





## **CONTROL THE AGRICULTURAL IRRIGATION OF YOUR FIELDS** WITH OUR APP

The free MySOLEM app is available on the App Store and Google Play.



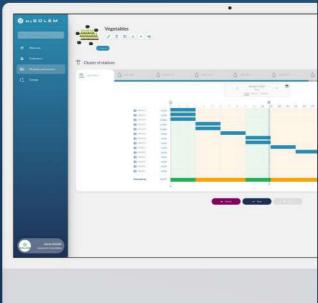






### A PLATFORM MADE FOR PROFESSIONALS

MySOLEM CANOPY, the CLUSTER and the PRO ACCOUNT are professional features of the MySOLEM.com platform. Features include site management, site mapping, user management, etc.



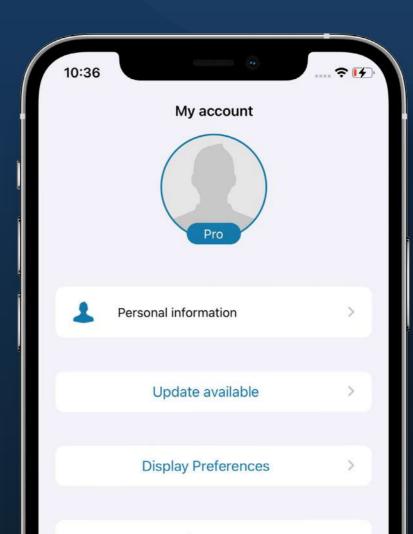




### **TO DISCOVER IN 2025**



Activate the **Eco Mode** during the winter season to extend the life of your batteries. You can increase it even more by activating it during the watering season too.





# MY CONNECTED CROPS LogRa



6 Irrigation Station 4G Gateway & Climate Data

17 **LR-BST-REACT** 4G Gateway

17 LR-MB Indoor WiFi Gateway

#### CONTROLLERS

19 **LR-PM** 9V Battery, for Master Valve And Pump

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21 LR-AG-ECO KIT 9V Battery, with Built-In Flowmeter © ECO RANGE

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#### **©** CONNECTED SENSORS

26 LR-MS 9V Sensor Module

27 LR-MS-ECO KIT 9V Sensor Module with a Solar Panel © ECO RANGE

28 LR-MS SDI12 9V Sensor Module NEW

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30 **Sensors** Individual Sensors or in Kit

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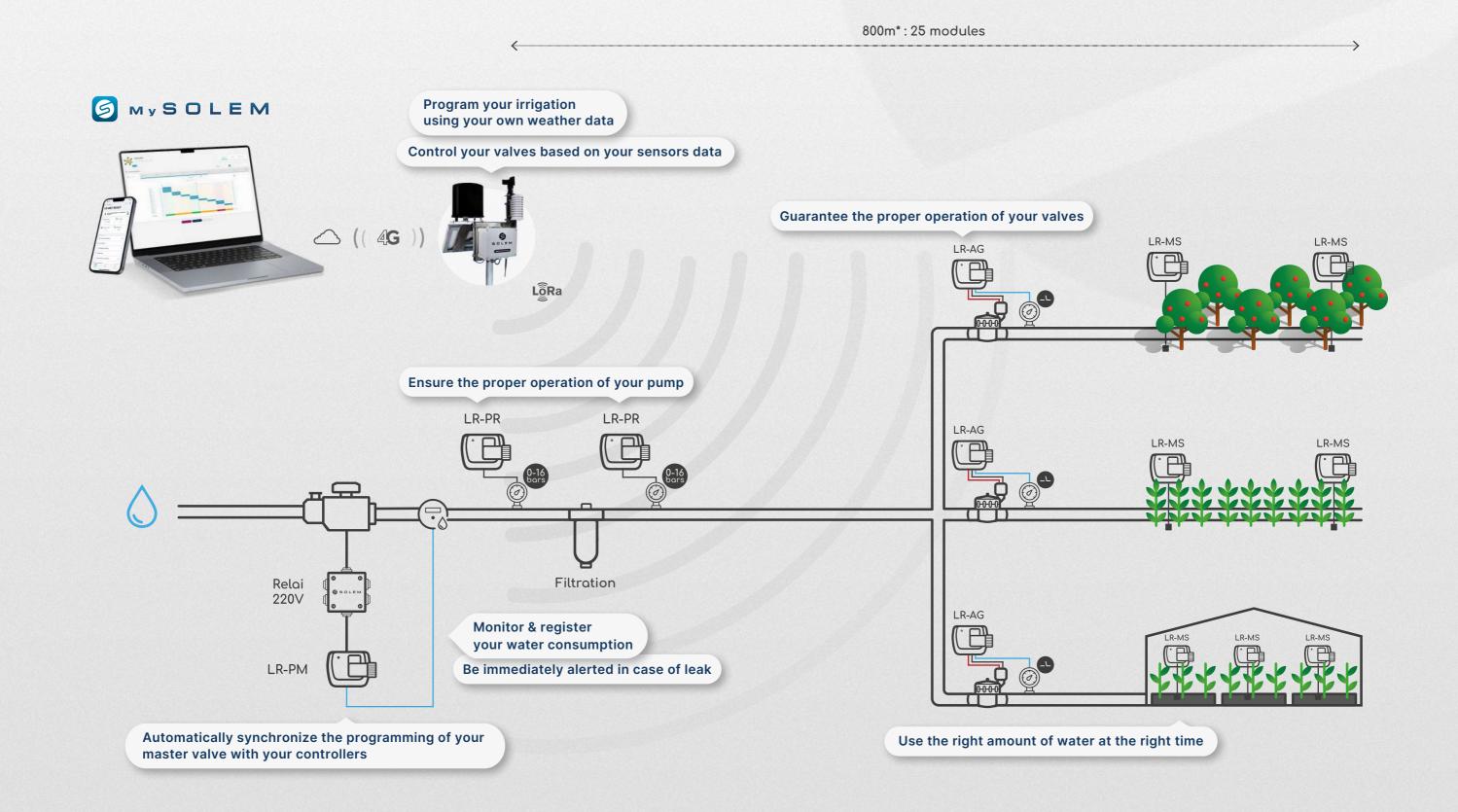
9V Battery

