plug & Sense! SA 4G EU/BR*	SAB-4G-EU/BR	816 €
Plug & Sense! SA 4G US*	SAB-4G-US	816 €
Plug & Sense! SA 4G AU	SAB-4G-AU	744 €
Plug & Sense! SA LoRaWAN EU	SAB-LW-EU	552 €
Plug & Sense! SA LoRaWAN US	SAB-LW-US	552 €
Plug & Sense! SA LoRaWAN AU	SAB-LW-AU	552 €
Plug & Sense! SA LoRaWAN IN	SAB-LW-IN	552 €
Plug & Sense! SA LoRaWAN ASIA-PAC / LATAM	SAB-LW-APL	552 €
Plug & Sense! SA Sigfox EU **	SAB-SF-EU	552 €
Plug & Sense! SA Sigfox US **	SAB-SF-US	558 €
Plug & Sense! SA Sigfox AU / APAC / LATAM **	SAB-SF-AAPL	558 €

Looking for a working and programmed demo with this product?
Try our out-of-the-box IoT Vertical kits!

** This device includes a GPS receiver. ** Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country. Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.*

We provide prices in USD to US customers. Please submit your RFQ, and we will provide you with the USD prices.

Sensors available:

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Temperature, Humidity and Pressure				✓		✓	9370-P	55 €
Soil moisture 1.5 m		✓	✓		✓		9248-P	65 €
Soil moisture 4.5 m		✓	✓		✓		9324-P	80 €
Soil moisture 8 m		✓	✓		✓		9323-P	90 €
Soil temperature (DS18B20)				✓			86949-P	19 €
WS-3000 (anemometer + wind vane + pluviometer)	✓						9256-P	75 €
Leaf wetness					✓		9249-P	10 €
Luminosity (Luxes accuracy)				✓		✓	9325-P	47 €
Ultrasound				✓		✓	9246-P	275 €

Smart Agriculture PRO

The PRO version accepts more sensors than the Standard version.

Communication options	Ref.	Price
Plug & Sense! SA-PRO 802.15.4 EU	SAPB-802-EU	600 €
Plug & Sense! SA-PRO 802.15.4	SAPB-802	600 €
Plug & Sense! SA-PRO WiFi	SAPB-W	600 €
Plug & Sense! SA-PRO 868	SAPB-868	601 €
Plug & Sense! SA-PRO 900 US	SAPB-900-US	636 €
Plug & Sense! SA-PRO 900 BR	SAPB-900-BR	636 €
Plug & Sense! SA-PRO 900 AU	SAPB-900-AU	636 €
Plug & Sense! SA-PRO 4G EU/BR*	SAPB-4G-EU/BR	864 €
Plug & Sense! SA-PRO 4G US*	SAPB-4G-US	864 €
Plug & Sense! SA-PRO 4G AU	SAPB-4G-AU	792 €
Plug & Sense! SA-PRO LoRaWAN EU	SAPB-LW-EU	570 €
Plug & Sense! SA-PRO LoRaWAN US	SAPB-LW-US	570 €
Plug & Sense! SA-PRO LoRaWAN AU	SAPB-LW-AU	570 €
Plug & Sense! SA-PRO LoRaWAN IN	SAPB-LW-IN	570 €
Plug & Sense! SA-PRO LoRaWAN ASIA-PAC / LATAM	SAPB-LW-APL	570 €
Plug & Sense! SA-PRO Sigfox EU **	SAPB-SF-EU	570 €
Plug & Sense! SA-PRO Sigfox US **	SAPB-SF-US	582 €
Plug & Sense! SA-PRO Sigfox AU / APAC / LATAM **	SAPB-SF-AAPL	582 €

Looking for a working and programmed demo with this product?

Try our out-of-the-box IoT Vertical kits!

** This device includes a GPS receiver. * *Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country. Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.*

Sensors available:

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Temperature, Humidity and Pressure				✓		✓	9370-P	55 €
Soil/Water temperature (Pt-1000)				✓			9255-P	30 €
Solar radiation (PAR)		✓					9251-P	250 €
Ultraviolet		✓					9257-P	315 €
Soil moisture 1.5 m		✓	✓		✓		9248-P	65 €
Soil moisture 4.5 m		✓	✓		✓		9324-P	80 €
Soil moisture 8 m		✓	✓		✓		9323-P	90 €
WS-3000 (anemometer + wind vane + pluviometer)	✓						9256-P	75 €
Leaf wetness					✓		9249-P	10 €
Trunk diameter			✓				9252-P	500 €
Stem diameter			✓				9253-P	475 €
Fruit diameter			✓				9254-P	475 €
Luminosity (Luxes accuracy)				✓		✓	9325-P	47 €
Ultrasound				✓		✓	9246-P	275 €

An accessory composed of a mounting bracket and a leveling plate is advised for the Solar radiation (PAR) and Ultraviolet sensor probes (check delivery time with your sales agent):

Item	Ref.	Price
Solar Sensors Mounting Accessory	SSMA	85 €

Smart Agriculture Xtreme

This Plug & Sense! is an evolution of our Agriculture line with a new selection of high-end professional sensors. There are sensors for atmospheric and soil monitoring and plants health. Up to 32 sensors can be connected.

Communication options	Ref.	Price
Plug & Sense! SA-XTR 802.15.4 EU	SAXB-802-EU	650 €
Plug & Sense! SA-XTR 802.15.4	SAXB-802	650 €
Plug & Sense! SA-XTR WiFi	SAXB-W	650 €
Plug & Sense! SA-XTR 868	SAXB-868	651 €
Plug & Sense! SA-XTR 900 US	SAXB-900-US	686 €
Plug & Sense! SA-XTR 900 BR	SAXB-900-BR	686 €
Plug & Sense! SA-XTR 900 AU	SAXB-900-AU	686 €
Plug & Sense! SA-XTR 4G EU/BR *	SAXB-4G-EU/BR	914 €
Plug & Sense! SA-XTR 4G US *	SAXB-4G-US	914 €
Plug & Sense! SA-XTR 4G AU	SAXB-4G-AU	842 €
Plug & Sense! SA-XTR LoRaWAN EU	SAXB-LW-EU	620 €
Plug & Sense! SA-XTR LoRaWAN US	SAXB-LW-US	620 €
Plug & Sense! SA-XTR LoRaWAN AU	SAXB-LW-AU	620 €
Plug & Sense! SA-XTR LoRaWAN IN	SAXB-LW-IN	620 €
Plug & Sense! SA-XTR LoRaWAN ASIA-PAC / LATAM	SAXB-LW-APL	620 €
Plug & Sense! SA-XTR Sigfox EU **	SAXB-SF-EU	620 €
Plug & Sense! SA-XTR Sigfox US **	SAXB-SF-US	632 €
Plug & Sense! SA-XTR Sigfox AU / APAC / LATAM **	SAXB-SF-AAPL	632 €

Looking for a working and programmed demo with this product?

Try our out-of-the-box IoT Vertical kits!

** This device includes a GPS receiver. * * Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country. Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.*

Sensors available:

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Non-contact surface temperature measurement SI-411	✓	✓	✓	✓			9468-P	720 €
Leaf and flower bud temperature SF-421	✓	✓	✓	✓			9467-P	255 €
Soil oxygen level SO-411	✓	✓	✓	✓			9469-P	330 €
Shortwave radiation SP-510		✓	✓		✓	✓	9470-P	280 €
Solar radiation (PAR) SQ-110 for Smart Agriculture Xtreme		✓	✓		✓	✓	9251-PX	250 €
Ultraviolet radiation SU-100 for Smart Agriculture Xtreme		✓	✓		✓	✓	9257-PX	315 €
Temperature, air humidity and pressure	✓			✓			9370-P	55 €
Conductivity, water content and soil temperature GS3	✓	✓	✓	✓			9464-P	390 €
Conductivity, water content and soil temperature 5TE	✓	✓	✓	✓			9402-P	455 €
Soil temperature and volumetric water content 5TM	✓	✓	✓	✓			9460-P	255 €
Soil water potentials MPS-6	✓	✓	✓	✓			9465-P	310 €
Vapor pressure, humidity, temperature, and atmospheric pressure in soil and air VP-4	✓	✓	✓	✓			9471-P	390 €
Leaf wetness Phytos 31		✓					9466-P	175 €
Trunk diameter DC2 for Smart Agriculture Xtreme			✓				9252-PX	500 €
Stem diameter DD-S for Smart Agriculture Xtreme			✓				9253-PX	475 €
Fruit diameter DF for Smart Agriculture Xtreme			✓				9254-PX	475 €
Luminosity (Luxes accuracy)	✓			✓			9325-P	47 €
Ultrasound	✓			✓			9246-P	275 €
Weather station GMX-100 (PO)					✓		9472-P	760 €

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Weather station GMX-101 (R)					✓		9473-P	1,370 €
Weather station GMX-200 (W)[1]					✓		9474-P	1,140 €
Weather station GMX-240 (W-PO)[1]					✓		9463-P	1,520 €
Weather station GMX-300 (T-H-AP)					✓		9475-P	870 €
Weather station GMX-301 (T-H-AP-R)					✓		9476-P	2,040 €
Weather station GMX-400 (PO-T-H-AP)					✓		9477-P	1,390 €
Weather station GMX-500 (W-T-H-AP)[1]					✓		9478-P	1,530 €
Weather station GMX-501 (W-T-H-AP-R)[1]					✓		9479-P	3,060 €
Weather station GMX-531 (W-PT-T-H-AP-R)[1]					✓		9480-P	3,500 €
Weather station GMX-541 (W-PO-T-H-AP-R)[1]					✓		9481-P	3,380 €
Weather station GMX-550 (W-x-T-H-AP)[1, 2]					✓		9482-P	1,950 €
Weather station GMX-551 (W-x-T-H-AP-R)[1, 2]					✓		9483-P	3,210 €
Weather station GMX-600 (W-PO-T-H-AP)[1]					✓		9484-P	2,270 €

1: This item can be ordered with a special accessory: a GPS receiver for wind corrections. Available on demand.
2: This item can accept a precipitation sensor (Kalyx rain gauge by Gill). Special accessory, on demand.

Several accessories are available:

Item	Ref.	Price
Solar Sensors Mounting Accessory	SSMA	85 €
Mounting bracket accessory	9462	40 €
Diffusion head accessory for Soil oxigen level sensor	9461	40 €

This table shows differences between the 14 weather stations:

Weather station	Wind and compass	Precipitation	Temperature, relative humidity and pressure	Solar radiation	GPS
GMX-100 (PO)		✓ (optical)			
GMX-101 (R)				✓	
GMX-200 (W)	✓				Optional
GMX-240 (W-PO)	✓	✓ (optical)			Optional
GMX-300 (T-H-AP)			✓		
GMX-301 (T-H-AP-R)			✓	✓	
GMX-400 (PO-T-H-AP)		✓ (optical)	✓		
GMX-500 (W-T-H-AP)	✓		✓		Optional
GMX-501 (W-T-H-AP-R)	✓		✓	✓	Optional
GMX-531 (W-PT-T-H-AP-R)	✓	✓ (Tipping bucket)	✓	✓	Optional
GMX-541 (W-PO-T-H-AP-R)	✓	✓ (Optical)	✓	✓	Optional
GMX-550 (W-x-T-H-AP)	✓	Optional (Tipping bucket)	✓		Optional
GMX-551 (W-x-T-H-AP-R)	✓	Optional (Tipping bucket)	✓	✓	Optional
GMX-600 (W-PO-T-H-AP)	✓	✓ (Optical)	✓		Optional

Smart Environment PRO

This model model has been created as an evolution of Smart Environment. It enables the user to implement pollution, air quality, industrial, environmental or farming projects with high requirements in terms of high accuracy, reliability and measurement range as the sensors come calibrated from factory.

Communication options	Ref.	Price
Plug & Sense! SE-PRO 802.15.4 EU	SEPB-802-EU	588 €
Plug & Sense! SE-PRO 802.15.4	SEPB-802	588 €
Plug & Sense! SE-PRO WiFi	SEPB-W	588 €
Plug & Sense! SE-PRO 868	SEPB-868	611 €
Plug & Sense! SE-PRO 900 US	SEPB-900-US	630 €
Plug & Sense! SE-PRO 900 BR	SEPB-900-BR	630 €
Plug & Sense! SE-PRO 900 AU	SEPB-900-AU	630 €
Plug & Sense! SE-PRO 4G EU/BR*	SEPB-4G-EU/BR	774 €
Plug & Sense! SE-PRO 4G US*	SEPB-4G-US	774 €
Plug & Sense! SE-PRO 4G AU	SEPB-4G-AU	708 €
Plug & Sense! SE-PRO LoRaWAN EU	SEPB-LW-EU	528 €
Plug & Sense! SE-PRO LoRaWAN US	SEPB-LW-US	528 €
Plug & Sense! SE-PRO LoRaWAN AU	SEPB-LW-AU	528 €
Plug & Sense! SE-PRO LoRaWAN IN	SEPB-LW-IN	528 €
Plug & Sense! SE-PRO LoRaWAN ASIA-PAC / LATAM	SEPB-LW-APL	528 €
Plug & Sense! SE-PRO Sigfox EU **	SEPB-SF-EU	528 €
Plug & Sense! SE-PRO Sigfox US **	SEPB-SF-US	540 €
Plug & Sense! SE-PRO Sigfox AU/APAC/LATAM **	SEPB-SF-AAPL	540 €

Looking for a working and programmed demo with this product?

Try our out-of-the-box IoT Vertical kits!

