



Plug & Sense!

## Smart Agriculture PRO

Smart Agriculture PRO is designed to perform vineyards monitoring for enhancing wine quality, selective irrigation on golf courses and conditions control in greenhouses, among others.

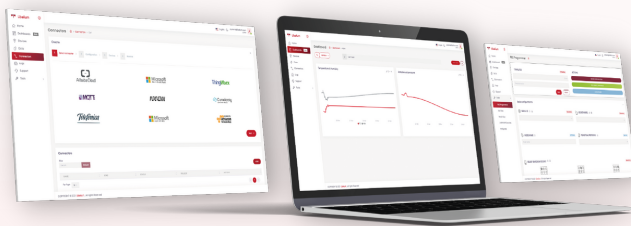
Plug & Sense! offers you the highest flexibility to connect to any sensor or device through your own programming. If you need to scale from zero, this is your best option in the market. You can use Plug & Sense! for any use case linked to Smart Cities, Agricultural and Environmental projects.

### CERTIFICATIONS



### SENSORS

- Soil moisture (3 depths)
- Soil temperature
- Leaf wetness
- Solar radiation (PAR and UV)
- Atmospheric pressure
- Stem, truck and fruit diameter
- Anemometer
- Wind vane
- Pluviometer
- Air temperature
- Air humidity
- Luminosity (Luxes Accuracy) for Smart Lighting
- Ultrasound (distance measurement)



### Libelium Cloud

A device management platform that allows you the complete management of your IoT Project end to end. Store, visualize and analyze the data received. Send the data to the main cloud platforms on the market.

# TECHNICAL FEATURES

## MECHANICAL SPECIFICATIONS

IK Grade	IK08
IP Grade	IP65
Dimensions	124 x 142 x 85 mm (without sensors)
Operating temperature	-30°C to +70°C (Temporary temperatures. Regular usage -20°C + 60°C)
Material	Polycarbonate
Sealing	Polyurethane
Cover screws	Stainless steel
Rated insulation voltage AC	690 V
Rated insulation voltage DC	1000 V
Heavy metals-free	Yes
Weatherproof	UL 746 C
Approximated weight	800 g

## GENERAL SPECIFICATIONS

Sensor sockets	6
Power sockets	2
Security	Multilayer encryption (HW + SW)
OTAP	Yes
Visual indication	Yes
Magnetic reset	Yes
Accessories	Extension cords, solar panels, power options...
Cloud connectors	More than 50 cloud services through Libelium Cloud

## CONNECTIVITY

Wireless communications	LTE CAT-4, NB-IoT / Cat-M, LoRaWAN, Sigfox, 802.15.4, WiFi, ZigBee, 868, 900
GNSS	Yes
Antenna	External and internal (depending on radio module)
SIM card	Optional through external connector
Other	RS-485, RS232, 4-20mA, Modbus and CAN bus

## POWER SPECIFICATIONS

Power supply maximum voltage	USB Vmax=7V. Solar panel Vmax 18V
USB charging voltage	5V
Solar panel charging voltage	6 - 12 V
Battery	6,6 A·h
Sleep mode	36 uA
Charging options	USB, solar panel (up to 18V) and External Battery Module
Battery charging current from USB	100 mA in batches
Battery charging current from solar panel	300 mA (max current input)
Maximum current from any digital I/O pin	40 mA

SENSOR	SOCKET	A	B	C	D	E	F	REF.
Soil moisture (3 depths)					X		X	9370-P
Soil temperature					X			9255-P
Leaf wetness			X	X		X		9248-P
Solar radiation (PAR and UV)			X	X		X		9324-P
Atmospheric pressure			X	X		X		9323-P
Stem, truck and fruit diameter			X					9530-P
Anemometer		X						9256-P
Wind vane							X	9249-P
Pluviometer				X				9252-P
Air temperature				X				9253-P
Air humidity				X				9254-P
Luminosity (Luxes Accuracy) for Smart Lighting					X			9325-P
Ultrasound (distance measurement)					X		X	9326-P

ITEM	REF.
Solar Sensors Mounting Accessory	SSMA



## Trust our knowledge

More than 15 years of experience in IoT support us.