CONTROLLER

BL-AG

# AUTOMATE YOUR ENTIRE IRRIGATION SYSTEM WITH MYSOLEM

# CONTROL YOUR IRRIGATION REMOTELY WITH LORATM





### YOUR LARGE-SCALE IRRIGATION

CANOPY is a feature available on the MySOLEM platform allowing to manage the irrigation of your crops.



## Manage your crop fields

Define and visualize your irrigation sites

Give full or partial access to your maintenance teams according to your different installation groups

Geolocate your equipment

#### DASHBOARD

## All your data in the blink of an eye

See at a glance the operating status of your installation thanks to a dedicated dashboard for each of your crops and check the water consumption by site or as a whole.

#### **SUPERVISION**

# **History & Control**

Access historical data and real-time tracking of your irrigation

Monitor the effectiveness of the irrigation with the graphical representation

Yerify the compliance of your hydraulic network by associating your valves and sensors

Customize your monitoring interface with your own supervision tabs

#### NEW

#### **Mobile CANOPY!**

Find your Crops on the MySOLEM app and be notified when needed.



SCAN & DISCOVER
THE APP VERSION!



#### **GROUP YOUR STATIONS**

## View all of your programs on a single board



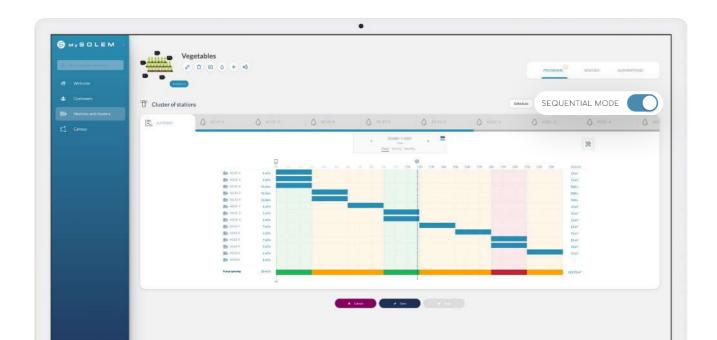
#### **CLUSTER** feature

Group all your controller stations on the same primary network to form a single one:

- View all your stations at a glance.
- Check your overall water consumption or station by station consumption.
- Be notified in case of under or over flow while your irrigation program is running.
- Synchronizes automatically with your master valve to avoid risks of overpressure.
- % See the impact of your water budget on your programming.

# **Automatic Sequential Mode** with parallel programming

By activating the Automatic Sequential Mode, easily program the stations you want. Only compatible with LR-AG and LR-AG-ECO.