** This device includes a GPS receiver. * * Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country. Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.*

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Temperature, Humidity and Pressure					✓		9370-P	55 €
Carbon Monoxide (CO) for low concentrations (Calibrated)[1]	✓	✓	✓				9371-LC-P	276 €
Carbon Dioxide ($CO_{2)}$ (Calibrated)* (1)	✓	✓	✓			✓	9372-P	648 €
Oxygen (O_2) (Calibrated) (1)	✓	✓	✓			✓	9373-P	240 €
Ozone (O_3) (Calibrated) (1)	✓	✓	✓			✓	9374-P	348 €
Nitric Oxide (NO) for low concentrations (Calibrated) (1)	✓	✓	✓			✓	9375-LC-P	288 €
Nitric Dioxide high accuracy (NO_2) (Calibrated) (1)	✓	✓	✓			✓	9376-HA-P	276 €
Sulfur Dioxide high accuracy (SO_2) (Calibrated) (1)	✓	✓	✓			✓	9377-HA-P	276 €
Ammonia (NH_3) for low concentrations (Calibrated) (1)	✓	✓	✓			✓	9378-LC-P	444 €
Ammonia (NH_3) for high concentrations (Calibrated) (1)	✓	✓	✓			✓	9378-HC-P	485 €
Methane (CH_4) and Combustible Gas (Calibrated)* (1)	✓	✓	✓			✓	9379-P	246 €
Hydrogen (H_2) (Calibrated) (1)	✓	✓	✓			✓	9380-P	222 €
Hydrogen Sulfide (H_2S)(Calibrated) (1)	✓	✓	✓			✓	9381-P	228 €
Hydrogen Chloride (HCl) (Calibrated) (1)	✓	✓	✓			✓	9382-P	408 €
Hydrogen Cyanide (HCN) (Calibrated) (1)	✓	✓	✓			✓	9383-P	268 €
PH_3 (Calibrated) (1)	✓	✓	✓			✓	9384-P	390 €
ETO (Calibrated) (1)	✓	✓	✓			✓	9385-P	288 €
Cl_2 (Calibrated) (1)	✓	✓	✓			✓	9386-P	300 €
Particle Matter (PM1 / PM2.5 / PM10) - Dust (1)				✓			9387-P	1,380 €
Luminosity (Luxes accuracy)					✓		9325-P	47 €
Ultrasound					✓		9246-P	275 €

Smart Water

With this platform you can measure more than 6 parameters, including the most relevant for water control such as dissolved oxygen, oxidation-reduction potential, pH, conductivity and temperature. An extremely accurate turbidity sensor has been integrated as we''

Communication options	Ref.	Price
Plug & Sense! SW 802.15.4 EU	SWB-802-EU	636 €
Plug & Sense! SW 802.15.4	SWB-802	636 €
Plug & Sense! SW WiFi	SWB-W	636 €
Plug & Sense! SW 868	SWB-868	636 €
Plug & Sense! SW 900 US	SWB-900-US	672 €
Plug & Sense! SW 900 BR	SWB-900-BR	672 €
Plug & Sense! SW 900 AU	SWB-900-AU	672 €
Plug & Sense! SW 4G EU/BR*	SWB-4G-EU/BR	996 €
Plug & Sense! SW 4G US*	SWB-4G-US	996 €
Plug & Sense! SW 4G AU	SWB-4G-AU	900 €
Plug & Sense! SW LoRaWAN EU	SWB-LW-EU	636 €
Plug & Sense! SW LoRaWAN US	SWB-LW-US	636 €
Plug & Sense! SW LoRaWAN AU	SWB-LW-AU	636 €
Plug & Sense! SW LoRaWAN IN	SWB-LW-IN	636 €
Plug & Sense! SW LoRaWAN ASIA-PAC / LATAM	SWB-LW-APL	636 €
Plug & Sense! SW Sigfox EU **	SWB-SF-EU	636 €
Plug & Sense! SW Sigfox US **	SWB-SF-US	648 €
Plug & Sense! SW Sigfox AU/APAC/LATAM **	SWB-SF-AAPL	648 €

Looking for a working and programmed demo with this product?
Try our out-of-the-box IoT Vertical kits!

** This device includes a GPS receiver. * * Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country.*
Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.

Sensors available:

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Soil/Water temperature (Pt-1000)*						✓	9255-P	30 €
Conductivity			✓				9326-P	59 €
Dissolved Oxygen		✓					9327	600 €
pH	✓						9328	21 €
Oxidation Reduction Potential					✓		9329	54 €
Turbidity**						✓	9353-P	3,594 €

** Each Smart Water node includes a Soil/Water temperature probe in the price.*
*** The sensor is sold calibrated from factory. It must be purchased with its corresponding Plug & Sense! Smart Water node; available on demand.*

For Smart Water sensors, it is highly recommended to purchase calibration solutions to calculate accurate measurement. One kit is enough for several sensor units.

Calibration Kit	Ref.	Price
Conductivity Calibration Kit, K=0.1	9339	28 €
Conductivity Calibration Kit, K=1	9340	28 €
Conductivity Calibration Kit, K=10	9341	28 €
DO Calibration Solution	9342	42 €
Dissolved Oxygen Maintenance Kit	9450	144 €
pH Calibration Kit	9343	63 €
ORP Calibration Solution	9344	42 €
Turbidity Calibration Kit (low)	TCL	144 €
Turbidity Calibration Kit (high)	TCH	186 €

Smart Water Xtreme

This model was created as an evolution of Smart Water and integrates high-end sensors, calibrated in factory, with enhanced accuracy and performance. Their reduced recalibration requirements and robust design enlarge maintenance periods, making it more affordable to deploy remote Smart Water applications.

Communication options	Ref.	Price
Plug & Sense! SW-XTR 802.15.4 EU	SWXB-802-EU	686 €
Plug & Sense! SW-XTR 802.15.4	SWXB-802	686 €
Plug & Sense! SW-XTR WiFi	SWXB-W	686 €
Plug & Sense! SW-XTR 868	SWXB-868	686 €
Plug & Sense! SW-XTR 900 US	SWXB-900-US	722 €
Plug & Sense! SW-XTR 900 BR	SWXB-900-BR	722 €
Plug & Sense! SW-XTR 900 AU	SWXB-900-AU	722 €
Plug & Sense! SW-XTR 4G EU/BR *	SWXB-4G-EU/BR	1,046 €
Plug & Sense! SW-XTR 4G US *	SWXB-4G-US	1,046 €
Plug & Sense! SW-XTR 4G AU	SWXB-4G-AU	950 €
Plug & Sense! SW-XTR LoRaWAN EU	SWXB-LW-EU	686 €
Plug & Sense! SW-XTR LoRaWAN US	SWXB-LW-US	686 €
Plug & Sense! SW-XTR LoRaWAN AU	SWXB-LW-AU	686 €
Plug & Sense! SW-XTR LoRaWAN IN	SWXB-LW-IN	686 €
Plug & Sense! SW-XTR LoRaWAN ASIA-PAC / LATAM	SWXB-LW-APL	686 €
Plug & Sense! SW-XTR Sigfox EU **	SWXB-SF-EU	686 €
Plug & Sense! SW-XTR Sigfox US **	SWXB-SF-US	698 €
Plug & Sense! SW-XTR Sigfox AU / APAC / LATAM **	SWXB-SF-AAPL	698 €

CE FC IC AT&T ANATEL PTCRB

Looking for a working and programmed demo with this product?
Try our out-of-the-box IoT Vertical kits!

** This device includes a GPS receiver. * * Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country.*
Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.

Sensors available:

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Optical dissolved oxygen and temperature OPTOD	✓	✓	✓	✓	✓		9488-P	1,050 €
Titanium optical dissolved oxygen and temperature OPTOD	✓	✓	✓	✓	✓		9489-P	1,250 €
pH, ORP and temperature PHEHT	✓	✓	✓	✓	✓		9485-P	1,025 €
Conductivity, salinity and temperature C4E	✓	✓	✓	✓	✓		9486-P	825 €
Inductive conductivity, salinity and temperature CTZN	✓	✓	✓	✓	✓		9487-P	1,250 €
Turbidity and temperature NTU	✓	✓	✓	✓	✓		9353-PX	3,594 €
Suspended solids, turbidity, sludge blanket and temperature MES5	✓	✓	✓	✓	✓		9490-P	4,900 €
Temperature, Humidity and Pressure	✓			✓			9370-P	55 €
Luminosity (luxes accuracy)	✓			✓			9325-P	47 €
Ultrasound	✓			✓			9246-P	275 €
Manta+ 40						✓	9495-P	6,900 €
Chlorophyll sensor for Manta probe*							72470	3,700 €
BGA sensor for Manta probe*							72471	3,700 €
Organic matter sensor CDOM/FDOM for Manta probe*							72472	4,100 €
Ammonium sensor for Manta probe*							72473	1,350 €
Nitrate sensor for Manta probe*							72474	1,350 €
Chloride sensor for Manta probe*							72475	1,350 €

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Sodium sensor for Manta probe*							72476	1,350 €
Calcium sensor for Manta probe*							72477	1,350 €

** These sensor probes need the Manta+ 40 probe. Available on demand. Check compatibility and leadtime with your Sales agent.*
*** The sensor is sold calibrated from factory. It must be purchased with its corresponding Plug & Sense! Smart Water node; available on demand.*

For Smart Water Xtreme sensors, it is highly recommended to purchase calibration solutions to calculate accurate measurements. One kit is enough for several sensor units. Some sensors need storage solutions too. Also, we provide an accessory for protecting a sensor mechanically; from aquatic fauna, for instance:

Accessory	Ref.	Price
Conductivity Calibration Kit, K=0.1	9339	28 €
Conductivity Calibration Kit, K=1	9340	28 €
Conductivity Calibration Kit, K=10	9341	28 €
DO Calibration Solution	9342	42 €
pH Calibration Kit	9343	63 €
ORP Calibration Solution	9344	42 €
Turbidity calibration solution, 4000 NTU	72465	55 €
Storage solution for PHEHT probe	72464	20 €
Sensor protection accessory	9493	300 €

For those users interested in measuring directly inside pipes, there are pipe segments with a protected measurement point. As an optional accessory for this sensor, Libelium offers pipe mounting adapters which can be connected to those special pipe segments:

Mounting accessory	Ref.	Price
PVC pipe mounting accessory for OPTOD sensor probe	72454	310 €
PVC pipe mounting accessory for PHEHT sensor probe	72455	315 €
PVC pipe mounting accessory for C4E or sensor NTU probes	72456	240 €
PVC pipe mounting accessory for CTZN sensor probe	72457	220 €
PVC pipe mounting accessory for MES5 sensor probe	72458	340 €
Steel pipe mounting accessory for OPTOD sensor probe	72459	710 €
Steel pipe mounting accessory for PHEHT sensor probe	72460	740 €
Steel pipe mounting accessory for C4E or NTU sensor probes	72461	1,050 €
Steel pipe mounting accessory for CTZN sensor probe	72462	1,050 €

Smart Water Ions

The Smart Water Ions models specialize in the measurement of ions concentration for drinking water quality control, agriculture water monitoring, swimming pools or waste water treatment. Due to the existence of 3 types for the reference probe and 2 types of sensor probes ("normal" and PRO), there are 3 variants.

Communication options	Ref.	Price
Plug & Sense! SWI Single 802.15.4 EU	SWIB-S-802-EU	720 €
Plug & Sense! SWI Single 802.15.4	SWIB-S-802	720 €
Plug & Sense! SWI Single WiFi	SWIB-S-W	732 €
Plug & Sense! SWI Single 868	SWIB-S-868	732 €
Plug & Sense! SWI Single 900 US	SWIB-S-900-US	756 €
Plug & Sense! SWI Single 900 BR	SWIB-S-900-BR	756 €
Plug & Sense! SWI Single 900 AU	SWIB-S-900-AU	756 €
Plug & Sense! SWI Single 4G EU/BR*	SWIB-S-4G-EU/BR	984 €
Plug & Sense! SWI Single 4G US*	SWIB-S-4G-US	984 €
Plug & Sense! SWI Single 4G AU	SWIB-S-4G-AU	912 €
Plug & Sense! SWI Single LoRaWAN EU	SWIB-S-LW-EU	708 €
Plug & Sense! SWI Single LoRaWAN US	SWIB-S-LW-US	708 €
Plug & Sense! SWI Single LoRaWAN AU	SWIB-S-LW-AU	708 €
Plug & Sense! SWI Single LoRaWAN IN	SWIB-S-LW-IN	708 €
Plug & Sense! SWI LoRaWAN ASIA-PAC / LATAM	SWIB-LW-APL	708 €
Plug & Sense! SWI Single Sigfox EU **	SWIB-S-SF-EU	708 €
Plug & Sense! SWI Single Sigfox US **	SWIB-S-SF-US	720 €
Plug & Sense! SWI Single Sigfox AU/APAC/LATAM **	SWIB-S-SF-AAPL	720 €

Looking for a working and programmed demo with this product?
Try our out-of-the-box IoT Vertical kits!

** This device includes a GPS receiver. ** Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country. Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.*

Sensors available :

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Soil/Water temperature (Pt-1000)*						✓	9255-P	30 €
Single Junction Reference*					✓		9350	78 €
Fluoride Ion (F^-)	✓	✓	✓	✓			9353	204 €
Fluoroborate Ion (BF_4^-)	✓	✓	✓	✓			9354	204 €
pH (for Smart Water Ions)	✓	✓	✓	✓			9363	54 €

** Each Smart Water Ions node, Single variant, includes a Soil/Water temperature probe and a Single Junction Reference probe in the price.*

The Double variant accepts other type of sensors than the Single variant.

Communication options	Ref.	Price
Plug & Sense! SWI Double 802.15.4 EU	SWIB-D-802-EU	768 €
Plug & Sense! SWI Double 802.15.4	SWIB-D-802	768 €
Plug & Sense! SWI Double WiFi	SWIB-D-W	780 €
Plug & Sense! SWI Double 868	SWIB-D-868	780 €
Plug & Sense! SWI Double 900 US	SWIB-D-900-US	804 €
Plug & Sense! SWI Double 900 BR	SWIB-D-900-BR	804 €
Plug & Sense! SWI Double 900 AU	SWIB-D-900-AU	804 €
Plug & Sense! SWI Double 4G EU/BR*	SWIB-D-4G-EU/BR	1,032 €
Plug & Sense! SWI Double 4G US*	SWIB-D-4G-US	1,032 €
Plug & Sense! SWI Double 4G AU	SWIB-D-4G-AU	954 €
Plug & Sense! SWI Double LoRaWAN EU	SWIB-D-LW-EU	750 €
Plug & Sense! SWI Double LoRaWAN US	SWIB-D-LW-US	750 €
Plug & Sense! SWI Double LoRaWAN AU	SWIB-D-LW-AU	750 €
Plug & Sense! SWI Double LoRaWAN IN	SWIB-D-LW-IN	750 €
Plug & Sense! SWI Double LoRaWAN ASIA-PAC / LATAM	SWIB-D-LW-APL	750 €
Plug & Sense! SWI Double Sigfox EU **	SWIB-D-SF-EU	750 €
Plug & Sense! SWI Double Sigfox US **	SWIB-D-SF-US	762 €
Plug & Sense! SWI Double Sigfox AU/APAC/LATAM **	SWIB-D-SF-AAPL	762 €

** This device includes a GPS receiver. * * Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.*

Sensors available (they are "normal", not PRO):

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Soil/Water temperature (Pt-1000)*						✓	9255-P	30 €
Double Junction Reference*					✓		9351	120 €
Bromide Ion (Br^-)	✓	✓	✓	✓			9356	204 €
Chloride Ion (Cl^-)	✓	✓	✓	✓			9357	204 €
Cupric Ion (Cu^{2+})	✓	✓	✓	✓			9358	204 €
Iodide Ion (I^-)	✓	✓	✓	✓			9360	204 €
Silver Ion (Ag^+)	✓	✓	✓	✓			9362	204 €
pH (for Smart Water Ions)	✓	✓	✓	✓			9363	54 €

** Each Smart Water Ions node, Double variant, includes a **Soil/Water temperature probe** and a **Double Junction Reference probe** in the price.*

The PRO variant is able to read PRO sensors, with higher performance than the "normal" sensors (Single or Double).

Communication options	Ref.	Price
Plug & Sense! SWI PRO 802.15.4 EU	SWIB-P-802-EU	1,092 €
Plug & Sense! SWI PRO 802.15.4	SWIB-P-802	1,092 €
Plug & Sense! SWI PRO WiFi	SWIB-P-W	1,104 €
Plug & Sense! SWI PRO 868	SWIB-P-868	1,134 €
Plug & Sense! SWI PRO 900 US	SWIB-P-900-US	1,134 €
Plug & Sense! SWI PRO 900 BR	SWIB-P-900-BR	1,134 €
Plug & Sense! SWI PRO 900 AU	SWIB-P-900-AU	1,134 €
Plug & Sense! SWI PRO 4G EU/BR*	SWIB-P-4G-EU/BR	1,068 €
Plug & Sense! SWI PRO 4G US*	SWIB-P-4G-US	1,068 €
Plug & Sense! SWI PRO 4G AU	SWIB-P-4G-AU	996 €
Plug & Sense! SWI PRO LoRaWAN EU	SWIB-P-LW-EU	972 €
Plug & Sense! SWI PRO LoRaWAN US	SWIB-P-LW-US	972 €
Plug & Sense! SWI PRO LoRaWAN AU	SWIB-P-LW-AU	972 €
Plug & Sense! SWI PRO LoRaWAN IN	SWIB-P-LW-IN	972 €
Plug & Sense! SWI PRO LoRaWAN ASIA-PAC / LATAM	SWIB-P-LW-APL	972 €
Plug & Sense! SWI PRO Sigfox EU **	SWIB-P-SF-EU	972 €
Plug & Sense! SWI PRO Sigfox US **	SWIB-P-SF-US	984 €
Plug & Sense! SWI PRO Sigfox AU/APAC/LATAM **	SWIB-P-SF-AAPL	984 €

** This device includes a GPS receiver. * * Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country. Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.*

These are the PRO sensors available:

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Soil/Water temperature (Pt-1000)*						✓	9255-P	30 €
Reference [PRO]*					✓		9410	504 €
Ammonium Ion (NH_4^+) [PRO]	✓	✓	✓	✓			9412	504 €
Bromide Ion (Br^-) [PRO]	✓	✓	✓	✓			9413	918 €
Calcium Ion (Ca^{2+}) [PRO]	✓	✓	✓	✓			9414	504 €
Chloride Ion (Cl^-) [PRO]	✓	✓	✓	✓			9415	504 €
Cupric Ion (Cu^{2+}) [PRO]	✓	✓	✓	✓			9416	918 €
Fluoride Ion (F^-) [PRO]	✓	✓	✓	✓			9417	918 €
Iodide Ion (I^-) [PRO]	✓	✓	✓	✓			9418	918 €
Lithium Ion (Li^+) [PRO]	✓	✓	✓	✓			9419	918 €
Magnesium Ion (Mg^{2+}) [PRO]	✓	✓	✓	✓			9420	504 €
Nitrate Ion (NO_3^-) [PRO]	✓	✓	✓	✓			9421	504 €
Nitrite Ion (NO_2^-) [PRO]	✓	✓	✓	✓			9422	918 €
Perchlorate Ion (ClO_4^-) [PRO]	✓	✓	✓	✓			9423	918 €
Potassium Ion (K^+) [PRO]	✓	✓	✓	✓			9424	504 €
Silver Ion (Ag^+) [PRO]	✓	✓	✓	✓			9425	918 €
Sodium Ion (Na^+) [PRO]	✓	✓	✓	✓			9426	504 €
pH (for Smart Water Ions) [PRO]	✓	✓	✓	✓			9411	504 €

** Each Smart Water Ions node, Pro variant, includes a **Soil/Water temperature probe** and a **Pro Junction Reference probe** in the price.*

For Smart Water Ions sensors, it is highly recommended to purchase calibration solutions to calculate accurate measurement. One kit is enough for several sensor units.

Calibration Kit	Ref.	Price
Reference Sensor Probe [PRO] Maintenance Solution	9449	119 €
Multi-Ions Calibration Kit (Ammonium, Calcium, Chloride, Magnesium, Nitrate, Potassium, Sodium)	9445	144 €
Bromide Calibration Kit	9388	119 €
Calcium Calibration Kit	9366	119 €
Chloride Calibration Kit	9389	119 €
Cupric Calibration Kit	9390	119 €
Fluoride Calibration Kit	9367	119 €
Fluoroborate Calibration Kit	9368	119 €
Iodide Calibration Kit	9391	119 €
Lithium Calibration Kit	9446	144 €
Nitrate Calibration Kit	9369	119 €
Nitrite Calibration Kit	9447	144 €
Perchlorate Calibration Kit	9448	144 €
Silver Calibration Kit	9392	119 €
pH Calibration Kit	9343	63 €

Smart Cities PRO

This model allows to deploy many Smart Cities and Smart Buildings applications.

Communication options	Ref.	Price
Plug & Sense! SCP 802.15.4 EU	SCPB-802-EU	588 €
Plug & Sense! SCP 802.15.4	SCPB-802	588 €
Plug & Sense! SCP WiFi	SCPB-W	588 €
Plug & Sense! SCP 868	SCPB-868	611 €
Plug & Sense! SCP 900 US	SCPB-900-US	624 €
Plug & Sense! SCP 900 BR	SCPB-900-BR	624 €
Plug & Sense! SCP 900 AU	SCPB-900-AU	624 €
Plug & Sense! SCP 4G EU/BR*	SCPB-4G-EU/BR	792 €
Plug & Sense! SCP 4G US*	SCPB-4G-US	792 €
Plug & Sense! SCP 4G AU	SCPB-4G-AU	720 €
Plug & Sense! SCP LoRaWAN EU	SCPB-LW-EU	546 €
Plug & Sense! SCP LoRaWAN US	SCPB-LW-US	546 €
Plug & Sense! SCP LoRaWAN AU	SCPB-LW-AU	546 €
Plug & Sense! SCP LoRaWAN IN	SCPB-LW-IN	546 €
Plug & Sense! SCP LoRaWAN ASIA-PAC / LATAM	SCPB-LW-APL	546 €
Plug & Sense! SCP Sigfox EU **	SCPB-SF-EU	546 €
Plug & Sense! SCP Sigfox US **	SCPB-SF-US	558 €
Plug & Sense! SCP Sigfox AU/APAC/LATAM **	SCPB-SF-AAAPL	558 €

Looking for a working and programmed demo with this product?
Try our out-of-the-box IoT Vertical kits!

** This device includes a GPS receiver. * * Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country. Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.*

Sensors available:

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Temperature, Humidity and Pressure	✓	✓	✓		✓	✓	9370-P	55 €
Noise Level (dBA)*	✓						NLS	995 €
Carbon Monoxide (CO) for low concentrations (Calibrated) [1]		✓	✓			✓	9371-LC-P	276 €
Carbon Dioxide (CO_2) (Calibrated) [1] [**]		✓	✓			✓	9372-P	648 €
Oxygen (O_2) (Calibrated) [1]		✓	✓			✓	9373-P	240 €
Ozone (O_3) (Calibrated) [1]		✓	✓			✓	9374-P	348 €
Nitric Oxide (NO) for low concentrations (Calibrated) [1]		✓	✓			✓	9375-LC-P	288 €
Nitric Dioxide high accuracy (NO_2) (Calibrated) [1]		✓	✓			✓	9376-HA-P	276 €
Sulfur Dioxide high accuracy (SO_2) (Calibrated) [1]		✓	✓			✓	9377-HA-P	276 €
Ammonia (NH_3) for low concentrations (Calibrated) [1]		✓	✓			✓	9378-LC-P	444 €
Ammonia (NH_3) for high concentrations (Calibrated) [1]		✓	✓			✓	9378-HC-P	485 €
Methane (CH_4) and Combustible Gas (Calibrated) [1] [**]		✓	✓			✓	9379-P	246 €
Hydrogen (H_2) (Calibrated) [1]		✓	✓			✓	9380-P	222 €
Hydrogen Sulfide (H_2S) (Calibrated) [1]		✓	✓			✓	9381-P	228 €
Hydrogen Chloride (HCl) (Calibrated) [1]		✓	✓			✓	9382-P	408 €
Hydrogen Cyanide (HCN) (Calibrated) [1]		✓	✓			✓	9383-P	268 €
Phosphine (PH_3) (Calibrated) [1]		✓	✓			✓	9384-P	390 €

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Ethylene (ETO) (Calibrated) [1]		✓	✓			✓	9385-P	288 €
Chlorine (Cl_2) (Calibrated) [1]		✓	✓			✓	9386-P	300 €
Particle Matter (PM1 / PM2.5 / PM10) - Dust 1				✓			9387-P	1,380 €
Luminosity (Luxes accuracy)	✓	✓	✓		✓	✓	9325-P	47 €
Ultrasound	✓	✓	✓		✓	✓	9246-P	275 €

1: Calibrated gas sensors are manufactured once the order has been placed to ensure maximum durability of the calibration feature. Manufacturing process and delivery may take from 4 to 6 weeks. Lifetime of calibrated gas sensors is 6 months working at maximum accuracy. We strongly encourage our customers to buy extra gas sensor probes to replace the original ones after that time to ensure maximum accuracy and performance.

**: This sensor includes all the needed accessories (sensor, windshield, enclosure, cables, mounting kit, roof, etc).*

***: Due to high power requirements, these sensors cannot work at the same time in the same Plug & Sense!.*

Smart Parking

This model allows to detect free parking spots. It is designed to be screwed on the surface of parking slots and to detect the arrival and departure of vehicles with an electromagnetic field sensor. It includes a robust polyamide enclosure for a fast and easy surface installation.

This node comes with 2 radios, Sigfox and LoRaWAN, which benefit from all the LPWAN characteristics. The device is easily configured from a PC and can even be reconfigured with the Remote Manager, from the cloud. This model comes with a non-rechargeable battery of 10.4 Ah.

Item	Ref.	Price
Smart Parking Node 6 Units Bundle, Europe version [1]	SP-6-E	1,260 €
Smart Parking Node 10 Units Bundle, Europe version [1]	SP-10-E	2,100 €
Smart Parking Node 6 Units Bundle, America version [1]	SP-6-A	1,260 €
Smart Parking Node 10 Units Bundle, America version [1]	SP-10-A	2,100 €
Smart Parking Node 6 Units Bundle, APAC / LATAM / AU / AU915 version [1, 2]	SP-6-APLA-AU	1,260 €
Smart Parking Node 10 Units Bundle, APAC / LATAM / AU / AU915 version [1, 2]	SP-10-APLA-AU	2,100 €
Smart Parking Node 6 Units Bundle, IN version [1, 3]	SP-6-IN	1,260 €
Smart Parking Node 10 Units Bundle, IN version [1, 3]	SP-10-IN	2,100 €
Smart Parking Node 6 Units Bundle, APAC / LATAM / AU / AS923 version [1, 4]	SP-6-APLA-AS	1,260 €
Smart Parking Node 10 Units Bundle, APAC / LATAM / AU / AS923 version [1, 4]	SP-10-APLA-AS	2,100 €
Smart Parking Installation Kit [45]	SP-INST	102 €

Looking for a working and programmed demo with this product?

Try our out-of-the-box IoT Vertical kits!

1.- Any Smart Parking bundle includes 'n' nodes. Each node includes, among others, PCB, battery, 2 antennas, enclosure, rubber isolators, 4 private ground screws and 4 ground screw anchors.
2.- The Sigfox radio of this version is also valid for countries in RC4 like Australia, New Zealand, Singapore, Taiwan, Hong Kong, Colombia, Argentina, Costa Rica, Thailand or Chile. The LoRaWAN radio of this version is valid for Australia.
3.- The LoRaWAN radio of this version is valid por India. The Sigfox radio of this version is disabled (no Sigfox network in India yet).
4.-The Sigfox radio of this version is also valid for countries in RC4 like Australia, New Zealand, Singapore, Taiwan, Hong Kong, Colombia, Argentina, Costa Rica, Thailand or Chile. The LoRaWAN radio of this version is valid for AS-923 countries (ASIA-PAC, LATAM, AU).
5.- The Smart Parking Installation Kit includes a magnet for contactless reset, a private screw key, a USB Programmer and a miniUSB cable. This Installation Kits not included in Smart Parking bundle, so remember to order at least one.

Smart Security

This model is designed to allow the detection of different events like movement, presence or water levels. Besides, a relay system allows this model to interact with external electrical machines.

Communication options	Ref.	Price
Plug & Sense! SS 802.15.4 EU	SSB-802-EU	546 €
Plug & Sense! SS 802.15.4	SSB-802	546 €
Plug & Sense! SS WiFi	SSB-W	546 €
Plug & Sense! SS 868	SSB-868	561 €
Plug & Sense! SS 900 US	SSB-900-US	582 €
Plug & Sense! SS 900 BR	SSB-900-BR	582 €
Plug & Sense! SS 900 AU	SSB-900-AU	582 €
Plug & Sense! SS 4G EU/BR*	SSB-4G-EU/BR	816 €
Plug & Sense! SS 4G US*	SSB-4G-US	816 €
Plug & Sense! SS 4G AU	SSB-4G-AU	744 €
Plug & Sense! SS LoRaWAN EU	SSB-LW-EU	516 €
Plug & Sense! SS LoRaWAN US	SSB-LW-US	516 €
Plug & Sense! SS LoRaWAN AU	SSB-LW-AU	516 €
Plug & Sense! SS LoRaWAN IN	SSB-LW-IN	516 €
Plug & Sense! SS LoRaWAN ASIA-PAC / LATAM	SSB-LW-APL	516 €
Plug & Sense! SS Sigfox EU **	SSB-SF-EU	516 €
Plug & Sense! SS Sigfox US **	SSB-SF-US	528 €
Plug & Sense! SS Sigfox AU/APAC/LATAM **	SSB-SF-AAPL	528 €

** This device includes a GPS receiver. * * Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country. Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.*

Sensors available:

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Temperature, Humidity and Pressure	✓		✓	✓	✓		9370-P	55 €
Water flow small		✓					9296-P	37 €
Water flow medium		✓					9297-P	42 €
Water flow large		✓					9298-P	45 €
Terminal box probe (accessory for Plug & Sense!)						✓	9270-P	30 €
Presence (PIR)	✓		✓	✓	✓		9212-P	64 €
Water Leakage / Liquid Detection (Point)	✓		✓	✓	✓		9243-P	27 €
Water Leakage / Liquid Detection (Line)	✓		✓	✓	✓		9295-P	114 €
Horizontal liquid level (combustibles)	✓		✓	✓	✓		9239-P	36 €
Horizontal liquid level (water)	✓		✓	✓	✓		9240-P	22 €
Hall Effect	✓		✓	✓	✓		9207-P	42 €
Luminosity (Luxes accuracy)	✓		✓	✓	✓		9325-P	47 €
Ultrasound	✓		✓	✓	✓		9246-P	275 €

4-20 mA (Current Loop)

The applications for this Plug & Sense! model are focused on adding wireless connectivity to 4-20 mA devices and connecting them to the Cloud.