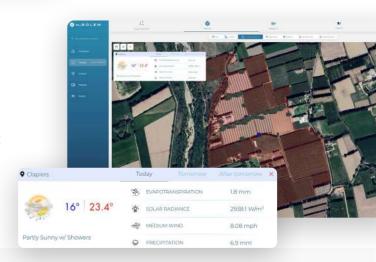
#### MYSOLEM EVOLUTION

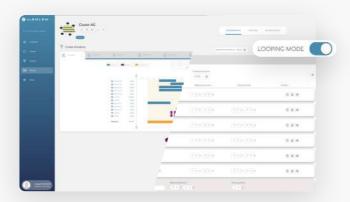
## New features for a precise irrigation



# **Evapotranspiration** & solar radiation

Switch to precision irrigation by taking into account the online weather data of your area.





### Looping

Program the duration of your irrigation by station (for 24h) and create an initial loop for 40 days max. Repeat this loop indefenitly. Change the starting order of your stations, add the associated flow and benefit from a larger number of programs per station.

Only available within a Cluster of LR-AG/LR-AG-ECO controllers.

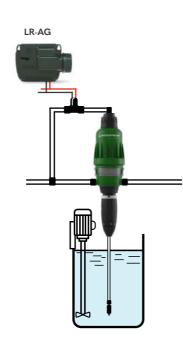
### MANAGE YOUR FERTIGATION

### with the LR-AG



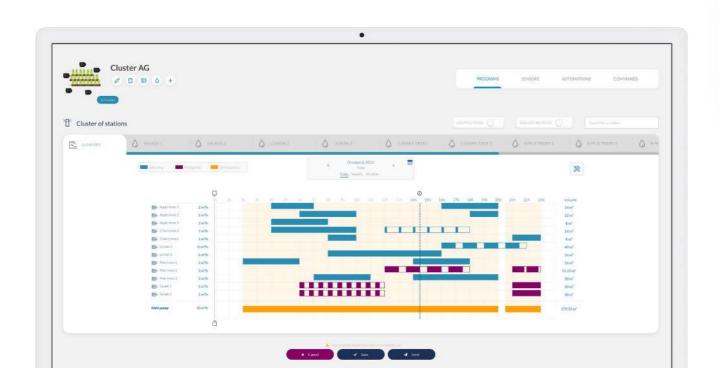
# **Control** your fertigation

The LR-AG agricultural controller allows you to manage your solenoid valves and/or a fertigation pump (manual or electric) independently. You automate the supply of inputs through programming the LR-AG adjustments within a much broader scope.



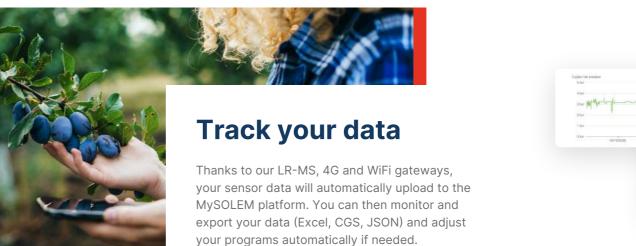
# **CLUSTER** Summary View

Using the CLUSTER feature, it is possible to quickly visualize the current programming of your entire irrigation (blue lines) and fertigation (purple line) system. You can also see how your programming impacts the flow rate of your master valve or pump.



#### MYSOLEM AUTOMATION

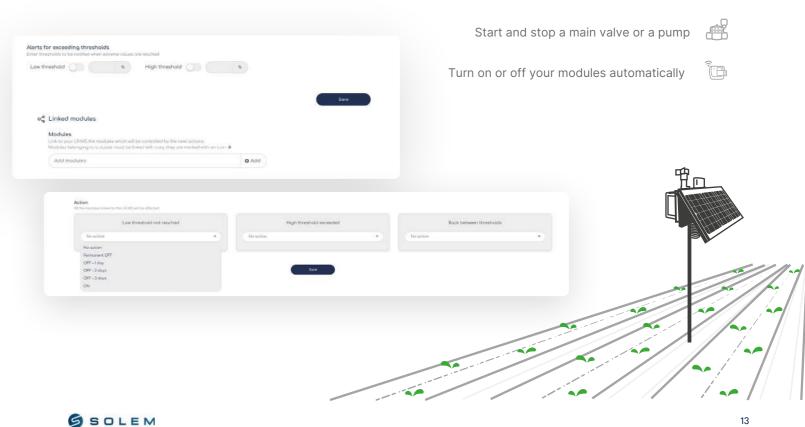
## Let your sensors control your valves





# **Exploit your data** to automate your irrigation

By defining min/max thresholds for your sensors, you can automate actions on your controllers via the MySOLEM platform.



# CONTROL YOUR IRRIGATION SYSTEM REMOTELY FROM ANYWHERE WITH LORATM

Connect your modules using LoRa™ radio technology to create remote-controlled installations.

Simply deploy the SOLEM controllers in the field, without having to worry about wiring or additional power supplies.



# Control your water consumption easily, from anywhere!

Connect a water meter to your controllers to monitor your consumption and to detect leaks.

Automatically stop your pump or master valve using the MySOLEM plateform.

Set up a threshold based on your needs.

Avoid leaks and save water.



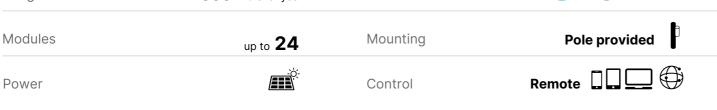


# Irrigation Station

4G Gateway, weather station, 100% self-sufficient with solar panel!

The irrigation station is a 4G outdoor gateway communicating through its SIM card. It is 100% solar-panel autonomous and pre-equipped with four probes. It is a weather station providing climate and gateway data capable of remotely managing up to 144 stations (24 modules) via LoRa™ radio. Simply transfer your programming and settings to be alerted in real-time from anywhere! You can then group together all your sensor data for visualization.

Range to module	<b>800</b> *m / 875* yds	Connection	🖟 G Lora 🚷 Bluetooth
Modules	up to <b>24</b>	Mounting	Pole provided
Power	<b>Æ</b>	Control	Remote



**Features** 

WEATHER DATA

PRE-WIRED PROBES

SOLAR-POWERED

REAL-TIME CONNECTION<sup>1</sup>



SCAN TO VIEW SPECIFICATIONS

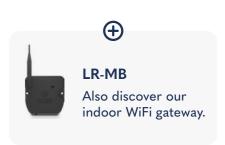


## **4G** Gateway to manage your modules remotely

The LR-BST-REACT is an outdoor 4G gateway communicating through its SIM card, remotely managing up to 25 modules. It is ideal for isolated green spaces without WiFi and/or for spaces without a power supply, given that the station can either be plugged into the mains or fully autonomous when connected directly to a solar panel. Simply transfer your programming and settings to be alerted in real-time from anywhere!

Range to module	<b>800</b> *m / 875* yds	Connection	🖟 🕻 🖟 😝 Bluetooth
Modules	up to <b>25</b>	Mounting	Fixings included
Power	<b>†</b>	Control	Remote







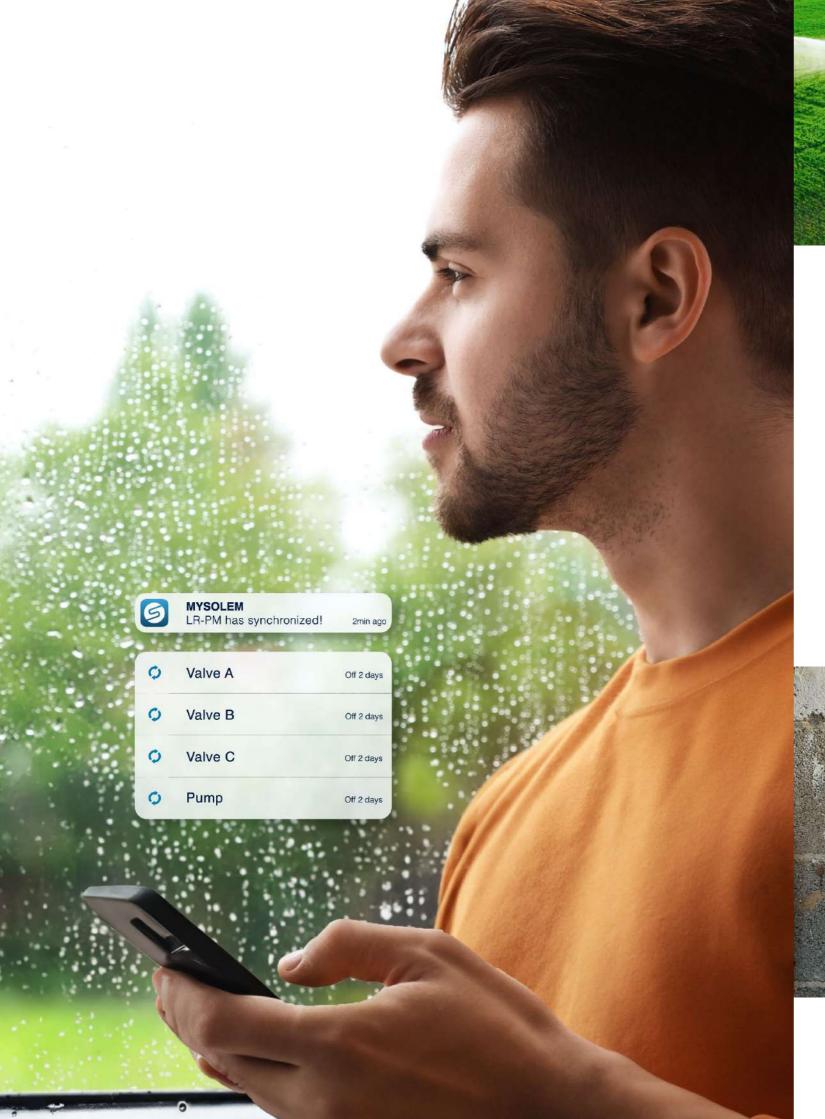
<sup>\*</sup>Up to 800m range. It variates according to system configuration. Synchronization to server every 15 minutes.