Communication options	Ref.	Price
Plug & Sense! 4-20 mA 802.15.4 EU	420B-802-EU	526 €
Plug & Sense! 4-20 mA 802.15.4	420B-802	526 €
Plug & Sense! 4-20 mA WiFi	420B-W	526 €
Plug & Sense! 4-20 mA 868	420B-868	526 €
Plug & Sense! 4-20 mA 900 US	420B-900-US	556 €
Plug & Sense! 4-20 mA 900 BR	420B-900-BR	556 €
Plug & Sense! 4-20 mA 900 AU	420B-900-AU	556 €
Plug & Sense! 4-20 mA 4G EU/BR*	420B-4G-EU/BR	826 €
Plug & Sense! 4-20 mA 4G US *	420B-4G-US	826 €
Plug & Sense! 4-20 mA 4G AU	420B-4G-AU	746 €
Plug & Sense! 4-20 mA LoRaWAN EU	420B-LW-EU	506 €
Plug & Sense! 4-20 mA LoRaWAN US	420B-LW-US	496 €
Plug & Sense! 4-20 mA LoRaWAN AU	420B-LW-AU	496 €
Plug & Sense! 4-20 mA LoRaWAN IN	420B-LW-IN	496 €
Plug & Sense! 4-20 mA LoRaWAN ASIA-PAC / LATAM	420B-LW-APL	496 €
Plug & Sense! 4-20 mA Sigfox EU **	420B-SF-EU	496 €
Plug & Sense! 4-20 mA Sigfox US **	420B-SF-US	516 €
Plug & Sense! 4-20 mA Sigfox AU/APAC/LATAM **	420B-SF-AAPL	516 €

** This device includes a GPS receiver. * * Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country.*
Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.

Sensors available:

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Terminal box probe	✓	✓	✓	✓			9270-P	30 €
DB9 probe	✓	✓	✓	✓			DB9-P	25 €

Radiation Control

This model can only attach one sensor for measuring radiation levels in nuclear centrals and surroundings.

Communication options	Ref.	Price
Plug & Sense! RA 802.15.4 EU	RAB-802-EU	636 €
Plug & Sense! RA 802.15.4	RAB-802	636 €
Plug & Sense! RA WiFi	RAB-W	636 €
Plug & Sense! RA 868	RAB-868	651 €
Plug & Sense! RA 900 US	RAB-900-US	672 €
Plug & Sense! RA 900 BR	RAB-900-BR	672 €
Plug & Sense! RA 900 AU	RAB-900-AU	672 €
Plug & Sense! RA 4G EU/BR*	RAB-4G-EU/BR	876 €
Plug & Sense! RA 4G US*	RAB-4G-US	876 €
Plug & Sense! RA 4G AU	RAB-4G-AU	804 €
Plug & Sense! RA LoRaWAN EU	RAB-LW-EU	600 €
Plug & Sense! RA LoRaWAN US	RAB-LW-US	600 €
Plug & Sense! RA LoRaWAN AU	RAB-LW-AU	600 €
Plug & Sense! RA LoRaWAN IN	RAB-LW-IN	600 €
Plug & Sense! RA LoRaWAN ASIA-PAC / LATAM	RAB-LW-APL	600 €
Plug & Sense! RA Sigfox EU **	RAB-SF-EU	600 €
Plug & Sense! RA Sigfox US **	RAB-SF-US	624 €
Plug & Sense! RA Sigfox AU/APAC/LATAM **	RAB-SF-AAPL	624 €

Ambient Control

This model is advised for the large amount of scenarios that only need to monitor temperature, humidity, pressure and luminosity sensors.

Communication options	Ref.	Price
Plug & Sense! AC 802.15.4 EU	ACB-802-EU	480 €
Plug & Sense! AC 802.15.4	ACB-802	480 €
Plug & Sense! AC WiFi	ACB-W	480 €
Plug & Sense! AC 868	ACB-868	486 €
Plug & Sense! AC 900 US	ACB-900-US	516 €
Plug & Sense! AC 900 BR	ACB-900-BR	516 €
Plug & Sense! AC 900 AU	ACB-900-AU	516 €
Plug & Sense! AC 4G EU/BR*	ACB-4G-EU/BR	744 €
Plug & Sense! AC 4G US*	ACB-4G-US	744 €
Plug & Sense! AC 4G AU	ACB-4G-AU	672 €
Plug & Sense! AC LoRaWAN EU	ACB-LW-EU	468 €
Plug & Sense! AC LoRaWAN US	ACB-LW-US	468 €
Plug & Sense! AC LoRaWAN AU	ACB-LW-AU	468 €
Plug & Sense! AC LoRaWAN IN	ACB-LW-IN	468 €
Plug & Sense! AC LoRaWAN ASIA-PAC / LATAM	ACB-LW-APL	468 €
Plug & Sense! AC Sigfox EU **	ACB-SF-EU	468 €
Plug & Sense! AC Sigfox US **	ACB-SF-US	480 €
Plug & Sense! AC Sigfox AU/APAC/LATAM **	ACB-SF-AAPL	480 €

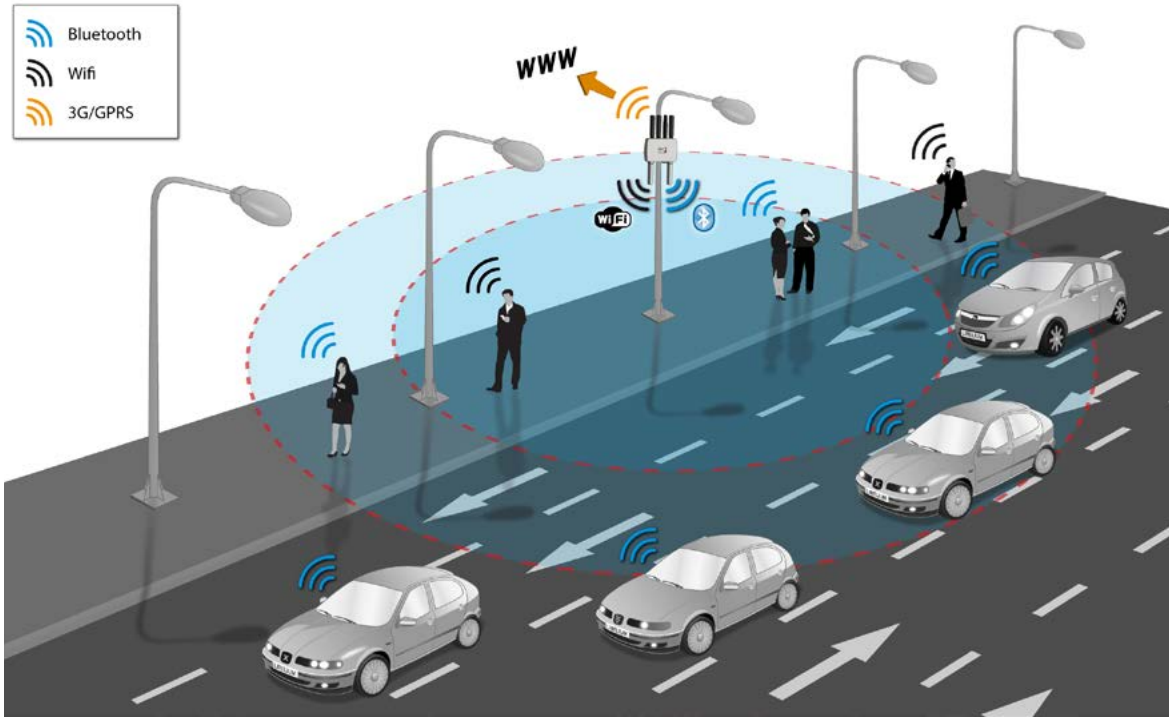
** This device includes a GPS receiver. * * Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country.*
Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.

Sensors available:

Sensor	Sockets						Ref.	Price
	A	B	C	D	E	F		
Temperature, Humidity and Pressure	✓						9370-P	55 €
Luminosity (LDR)		✓					9205-P	15 €
Luminosity (luxes accuracy)			✓				9325-P	47 €

Smartphone detection for traffic congestion and pedestrian counting

This application is performed with Meshlium and it is the only one that does not allow to attach any sensor. Meshlium can detect any smartphone in the area by measuring WiFi and Bluetooth activity. This way, pedestrian and traffic congestion can be determined in real time. Meshlium is also the Internet Gateway for Waspmote Plug & Sense! For more information about Meshlium models and prices see Meshlium section.



Power options

One of the following options is necessary for each Plug & Sense! unit.

Power options	Smart Environment PRO	Smart Agriculture	Smart Water	Smart Water Ions	Smart Cities PRO	Smart Parking[3]	Smart Security	4-20 mA	Radiation Control	Ambient Control	Ref.	Price
External solar panel 7V - 500mA (power accessory for Plug & Sense!)	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	PAPS-ESP	42 €
220V adapter (power accessory for Plug & Sense!)	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	PAPS-220V	4 €
220V adapter + outdoors USB cable (power accessory for Plug & Sense!) [1]	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	PAPS-220V-OUT	16 €
220V adapter + international plug adapter (power accessory for Plug & Sense!) [2]	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	PAPS-220V-J	11 €

1.- Includes a special USB cable, waterproof in the Plug & Sense! end.
2.- Includes a plug adapter for the mains electricity in countries like USA, UK, Australia, Canada, China, Japan, Singapore or Hong Kong.
3.- Smart Parking comes by default with a 10.4 Ah non-rechargeable battery; other power options do not make sense.

You can also add this item as a power accessory (only valid for Plug & Sense! with rechargeable battery):

Power options	PAPS-ESP	PAPS-220V	PAPS-220V-OUT	PAPS-220V-J	Smart Parking	Ref.	Price
External Battery Module	✓	✓	✓	✓	X	EBM	180 €

Industrial Protocols for Plug & Sense!

Plug & Sense! can incorporate an Industrial Protocol module as a secondary communication option. This feature opens a wide variety of applications for industrial sensing and automation, military, automobile, vehicle tracking or remote factory management. You can add the following accessories to your Plug & Sense! units:

Accessories	Smart Env. PRO	Smart Agric.	Smart Water	Smart Water Ions	Smart Cities PRO	Smart Parking	Smart Security	4-20 mA	Radiation Control	Ambient Control	Ref.	Price
RS-485 / Modbus Module	✓	✓	X	X	✓	X	✓	✓	✓	✓	RS-485-PS	120 €
RS-485 / Modbus Module (4G models)	✓	✓	X	X	✓	X	✓	✓	✓	✓	RS-485-PS-4G	90 €
CAN Bus Module	✓	✓	X	X	✓	X	✓	✓	✓	✓	CAN-PS	110 €
CAN Bus Module (4G models)	✓	✓	X	X	✓	X	✓	✓	✓	✓	CAN-PS-4G	85 €

Note: These accessories need special Plug & Sense! versions (called "Industrial Protocols ready"). Just remember to indicate to your sales agent the Plug & Sense! units where you want to use the Industrial modules.

In the case you chose any of the above options, you will need one or more of these accessories to connect your industrial devices to Plug & Sense!:

Sensor	Ref.	Price
Terminal box probe	9270-P	30 €
DB9 probe	DB9-P	25 €

Accessories

The following items are optional. Feel free to choose!

Accessories	Ambient Control	Smart Cities PRO	Smart Parking	Smart Environment PRO	Smart Agriculture	Smart Security	Smart Water	Smart Water Ions	4-20 mA	Radiation Control	Ref.	Price
GPS Module (1)	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	GPS-PS	80 €
Extension cord 1.5 m (2)	✓	X	X	X	✓	✓	✓(3)	✓(3)	✓	X	10250	10 €
Extension cord 3 m (2)	✓	X	X	X	✓	✓	✓(3)	✓(3)	✓	X	10251	12 €
Magnet for contactless reset (4)	✓	✓	✓(5)	✓	✓	✓	✓	✓	✓	✓	10342	30 €

1.- You can add a GPS receiver to your Plug & Sense! units. That is great for locating each node and tracking applications. The GPS accessory needs special Plug & Sense! versions (called "GPS-ready"). Just remember to indicate to your sales agent the Plug & Sense! units where you want to have a GPS.

2.- Extension cords are compliant with most sensor probes (not compliant for example with I2C probes or other digital probes). One extension cord per sensor required.

3.- In Smart Water or Smart Water Ions, extension cords are only compliant with the Soil/Water temperature probe.

4.- A single magnet can be used for many motes. It is highly recommended.

5.- The magnet is EXTREMELY recommended for Smart Parking.

Now that you have configured your hardware, go to Data section to decide how to connect to the Cloud.

View Section

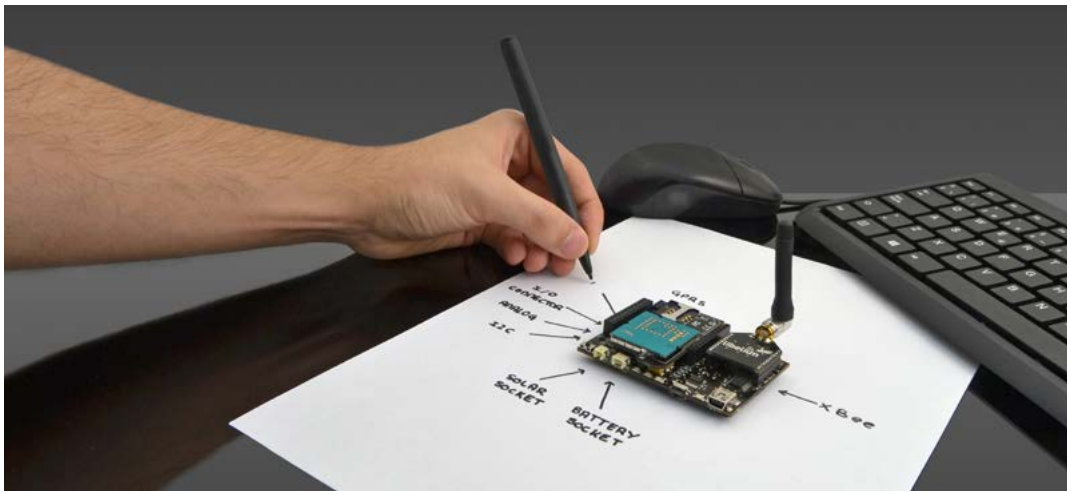
We provide prices in USD to US customers. Please submit your RFQ, and we will provide you with the USD prices.

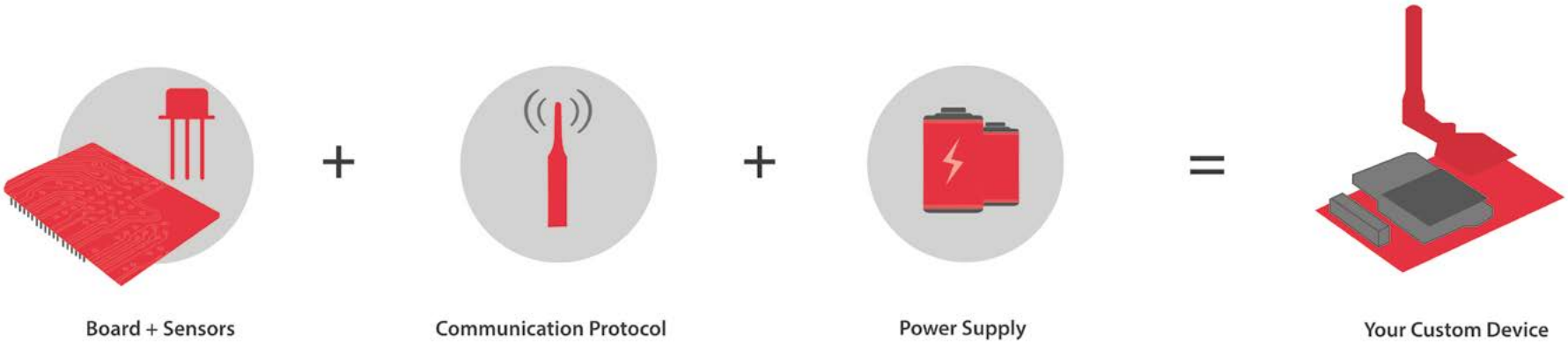
Waspmote OEM: technology for developers

Waspmote OEM is the best option to research and develop. With a good C++ programming level, you can explore multiple possibilities with its Open Source API, 400+ online code examples and documentation.

Since it has no enclosure, you can try all kind of different hardware combinations, it is more handy to work with it at your lab table and you can use that extra money in getting more sensors and communication modules.

For configuring your hardware you will have to choose:





Sensors

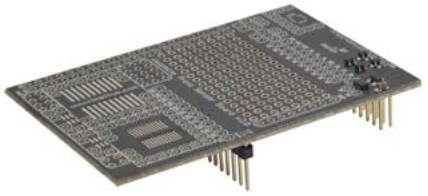
To make the deployment of IoT sensor networks easier, we have created 10 sensor boards to integrate more than 110 different sensors.

Gases PRO	Events	Cities PRO
- Particle Matter (PM1 / PM2.5 / PM10) – Dust Sensor [1] - CO - CO_2 - O_2 - O_3 - NO - NO_2 - SO_2 - NH_3 - CH_4 (and other combustible gases) - H_2 - H_2S - HCl - HCN - PH_3 - ETO - Cl_2 - Temperature, Humidity and Pressure - Luminosity (Luxes accuracy) - Ultrasound (outdoor IP67)	- Temperature, Humidity and Pressure - Presence PIR - Horizontal liquid level (combustibles) / (water) - Vertical liquid level (water) - Water presence (point/line) - Hall effect [2] - Water flow small - Water flow medium - Water flow large - Relay Input-Output * - Luminosity (Luxes accuracy) - Ultrasound (outdoor IP67)	- Noise / Sound Level * - Particle Matter (PM1 / PM2.5 / PM10) – Dust Sensor [3] - CO - CO_2 - O_2 - O_3 - NO - NO_2 - SO_2 - Cl_2 - NH_3 (and other combustible gases) - CH_4 - H_2 - H_2S - HCl - HCN - PH_3 - ETO - Temperature + Humidity + Pressure - Temperature, Humidity and Pressure - Luminosity (Luxes accuracy) - Ultrasound (outdoor IP67)
WGASPRO - 50 €	**WEVENTS - 55 €**	**WCITIES - 55 €**

1. Only available in the Plug & Sense! Smart Environment PRO line.

2. For doors and windows.
** Only available in the Plug & Sense! Smart Security line.*

3. Only available in the Plug & Sense! Smart Cities PRO line.

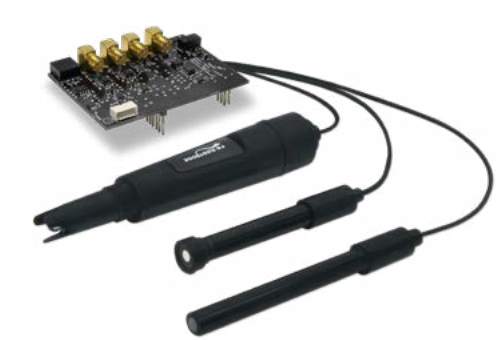
Parking *	Agriculture	Agriculture PRO	Prototyping
			
- Magnetic Field (3 axis): ** Always supplied with a Waspmote.* *Note: Smart Parking is only available with the Plug & Sense! line.*	- Temperature, Humidity and Pressure - Anemometer + wind vane + pluviometer - Soil moisture [4] (1.5, 4.5, 8 m) - Leaf wetness - Luminosity (Luxes accuracy) - Ultrasound (outdoor IP67)	- Temperature, Humidity and PressureHumidity - Anemometer + wind vane + pluviometer - Soil moisture [5] (1.5, 4.5, 8 m) - Leaf wetness - Soil temperature (DS18B20) - Luminosity (Luxes accuracy) - Ultrasound (outdoor IP67) - Soil/Water temperature - Solar radiation (PAR) - Trunk diameter - Stem diameter - Fruit diameter	- Pad Area - Integrated Circuit Area - Analog-to-Digital Converter (16b)
	WAGR - 75 €	**WAGRPRO - 99 €**	**WPROT - 35 €**

4. In each agriculture board 3 soil moistures can be connected in order to measure the parameter in different depth levels.

5. In each agriculture board 3 soil moistures can be connected in order to measure the parameter in different depth levels.

Radiation	4-20 mA (Current Loop)
- Geiger tube [β, γ] (Beta and Gamma)	- Sensors and Instruments - Remote transducers - Monitoring processes - Data transmission in industrial ambients The user can choose among a wide variety of standard sensors
WRADIATION - 138 €	**W420 - 54 €**

Smart Water *



- Soil/Water Temperature
- Conductivity
- Dissolved Oxygen
- pH
- Oxidation-Reduction Potential
- Turbidity **

** Contains Soil/Water temperature sensor and 4 BNC pigtails.*
*** The sensor is sold calibrated from factory.*

WWATER - 228 €

Smart Water Ions

- Ammonium (NH_4^+)
- Bromide (Br^-)
- Calcium (Ca^{2+})
- Chloride (Cl^-)
- Cupric (Cu^{2+})
- Fluoride (F^-)
- Iodide (I^-)
- Fluoroborate (BF_4^-)
- Lithium (Li^+)
- Nitrate (NO_3^-)
- Nitrite (NO_2^-)
- Magnesium (Mg^{2+})
- Perchlorate (ClO_4^-)
- Potassium (K^+)
- Silver (Ag^+)
- Sodium (Na^+)
- pH
- Soil / Water Temperature

** Contains Soil/Water temperature sensor and 5 BNC pigtails. Ion sensors need Reference Probe.*

- Single Junction Reference Probe
- Double Junction Reference Probe
- Reference Probe [PRO]

WWIONS - 240 €

Sensor	Ref.	Price
Temperature, Humidity and Pressure	9370	24 €
Luminosity (luxes accuracy)	9325	10 €
Presence (PIR)	9212	19 €
Horizontal liquid level (combustibles)	9239	12 €
Horizontal liquid level (water)	9240	24 €
Vertical liquid level (water)	9242	24 €
Water Leakage / Liquid Detection (Point)	9243	12 €
Water Leakage / Liquid Detection (line)	9295	67 €
Hall effect [1]	9207	6 €
CO for low concentrations (Calibrated) [3]	9371-LC	264 €
CO_2 (Calibrated)[3]	9372	630 €
O_2 (Calibrated)[3]	9373	199 €
O_3 (Calibrated)[3]	9374	324 €
NO for low concentrations(Calibrated)[3]	9375-LC	264 €
NO_2 high accuracy (Calibrated)[3]	9376-HA	264 €
SO_2 high accuracy (Calibrated)[3]	9377-HA	264 €
NH_3 (Calibrated) for low concentrations [3]	9378-LC	420 €

Sensor	Ref.	Price
NH_3 (Calibrated) for high concentrations [3]	9378-HC	461 €
CH_4 and Combustible Gas (Calibrated)[3]	9379	234 €
H_2 (Calibrated)[3]	9380	198 €
H_2S (Calibrated)[3]	9381	204 €
HCl (Calibrated)[3]	9382	384 €
HCN (Calibrated)[3]	9383	250 €
PH_3 (Calibrated)[3]	9384	372 €
ETO (Calibrated)[3]	9385	276 €
Cl_2 (Calibrated)[3]	9386	276 €
Ultrasound (indoor)	9213	45 €
Ultrasound (outdoor IP67)	9246	110 €
Distance (by metallic pressure)	9267	36 €
Water flow small	9296	18 €
Water flow medium	9297	17 €
Water flow large	9298	23 €
Soil/Water temperature [4]	9255	18 €
Solar radiation (PAR)	9251	225 €

Sensor	Ref.	Price
Trunk diameter	9252	500 €
Stem diameter	9253	475 €
Fruit diameter	9254	475 €
Anemometer + wind vane + pluviometer	9256	73 €
Ultraviolet radiation	9257	310 €
Soil moisture [5] (1.5m)	9248	55 €
Soil moisture [5] (4.5m)	9324	65 €
Soil moisture [5] (8m)	9323	75 €
Leaf wetness	9249	3 €
Soil temperature (DS18B20)	86949	11 €
Conductivity	9326	40 €
Dissolved Oxygen	9327	600 €
pH	9328	21 €
Oxidation Reduction Potential	9329	54 €
Turbidity Sensor kit [6]	TSK	3,924 €
Fluoride Ion (F^-)	9353	204 €
Fluoroborate Ion (BF_4^-)	9354	204 €

Please note that each board is only compatible with certain sensors. Boards and sensors have to be purchased separately. Sensors are not included in the board price (unless stated otherwise)

Sensor	Ref.	Price
Bromide Ion (Br^-)	9356	204 €
Chloride Ion (Cl^-)	9357	204 €
Cupric Ion (Cu^{2+})	9358	204 €
Iodide Ion (I^-)	9360	204 €
Silver Ion (Ag^+)	9362	204 €
pH (for Smart Water Ions)	9363	54 €
Ammonium Ion (NH_4^+) [PRO]	9412	504 €
Bromide Ion (Br^-) [PRO]	9413	918 €
Calcium Ion (Ca^{2+}) [PRO]	9414	504 €
Chloride Ion (Cl^-) [PRO]	9415	504 €
Cupric Ion (Cu_2^+) [PRO]	9416	918 €
Fluoride Ion (F^-) [PRO]	9417	918 €
Iodide Ion (I^-) [PRO]	9418	918 €
Lithium Ion (Li^+) [PRO]	9419	918 €
Nitrate Ion (NO_3^-) [PRO]	9421	504 €
Nitrite Ion (NO_2^-) [PRO]	9422	918 €
Magnesium Ion (Mg^{2+}) [PRO]	9420	504 €

Sensor	Ref.	Price
Perchlorate Ion (ClO_4^-) [PRO]	9423	918 €
Potassium Ion (K^+) [PRO]	9424	504 €
Silver Ion (Ag^+) [PRO]	9425	918 €
Sodium Ion (Na^+) [PRO]	9426	504 €
pH [PRO]	9411	504 €
Single Junction Reference Probe [7]	9350	78 €
Double Junction Reference Probe [8]	9351	120 €
Reference Probe [PRO] [9]	9410	504 €

1. For doors and windows.

2. VOC sensors are connected to the same socket, thus, it is not possible to have them working within the same board at the same time, but they are interchangeable.

3. Calibrated gas sensors are manufactured once the order has been placed to ensure maximum durability of the calibration feature. Manufacturing process and delivery may take from 4 to 6 weeks. Lifetime of calibrated gas sensors is 6 months working at maximum accuracy. We strongly encourage our customers to buy extra gas sensors to replace the original ones after that time to ensure maximum accuracy and performance.

4. Each Smart Water or Smart Water ions board includes a Soil/Water temperature sensor.

5. In each agriculture board ,3 soil moistures can be connected in order to measure the parameter in different depth levels.

6. This pack comprises the turbidity sensor and calibration kits. Sensor is calibrated in factory. Pack available on demand.

*7. This reference probe is **mandatory** for ion sensors like Fluoride (F-), Fluoroborate (BF4-), Nitrate (NO3-) and pH (for Smart Water Ions). It is not valid for the double or PRO type sensors.*

*8. This reference probe is **mandatory** for ion sensors like Bromide (Br-), Chloride (Cl-), Cupric (Cu2+), Iodide (I-), Silver (Ag+) and pH (for Smart Water Ions). It is not valid for the single or PRO type sensors.*

*9. This reference probe is **mandatory** for any ion sensor of the PRO type. It is not valid for the single or double type sensors.*

An accessory composed of a mounting bracket and a leveling plate is advised for the Solar radiation (PAR) and Ultraviolet sensor probes (check delivery time with your sales agent):

Item	Ref.	Price
Solar Sensors Mounting Accessory	SSMA	85 €

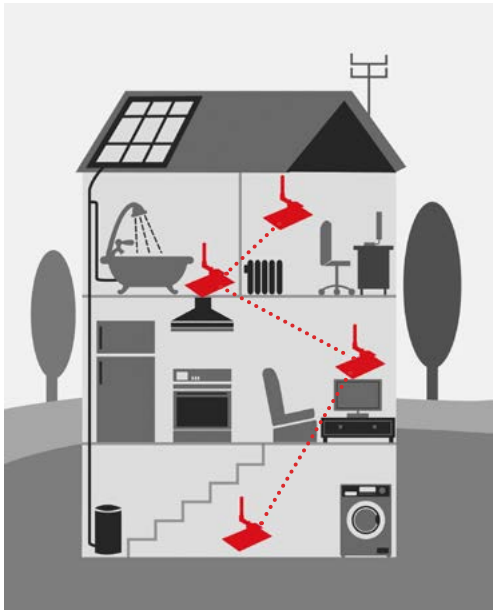
For Smart Water and for Smart Water Ions sensors it is highly recommended to purchase calibration solutions to calculate accurate measurement.
One kit is enough for several sensor units:

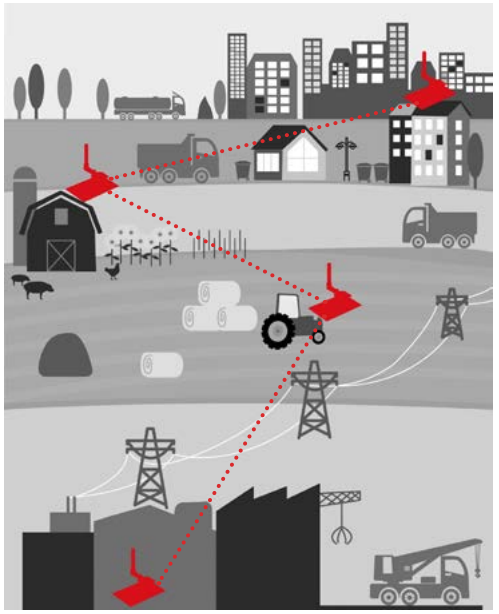
Calibration Kit	Ref.	Price
Conductivity Calibration Kit, K=0.1	9339	28 €
Conductivity Calibration Kit, K=1	9340	28 €
Conductivity Calibration Kit, K=10	9341	28 €
DO Calibration Solution	9342	42 €
Dissolved Oxygen Maintenance Kit	9450	144 €
pH Calibration Kit	9343	63 €
ORP Calibration Solution	9344	42 €
Turbidity Calibration Kit (low)	TCL	144 €
Turbidity Calibration Kit (high)	TCH	186 €
Reference Sensor Probe [PRO] Maintenance Solution	9449	119 €
Multi-Ions Calibration Kit (Ammonium, Calcium, Chloride, Magnesium, Nitrate, Potassium, Sodium)	9445	144 €

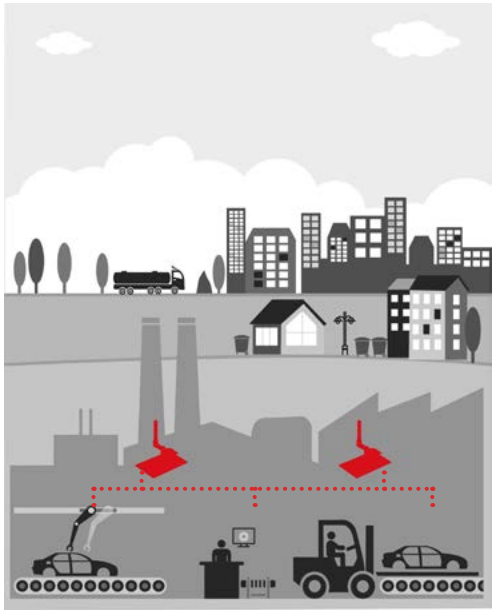
Calibration Kit	Ref.	Price
Bromide Calibration Kit	9388	119 €
Calcium Calibration Kit	9366	119 €
Chloride Calibration Kit	9389	119 €
Cupric Calibration Kit	9390	119 €
Fluoride Calibration Kit	9367	119 €
Fluoroborate Calibration Kit	9368	119 €
Iodide Calibration Kit	9391	119 €
Lithium Calibration Kit	9446	144 €
Nitrate Calibration Kit	9369	119 €
Nitrite Calibration Kit	9447	144 €
Perchlorate Calibration Kit	9448	114 €
Silver Calibration Kit	9392	119 €

Configuring your Waspmotes: Connectivity

Waspmote model is determined by the selected communication radio. Each Waspmote model can have different types of antenna: 2dBi or 5dBi for 2.4 GHz models and 4.5dBi for the rest of frequencies.







WiFi Bluetooth Bluetooth Low Energy	4G - NB-IoT - Cat-M - 3G - GPRS - Sigfox - LoRaWAN	802.15.4 Digimesh ZigBee-PRO 868 MHz 900 MHz LoRa	RS-485 4-20 mA CAN Bus Modbus
~ 0-300 m	Typical carrier range	~ 7-22+ Km	~ 0-200 m

The following table compares the features of all available options according to frequency, use zone, protocol and range.

Waspmote price chart depending on model:

Model	Frequency band	Use zone	Protocol	Distance outdoors [1]	Ref.	Price
Waspmote 802.15.4 2dBi EU	2.4 GHz	Europe	802.15.4		W802P-SMA2-EU	240 €
Waspmote 802.15.4 5dBi EU	2.4 GHz	Europe	802.15.4	750 m	W802P-SMA5-EU	240 €
Waspmote 802.15.4 2dBi	2.4 GHz	Worldwide	802.15.4		W802P-SMA2	240 €
Waspmote 802.15.4 5dBi	2.4 GHz	Worldwide	802.15.4	1.6 km	W802P-SMA5	240 €
Waspmote Digimesh 2 dBi	2.4 GHz	Worldwide	Digimesh		WDMP-SMA2	240 €
Waspmote Digimesh 5 dBi	2.4 GHz	Worldwide	Digimesh	1.5 km	WDMP-SMA5	240 €
Waspmote ZigBee 2 dBi	2.4 GHz	Worldwide	ZigBee-Pro		WZB-SMA2	240 €
Waspmote ZigBee 5 dBi	2.4 GHz	Worldwide	ZigBee-Pro	1.2 km	WZB-SMA5	240 €
Waspmote 868 4.5 dBi	868 MHz	Europe	RF	8.4 km	W868-SMA4	250 €
Waspmote 900 4.5dBi US	900 MHz	USA & Canada	RF	15.5 km	W900-SMA4-US	276 €
Waspmote 900 4.5dBi BR	900 MHz	Brazil	RF	15.5 km	W900-SMA4-BR	276 €
Waspmote 900 4.5dBi AU	900 MHz	Australia	RF	15.5 km	W900-SMA4-AU	276 €
Waspmote LoRaWAN 4.5 dBi - EU	868 MHz	Europe	LoRaWAN	-km- Typical base station range	WLW-SMA4-EU	228 €
Waspmote LoRaWAN 4.5 dBi - US	900 MHz	USA & Canada	LoRaWAN	-km- Typical base station range	WLW-SMA4-US	228 €
Waspmote LoRaWAN 4.5 dBi - 433	433 MHz	Worldwide	LoRaWAN	-km- Typical base station range	WLW-SMA4-433	228 €

Waspmote price chart depending on model:

Model	Frequency band	Use zone	Protocol	Distance outdoors [1]	Ref.	Price
Waspmote LoRaWAN 4.5 dBi -AU	900 MHz	Australia	LoRaWAN	-km- Typical base station range	WLW-SMA4-AU	228 €
Waspmote LoRaWAN 4.5 dBi -IN	865 MHz	India	LoRaWAN	-km- Typical base station range	WLW-SMA4-IN	228 €
Waspmote LoRaWAN 4.5 dBi ASIA-PAC / LATAM	923 MHz	AS923	LoRaWAN	-km- Typical base station range	WLW-SMA4-APL	228 €
Waspmote Sigfox 4.5 dBi EU [2]	868 MHz	Europe	Sigfox	-km- Typical base station range	WSF-SMA4-EU	228 €
Waspmote Sigfox 4.5 dBi US [2]	900 MHz	USA & Canada	Sigfox	-km- Typical base station range	WSF-SMA4-US	240 €
Waspmote Sigfox 4.5 dBi AU / APAC / LATAM [2]	900 MHz	Australia, Asia-Pacific, Latinamerica	Sigfox	-km- Typical base station range	WSF-SMA4-AAPL	240 €
Waspmote LoRa 4.5 dBi - 868	868 MHz	Europe	RF	22+ Km	WLoRa-SMA4-868	178 €
Waspmote LoRa 4.5 dBi - 900	900 MHz	USA & Canada	RF	22+ Km	WLoRa-SMA4-900	178 €
Waspmote WiFi SMA5	2.4 GHz	Worldwide	802.11b/g/n	100 m	WWIFI-SMA5	264 €
Waspmote GPRS	850/900/1800/1900 MHz	Worldwide	GSM – GPRS	- km - Typical carrier range	WA-GPRS	234 €
Waspmote + 3G (Europe version)	Dual-band: WCDMA/ UMTS 900/2100 MHz Tri-band: GSM/GPRS/ EDGE 850/900/1800MHz	Europe	GSM – GPRS – 3G	- km - Typical carrier range	WA-3G-E	316 €

Waspmote price chart depending on model:

Model	Frequency band	Use zone	Protocol	Distance outdoors [1]	Ref.	Price
Waspmote + 3G (America/Australia version)	Dual-band: WCDMA/ UMTS 850/1900 MHz Quad-band: GSM/ GPRS/EDGE 850/900/1800/1900 MHz	America / Australia	GSM – GPRS – 3G	- km - Typical carrier range	WA-3G-A	316 €
Waspmote NB-IoT / Cat-M 3	B1/B2/B3/B4/B5/B8/B12/ B13/B18/B19/B20/B25/ B26/B28/B39	Worldwide	NB-IoT – Cat-M – EGPRS	- km - Typical carrier range	WA-NBCM	290 €
Waspmote 4G EU/BR [3]	2G: 900/1800 MHz WCDMA: 900/2100 MHz LTE: 800/900/1800/ 2100/2600 MHz	Europe & Brazil	GSM – GPRS – 3G – 4G	- km - Typical carrier range	WA-4G-EU/BR	468 €
Waspmote 4G US [3]	2G: 850/1900 MHz WCDMA: 850/1900 MHzTE: 700/850/1700/1900 MHz	USA & Canada	GSM – GPRS – 3G – 4G	- km - Typical carrier range	WA-4G-US	468 €
Waspmote 4G AU	4G: 700/1800/2600 MHz	Australia	4G	- km - Typical carrier range	WA-4G-AU	378 €
Waspmote Bluetooth 2dBi	WCDMA: 850/1900 MHz	Worldwide	Bluetooth 2.1 + EDR Class 2		WWBTS-SMA2	234 €
Waspmote Bluetooth 5dBi	LTE: 700/850/1700/1900 MHz	Worldwide	Bluetooth 2.1 + EDR Class 2	30-100 m	WWBTS-SMA5	234 €
Waspmote Bluetooth Low Energy 2dBi	2.4 GHz	Worldwide	Bluetooth 4.0 / Bluetooth Smart		WBLE-SMA2	204 €
Waspmote Bluetooth Low Energy 5dBi	2.4 GHz	Worldwide	Bluetooth 4.0 / Bluetooth Smart	100 m	WBLE-SMA5	204 €

1- Tests performed with 5 dBi omnidirectional antenna, line-of-sight and Fresnel zone clearance conditions.
2-Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country. Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.
3- This device includes a GPS receiver.

Industrial Protocols

Waspmote can integrate communication modules for the most common wired communication protocols: RS-485, CAN Bus and Modbus. These are widely used standards in the industrial and automation market for connecting devices and sensors, not in a wireless way but with cables. The user can interface Waspmote ecosystem with these protocols.

Waspmote allows to perform three main applications:

1. Connect any sensor to an existing industrial bus.
2. Add wireless connectivity to wired buses.
3. Connect to the Cloud industrial devices.

Waspmote price chart depending on model:

Model	Ref.	Price
Waspmote RS-485 / Modbus + DB9 cable	WA-485	210 €
Waspmote CAN Bus + DB9 cable	WA-CAN	222 €

Waspmote RS-232 Serial / Modbus

Waspmote RS-485 / Modbus

Waspmote CAN Bus

1- Tests performed with 5 dBi omnidirectional antenna, line-of-sight and Fresnel zone clearance conditions.
3- This device includes a GPS receiver.

Expansion Radio Board

The Expansion Board allows to connect two radios at the same time. This means a lot of different combinations are possible using any of the radios available for Waspmote: 802.15.4, ZigBee, DigiMesh, 868 MHz, 900 MHz, LoRa, WiFi, GPRS, 3G, NB-IoT, Cat-M, 4G, Sigfox, LoRaWAN, Bluetooth Pro, Bluetooth Low Energy and RFID/NFC. Besides, the Expansion Radio Board can be utilized to connect the Industrial Protocols modules.

Applications:

- Multifrequency Sensor Networks: (2.4GHz – 868/900MHz, LoRa)
- Sigfox - ZigBee hybrid networks
- NFC (RFID) applications with GPRS
- LoRaWAN - WiFi hybrid networks
- Industrial Protocols – wireless hybrid networks

Expansion Radio Board: 2 radios connection

Model	Require Expansion Radio Board?	Direct connection to Waspmote	Ref.	Price
Expansion Radio Board	-	-	WEXP	30 €
XBee 802.15.4 5 dBi EU	✓		X802P-SMA5-EU	48 €
XBee 802.15.4 5dBi	✓		X802P-SMA5	48 €
XBee Digimesh 5dBi	✓		XDMP-SMA5	48 €
XBee ZigBee 5dBi	✓		XZB-SMA5	48 €
XBee 868 4.5dBi	✓		X868-SMA4	90 €
XBee 900 4.5 dBi US	✓		X900-SMA4-US	79 €
XBee 900 4.5 dBi BR	✓		X900-SMA4-BR	79 €
XBee 900 4.5 dBi AU	✓		X900-SMA4-AU	79 €
LoRa module SMA 4.5 dBi - 868	Only for socket 0		LoRa-SMA4-868	54 €
LoRa module SMA 4.5 dBi - 900	Only for socket 0		LoRa-SMA4-900	54 €
LoRaWAN Module EU	✓		LW-SMA4-EU	70 €
LoRaWAN Module US	✓		LW-SMA4-US	70 €
LoRaWAN Module 433	✓		LW-SMA4-433	70 €
LoRaWAN Module AU	✓		LW-SMA4-AU	70 €
LoRaWAN Module IN	✓		LW-SMA4-IN	70 €
LoRaWAN Module ASIA-PAC / LATAM	✓		LW-SMA4-APL	70 €
Sigfox Module EU[1]	✓		SF-SMA4-EU	66 €

Model	Require Expansion Radio Board?	Direct connection to Waspmote	Ref.	Price
Sigfox Module US[1]	✓		SF-SMA4-US	78 €
Sigfox Module AU/APAC/LATAM[1]	✓		SF-SMA4-AAPL	78 €
WiFi Module SMA5	✓		WIFI-SMA5	108 €
GSM / GPRS Module		✓	WGPRS	84 €
3G Module (Europe version)		✓	W3G-E	174 €
3G Module (America/Australia version)		✓	W3G-A	174 €
NB-IoT / Cat-M Module [2]		✓	WNBCM	199 €
4G Module EU/BR [2]		✓	W4G-EU/BR	264 €
4G Module US [2]		✓	W4G-US	264 €
4G Module AU		✓	W4G-AU	198 €

Sigfox module

Waspmote 4G module

Model	Require Expansion Radio Board?	Direct connection to Waspmote	Ref.	Price
Bluetooth Module for device discovery[3], 2 dBi antenna	✓		WBTS-SMA2	90 €
Bluetooth Module for device discovery[3], 5 dBi antenna	✓		WBTS-SMA5	90 €
Bluetooth Low Energy Module, 2dBi antenna	✓		BLE-SMA2	78 €
Bluetooth Low Energy Module, 5dBi antenna	✓		BLE-SMA5	78 €
RFID 13.56 MHz / NFC Module + antenna*	✓		W1356	60 €
GPS Module		✓	WGPS	60 €
RS-485 / Modbus module + DB9 cable	Only for socket 0		W485	60 €
CAN Bus module + DB9 cable	Only for socket 0		WCAN	66 €

RFID 13.56 MHz / NFC module + antenna

Waspmote GPS module

1 Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country. Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.
2 This radio includes a GPS receiver.
3 The Bluetooth module requires an SD card to save all data of discovered devices, see prices in the next section.

Power options

Model	Features	Ref.	Price
6600mA·h battery(1)	Li-ion rechargeable	6041	36 €
52 A·h(1) (2)	Non-rechargeable	6023	162 €
Rigid solar panel	7 V – 500 mA	6020	42 €
Flexible solar panel	7.2 V – 100 mA	6021	41 €
220V - USB	USB connector option	6006	4 €
International adapter	USB connector option	10280	8 €
Car lighter - USB	USB connector option	6007	4 €

1.- Each Waspmote always requires a battery, even if it is powered from an external power supply.
2.- This power option is not available for GPRS, 3G, NB-IoT, Cat-M or 4G models.

Rigid Solar Panel 7V - 500mA

Flexible Solar Panel 7.2V - 100mA

We provide prices in USD to US customers. Please submit your RFQ, and we will provide you with the USD prices.

Accessories

Optional complements for Waspmote. Feel free to customize your Waspmotes!

Model	Features	Ref.	Price
SD card*	16 GB (5 cards pack)	WSD	36 €
13.56 MHz / NFC card	5 units pack	10156	3 €
13.56 MHz / NFC keyring	5 units pack	10157	4 €
13.56 MHz / NFC sticker	5 units pack	10166	4 €
OBD-II cable for CAN Bus Module	For connecting to compatible vehicles	OBD	29 €

** There are many SD card models; the only model that Libelium can assure that works with Waspmote correctly is the model that Libelium distributes officially.*

Now that you have configured your hardware, go to Data section to decide how to connect to the Cloud.

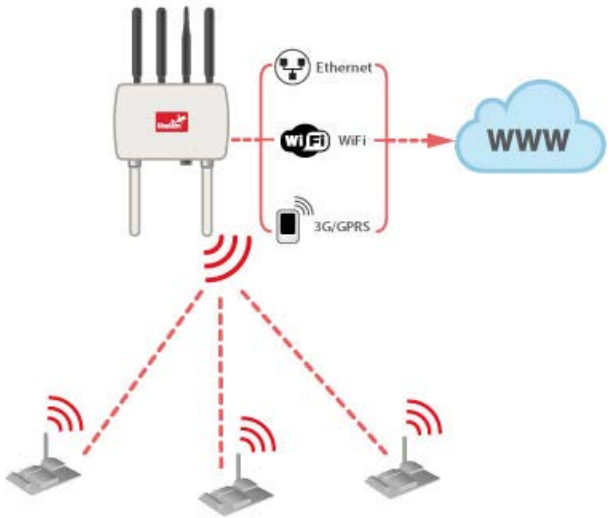
View Section

Extracting the data

The last point for configuring a sensor network is to decide the way to access the data. There are 3 alternatives:

Meshlium

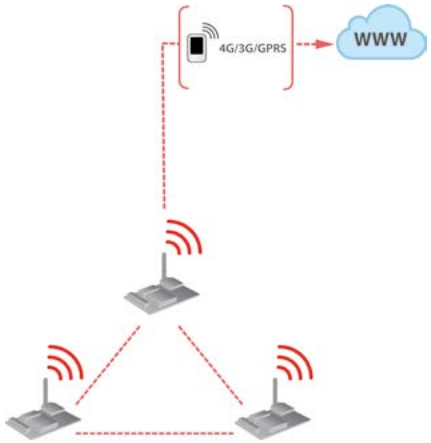
This is the most recommended option for outdoor networks since it is encased in a rugged, waterproof enclosure which protects it from the harshest conditions. It can receive, parse and store frames in its local database. Meshlium can also forward sensor data directly to the Internet via Ethernet or GPRS/3G/4G protocols, depending on the connectivity options available in the area.



Waspmote GPRS / 3G / NB-IoT / Cat-M / 4G / Sigfox / LoRaWAN

GPRS, 3G , NB-IoT, Cat-M or 4G can be used in networks placed in difficult access locations, when using a single point of data collection alone or in combination with the other two options, using the cellular radio only to send SMS alert messages.

Sigfox and LoRaWAN are special cases of cellular communications: LPWAN (Low Power, Wide Area Network). They are indicated for many applications (Smart Cities, Smart Parking, security, etc). Nodes send data directly to the back-end with low power consumption and cheap fees.



Waspmote Gateway

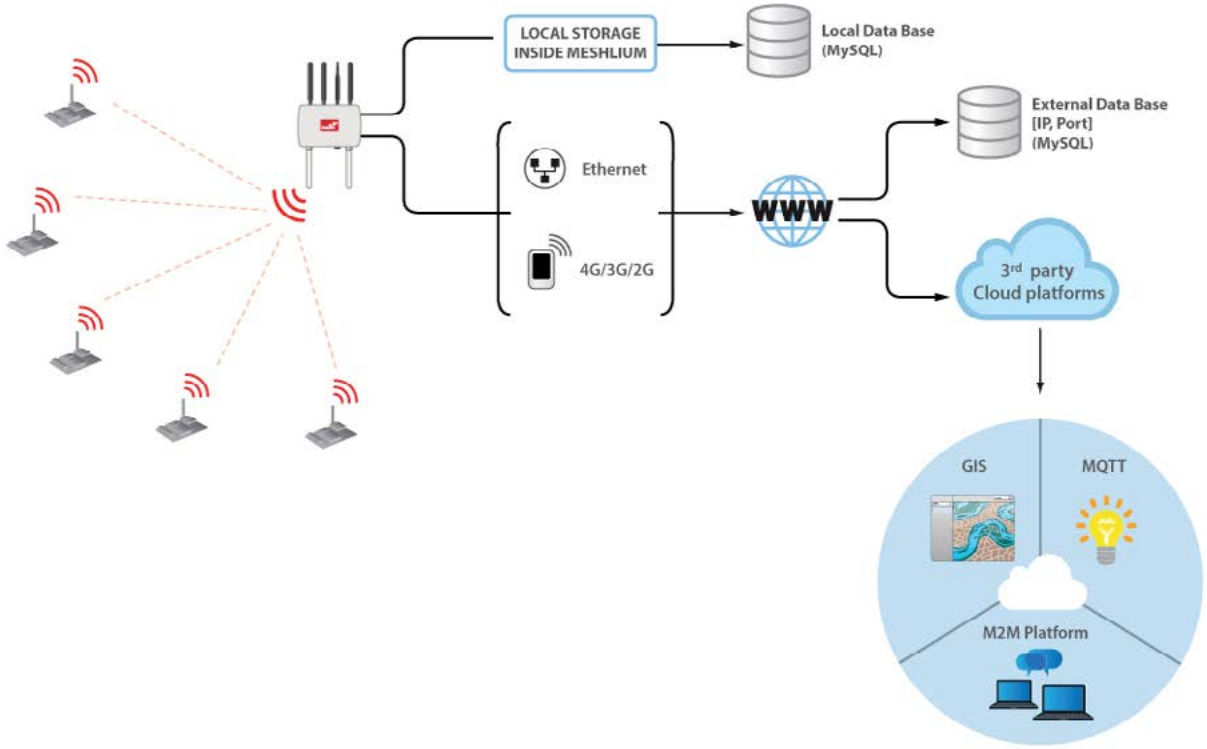
Connected by USB to a computer. This is recommended for applications of few nodes that are indoors or for testing while configuring the network. The Waspmote Gateway is also used to send commands to the sensor network, thus at least one unit should be purchased with the first kit of Waspmotes.

Meshlium

Meshlium is the best Internet Gateway for Waspmote. It is a Linux-based router, totally modular and specially designed for harsh conditions without compromising flexibility in the installation. Meshlium can directly send sensor data from Waspmote to many 3rd party Cloud platforms.

Any scenario	• Communication: - Waspmote → Meshlium: 802.15.4, 868/900MHz - Meshlium → Internet: Ethernet and 4G/3G/GPRS • WiFi and Bluetooth interface detection to detect smartphones (traffic congestion applications) • GPS receiver
Fast configuration	• GUI to configure in a visual and easy way (includes factory presets to make installation even faster) • Integrated with 3rd party Cloud platforms, required agents installed by default in all Meshliums
Easy installation	• Special holders and brackets to install in street lights and building fronts • Elbow connectors included in all models to place antennas horizontally • External socket for SIM card
Easy maintenance	• Get the latest software version with just one click • Robust waterproof IP65 enclosure • Notifications buzzer
Fully certified	• CE (Europe) • FCC (US) • IC (Canada) • ANATEL (Brazil) • RCM (Australia) • PTCRB (cellular certification for US) • AT&T (cellular certification for US)

Libelium has partnered with the best Cloud software solution providers to offer you all the necessary components to deploy Internet of Things (IoT), machine-to-machine (M2M) or Smart Cities projects with minimum time to market. Meshlium is able to send data to the Cloud in a transparent way:

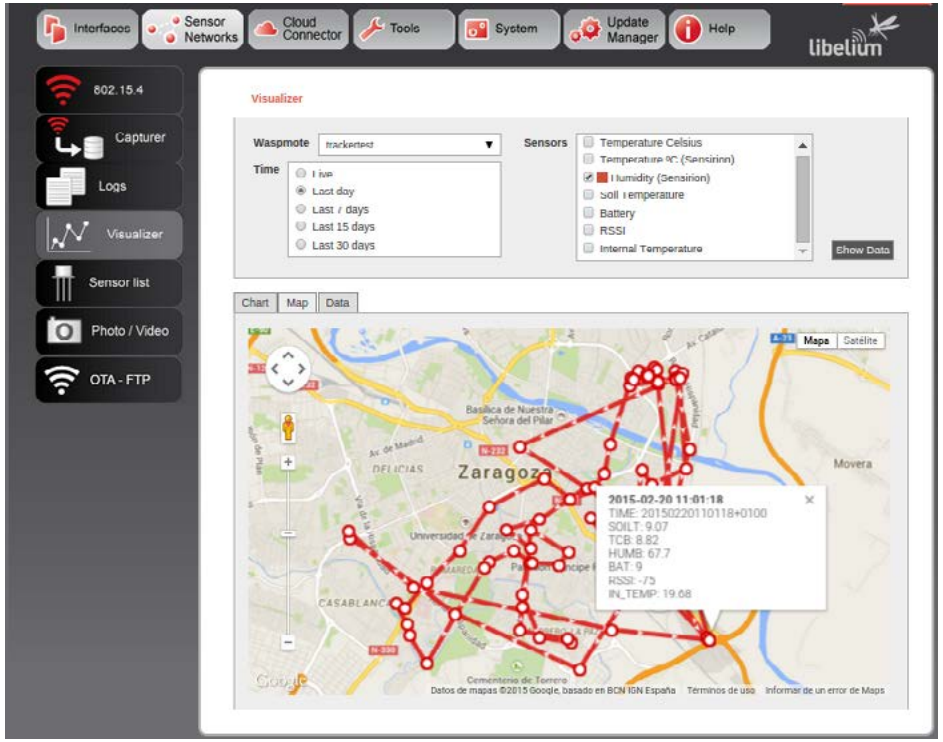


Meshlium includes internal software units called "Cloud Connectors" that allow the information gathered to be easily sent to any of the next Cloud Platforms. Note that data can be also stored in the internal database of Meshlium or even sent to any other Cloud Platform (for more info about how being part of the official Cloud Connectors Program go to http://www.libelium.com/products/meshlium/wsn/).

Meshlium Visualizer

This software feature allows to plot beautiful graphs with Meshlium. Meshlium Visualizer is only included in IoT Vertical Kits and Solution Kits with Meshlium. The service is valid for Libelium standard sensors.

Meshlium Visualizer showing data series



Meshlium Visualizer geo-locating a moving Plug & Sense!

Meshlium price chart depending on model:

Meshlium Model	Use zone	WiFi AP	4G/3G/GPRS	GPS	802.15.4	868/900	WiFi & Bluetooth scanners	Ref.	Price
Meshlium 4G 802.15.4 AP 868 EU	Europe	✓	EU/BR version	✓	EU version	868		M4G-802-868-EU	1,590 €
Meshlium 4G 802.15.4 AP 900 US	USA & Canada	✓	US version	✓	World version	900 US		M4G-802-900-US	1,590 €
Meshlium 4G 802.15.4 AP 900 BR	Brazil	✓	EU/BR version	✓	World version	900 BR		M4G-802-900-BR	1,590 €
Meshlium 4G 802.15.4 AP 900 AU	Australia	✓	AU version		World version	900 AU		M4G-802-900-AU	1,590 €
Meshlium 4G AP 868 EU	Europe	✓	EU/BR version	✓		868		M4G-868-EU	1,500 €
Meshlium 4G AP 900 US	USA & Canada	✓	US version	✓		900 US		M4G-900-US	1,500 €
Meshlium 4G AP 900 BR	Brazil	✓	EU/BR version	✓		900 BR		M4G-900-BR	1,500 €
Meshlium 4G AP 900 AU	Australia	✓	AU version			900 AU		M4G-900-AU	1,500 €
Meshlium 4G 802.15.4 AP EU	Europe	✓	EU/BR version	✓	EU version			M4G-802-EU	1,500 €
Meshlium 4G 802.15.4 AP US	USA & Canada	✓	US version	✓	World version			M4G-802-US	1,500 €
Meshlium 4G 802.15.4 AP BR	Brazil	✓	EU/BR version	✓	World version			M4G-802-BR	1,500 €
Meshlium 4G 802.15.4 AP AU	Australia	✓	AU version		World version			M4G-802-AU	1,500 €
Meshlium 4G AP Scanner EU/BR	Europe & Brazil	✓	EU/BR version	✓			✓	M4G-SCAN-EU/BR	1,650 €
Meshlium 4G AP Scanner US	USA & Canada	✓	US version	✓			✓	M4G-SCAN-US	1,650 €
Meshlium 4G AP Scanner AU	Australia	✓	AU version				✓	M4G-SCAN-AU	1,650 €

The following accessory is optional.

Item	Ref.	Price
International adapter *	10280	8 €
Directional Antennas for Meshlium Scanner **	MDA	150 €

** Plug adapter for the mains electricity in countries like USA, UK, Australia, Canada, China, Japan, Singapore or Hong Kong. Highly recommended for powering Meshlium.*
*** This is a kit of 2 outdoors directional antennas (14 dB) for WiFi and Bluetooth, mounting kits, 3 m cables and adapters. The kit is specially indicated for Vehicle Detection applications because it enlarges the range area.*

Directional antenna for Meshlium Scanner

We provide prices in USD to US customers. Please submit your RFQ, and we will provide you with the USD prices.

Waspmote Gateway and cellular or LPWAN modules

Data extraction option	Ref.	Price
Waspmote Gateway 802.15.4 2dBi EU	WG802P-SMA2-EU	74 €
Waspmote Gateway 802.15.4 2dBi	WG802P-SMA2	74 €
Waspmote Gateway 802.15.4 5dBi EU	WG802P-SMA5-EU	74 €
Waspmote Gateway 802.15.4 5dBi	WG802P-SMA5	74 €
Waspmote Gateway Digimesh 2dBi	WGDMP-SMA2	70 €
Waspmote Gateway Digimesh 5dBi	WGDMP-SMA5	70 €
Waspmote Gateway ZigBee 2dBi	WGZB-SMA2	80 €
Waspmote Gateway ZigBee 5dBi	WGZB-SMA5	80 €
Waspmote Gateway 868 4.5 dBi	WG868-SMA4	82 €
Waspmote Gateway 900 4.5dBi US	WG900-SMA4-US	99 €
Waspmote Gateway 900 4.5dBi BR	WG900-SMA4-BR	99 €
Waspmote Gateway 900 4.5dBi AU	WG900-SMA4-AU	99 €
Waspmote Gateway LoRa 868	WGLoRa-SMA4-868	57 €
Waspmote Gateway LoRa 900	WGLoRa-SMA4-900	57 €
Waspmote Gateway Bluetooth 2 dBi	WGBTS-SMA2	69 €
Waspmote Gateway Bluetooth 5 dBi	WGBTS-SMA5	69 €
Waspmote Gateway Bluetooth Low Energy 2 dBi	WGBLE-SMA2	60 €
Waspmote Gateway Bluetooth Low Energy 5 dBi	WGBLE-SMA5	60 €

Data extraction option	Ref.	Price
Waspmote GSM/ GPRS module	WGPRS	84 €
Waspmote 3G module (Europe version)	W3G-E	174 €
Waspmote 3G module (America/Australia version)	W3G-A	174 €
NB-IoT / Cat-M Module *	WNBCM	199 €
4G Module EU/BR *	W4G-EU/BR	264 €
4G Module US *	W4G-US	264 €
4G Module AU	W4G-AU	198 €
LoRaWAN Module EU	LW-SMA4-EU	70 €
LoRaWAN Module US	LW-SMA4-US	70 €
LoRaWAN Module 433	LW-SMA4-433	70 €
LoRaWAN Module AU	LW-SMA4-AU	70 €
LoRaWAN Module IN	LW-SMA4-IN	70 €
LoRaWAN Module ASIA-PAC / LATAM	LW-SMA4-APL	70 €
Waspmote Sigfox module EU**	SF-SMA4-EU	66 €
Waspmote Sigfox module US**	SF-SMA4-US	78 €
Waspmote Sigfox module AU/APA/LATAM**	SF-SMA4-AAPL	78 €

** This radio includes a GPS receiver.*
***Does NOT include Sigfox connectivity, the user must hire this service directly from Sigfox. Check network availability in your country.*
Libelium offers Sigfox radios with 1-year license in the Sigfox IoT Starter Kit. Contact our Sales Team for more info.

LoRaWAN base stations

Libelium distributes base stations for LoRaWAN networks. They are manufactured by the company MultiTech. All of them have LoRaWAN and Ethernet connection; some feature 4G connectivity too. These base stations are ready to work outdoors (IP67 grade), and come with lightning arrestor and grounding protection, PoE powering system, a mounting kit and all needed cables and antennas. They run the AEP operating system (enhanced closed-source Linux distro).

There are EU, US and AU versions, and some of them come pre-configured for some LoRaWAN cloud servers:

Model	User Zone	Operating system	Pre-configured for LoRaWAN servers	4G connectivity?	Ref.	Price
Multitech Conduit LoRaWAN Base Station, 4G, AEP, EU version (embedded Network Server)	EU	AEP	No, but has an embedded LoRaWAN Network Server	✓	MLRWBS-4G-AEP-ENS-EU	1,400 €
Multitech Conduit LoRaWAN Base Station, 4G, AEP, US version (embedded Network Server)	US	AEP	No, but has an embedded LoRaWAN Network Server	✓	MLRWBS-4G-AEP-ENS-US	1,400 €
Multitech Conduit LoRaWAN Base Station, AEP, AU version (embedded Network Server)	AU	AEP	No, but has an embedded LoRaWAN Network Server	X	MLRWBS-AEP-ENS-AU	1,200 €
Multitech Conduit LoRaWAN Base Station, 4G, AEP, EU version (configured for Loriot)	EU	AEP	Yes, Loriot	✓	MLRWBS-4G-AEP-L-EU	1,400 €
Multitech Conduit LoRaWAN Base Station, 4G, AEP, US version (configured for Loriot)	US	AEP	Yes, Loriot	✓	MLRWBS-4G-AEP-L-US	1,400 €
Multitech Conduit LoRaWAN Base Station, AEP, AU version (configured for Loriot)	AU	AEP	Yes, Loriot	X	MLRWBS-AEP-L-AU	1,200 €

MultiTech's LoRaWAN base station

Now that you know how to extract the Data go to the Support section and see our training formulas.

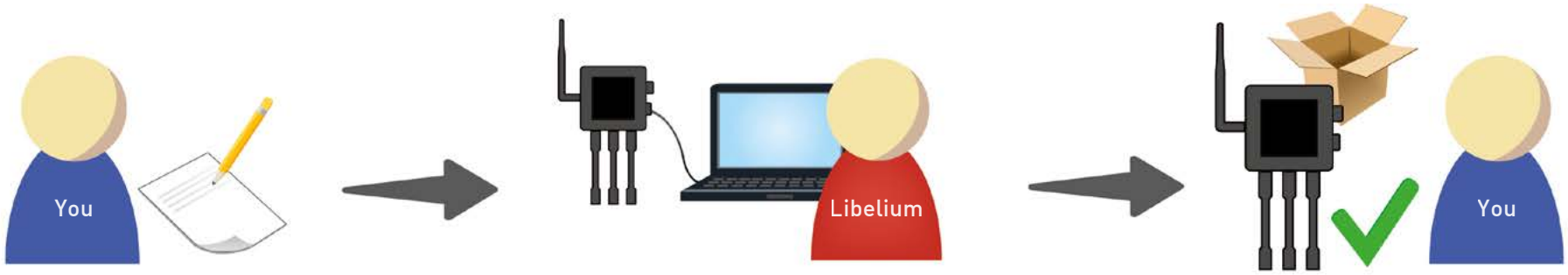
View Section

Getting support

Waspmote Plug & Sense! devices factory-programmed

If you want to save time and development costs you do not need to program anything, we can ask you about the requirements and ship your devices factory-programmed and ready to plug and sense.

Plug & Sense! Programming Service (includes the creation of up to 3 different binaries and the upload of them into 5 Plug & Sense! nodes)	PROG	600 €
Additional Nodes Upload Service	PROG-UPL	24 € per node



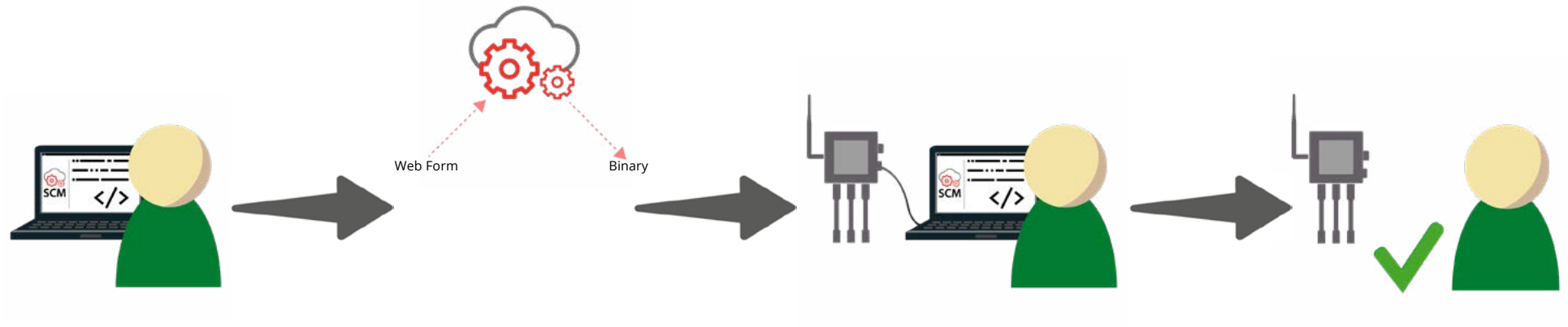
Fill the features of code in the form

We program your devices

You receive ready-to-install motes

Waspmote Plug & Sense! programmer on the cloud

The **Programming Cloud Service** is an intuitive graphic interface which creates code automatically. The user just needs to to fill a web form to obtain binaries for Plug & Sense!.



Fill the features of code in the web form

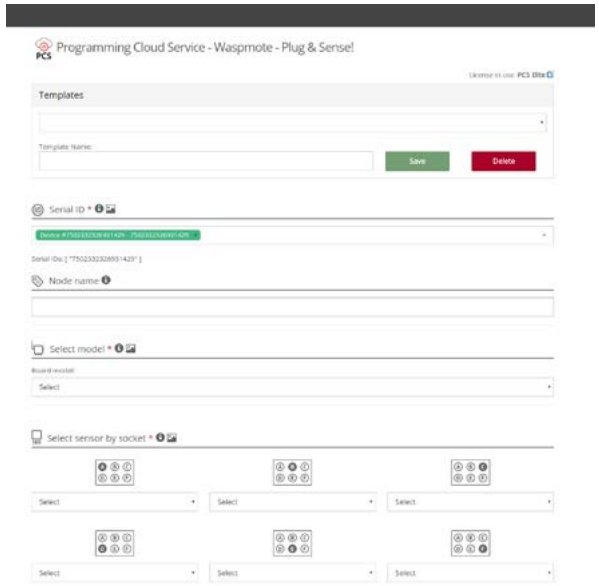
The Programming Cloud Service generates the code

You download the binary and upload it to your device

Your mote is ready-to-install

Advanced programming options are available, depending on the license selected:

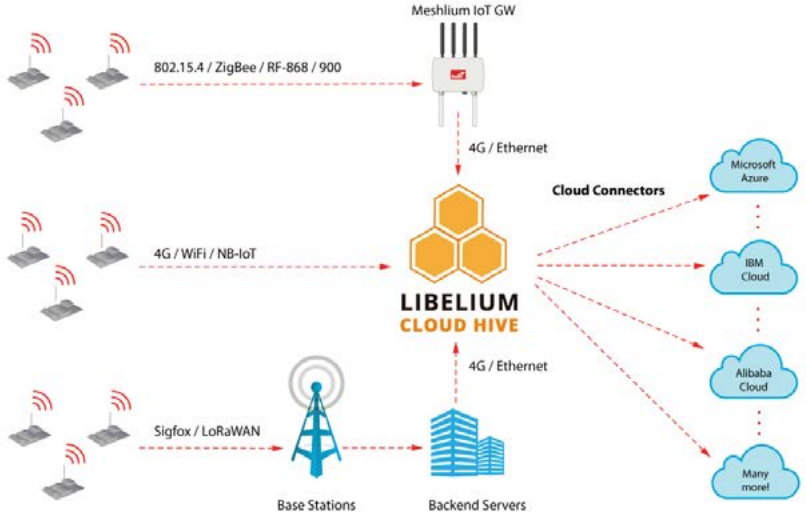
	Basic	PRO	Elite
Nodes to program	6	20	100
Plug & Sense! models supported	All	All	All
Sensors supported	All	All	All
Actuators control (Relay on/off in Plug & Sense! Smart Security)	✓	✓	✓
Sigfox/LoRaWAN settings setup	✓	✓	✓
802.15.4 / RF 868/900 MHz settings setup	✓	✓	✓
4G/WiFi settings setup	✓	✓	✓
GPS settings setup	✓	✓	✓
HTTP (4G/WiFi)	✓	✓	✓
HTTPS (4G/WiFi)	✓	✓	✓
RF link encryption (802.15.4 / RF 868/900)	✓	✓	✓
AES-256 payload encryption	✓	✓	✓
Industrial Protocols support (Modbus over RS485, CAN Bus)	X	✓	✓
Low battery warning	✓	✓	✓
Templates manager	✓	✓	✓
Batch programming (generate up to 100 binaries in one click)	X	X	✓
Price (per year)	**200 €**	**300 €**	**1,499 €**
Ref.	PCS-B	PCS-P	PCS-E



Programming Cloud Service web form

The Hive

The **Libelium Cloud Hive** is a service which sends information from any IoT device to the main worldwide cloud platforms simultaneously and without having to implement each specific cloud protocol or authentication methology, including Alibaba Cloud, Amazon Web Services, Cumulocity, IBM Bluemix, Microsoft Azure, MQTT, SAP by Techedge and Telefónica.



	Freemium License	License	Extension of License
Number of register transactions	100,000	200,000	2,000,000
Price (per year)	0 €	399 €	499 €
Ref.	H-FL	H-L	H-EL

Support options

Programming Waspmote on your own requires an advanced level in C++ and object oriented coding. Our Development site shows 400+ code examples, tutorials and technical guides. Do not worry if you are not a skilled programmer yet, we offer different training formulas so that you can achieve easily a good level.

Forum	Technical Consultancy	Training Workshops	Free Live IoT Overview Webinars	Special Projects Consultancy
• Answered once a day in best-effort way by our engineers • Online: text • Useful for: - Solving doubts about API usage, compilation problems, IDE options or basic questions - Reporting bugs - Tier-1 troubleshooting - Staying up to date about new API releases, tutorials, code examples, etc	• Arranged in 1 hour time-slots • Online and interactive video conference sessions: text, screen share, mic and webcam • Useful for: - Solving urgent questions that cannot wait the Forum's response time - Guiding you step by step - Helping you to design a system architecture - Improving your program to reduce power consumption, make it more efficient, etc	• Celebrated every quarter during 3 days / 21 hours • Face-to-face • Useful for: - Learning how to program Waspmote step by step - Achieving an advanced programming level in just 3 days	• Online master class: text, screen share, mic and webcam • Useful for: - Getting an overview on the IoT market - Discovering in just 1 hour the latest trends on smart cities, smart environment, precision agriculture, smart water, logistics, IoT... - Finding the inspiration to develop new projects learning about our success stories - Taking advantage of our professional experience on IoT projects - Approaching to Libelium ecosystem	• On request. Even although we have a very modular and complete solution, sometimes you need something else...integrating a new sensor, connect with a specific cloud platform, adapt the board for a vertical application, etc. In these cases, we arrange a meeting with our Project Manager to gather the requirements and after that he analyzes with the R&D team the viability of the solution and returns you an implementation proposal.
Free and exclusive for customers[1]	2 hours — TC-2 → 110 €	Basic Training course *(2 first days)* — Free[2] / 1,600 €[3]	See the **calendar** and **register**	PAS → 300 €
	3 hours — Free [2]	Advanced Training course *(3rd day)* — 800 €[3]		
	5 hours — TC-5 → 280 €	Basic + Advanced Training course *(3 days)* — 2,000 €[3]		
	10 hours — TC-10 → 550 €	In-Company Training Course[4] — 14,000 €		

1.- Customers get exclusive access when they formalize the 1st purchase order.
2.-For customers that acquired an Evaluator Kit, 3 hours of Technical Consultancy and 1 place at a Basic Training Course are included.
3.- Discounts available: 2nd attendee: 25% off. 3rd, 4th, etc, attendees: 50% off.
4.- One engineer travels to your facilities to teach the Basic + Advanced Training Course. Recommended for groups from 7 to 20 attendees. Travel expenses not included.

Calendar - Libelium Training Courses 2018

- Waspmote Face-to-Face Workshops
- Advanced Waspmote Face-to-Face Workshops
- Internet of Things Webinars

Now that you have chosen a Support option go to the Orders section to place your order.

View Section

Order placement

To place an order, you must complete the form available in: **http://www.libelium.com/order_form**
and send it back to your sales agent.

If sales agent has not yet been assigned, please send it back to: **sales@libelium.com**

You can consult our Terms & Conditions in: **http://www.libelium.com/legal**. Should you have any doubt, please, contact our sales department.

- E-mail: **sales@libelium.com**
- Tlf: +34 976 54 74 92

Order Form

www.libelium.com
Libelium Comunicaciones Distribuidas S.L.
C/Escatrón nº16 (Edificio LIBELIUM)
C.P: 50014, Zaragoza (Spain)
Tel: +34 976 54 74 92
Fax: +34 976 47 31 86