SCAN TO VIEW SPECIFICATIONS

<sup>\*</sup>Up to 800m range. It variates according to system configuration. <sup>1</sup>Synchronization to server every 15 minutes.

SOLEM







The LR-PM is a battery-powered, waterproof Bluetooth® and LoRa™ irrigation controller capable of controlling a master valve or a pump. Paired with a WiFi or 4G gateway, it automatically synchronizes the programming of all controllers connected to the same water network (LR-AG and LR-AG-ECO compatible). View all your programs at a glance and optimize pump flow according to your valve programming.

Compatibility	97	Power	ECO MODE gy
Sensor input: 1	or Per	Connection	LoRa 🖇 Bluetooth
Station	1	Control	Remote



### **Features**

Product	MySOLEM		
WATERPROOF	ECO MODE p.3		
WATER CONSUMPTION CONTROL p.15	SUPERVISION p.s		
HYDRAULIC NETWORK SECURITY	<b>CLUSTER</b> p.10		
PUMP IGNITION CONTROL	LOOPING p.11		





<sup>\*</sup>Up to 800m / 875 yds range. It variates according to system configuration. \*\* Pressure switch (see p.37).



The LR-AG is a waterproof, battery-powered LoRa™ irrigation controller that can control solenoid valves independently. It can open up to 6 valves at the same time and it can also be programmed for simple cyclic watering.

Stations	1/2/4/6	Control	Remote
Sensor input: 1	or	Connection	LoRa 🚷 Bluetooth
Compatibility	9V 🗇	Power	ECO MODE (9V)







9V battery.

Compatibility

Sensor input: 1

Stations

## **Features**

Product
WATERPROOF
SIMULTANEOUS VALVE OPENING
WATER CONSUMPTION MONITORING
PRESSURE CONTROL
CYCLE / SOAK PROGRAMMING

1/2/4/6

NEW 800m/875 yds\*

LR-AG-ECO KIT

ECO MODE 3

**MySOLEM** 

ECO MODE p.3

CLUSTER p.10

**SUPERVISION** p.9

**9V Agricultural Controller** 

Power

Control

Connection

with Built-In Flowmeter

The LR-AG-ECO KIT is a waterproof, battery-powered Blutooth® and LoRa™ irrigation controller that shares the same

features as the LR-AG. It features a flowmeter that measures your water consumption, monitors your flow rate and detects the risk of leaks. Finally, the turbine is designed to recharge the module's built-in battery, tripling the life of the

> LOOPING p.11 SCAN TO VIEW SPECIFICATIONS

AUTO. SEQUENTIAL MODE p.10

LoRa Bluetooth

Remote Remote

BUILT-IN FLOWMETER

RECHARGEABLE BATTERY



\*\* Pressure switch (see p.37)

\*Up to 800m / 875 yds range. It variates according to system configuration.



SOLEM

<sup>\*</sup>Up to 800m / 875 yds range. It variates according to system configuration.

<sup>\*\*</sup> Pressure switch (see p.37)



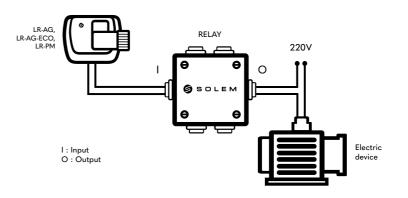


The RELAY can be used to control any type of electrical device (e.x. pump) from a 9V LoRa™ and Bluetooth® controller. The watering command from the controller opens or closes the RELAY.

Compatibility	Any type of device (up to 230-16A)	Wire connection	Ť
Input	1	Max. distance to wire	For input $30_{\mathrm{m}}$ / 33 yds

# Control **remotely**!

Control remotely thanks to a 9V LoRa<sup>™</sup> and Bluetooth<sup>®</sup> controller (associated with a LR-MB-30 or LR-BST-REACT access point).







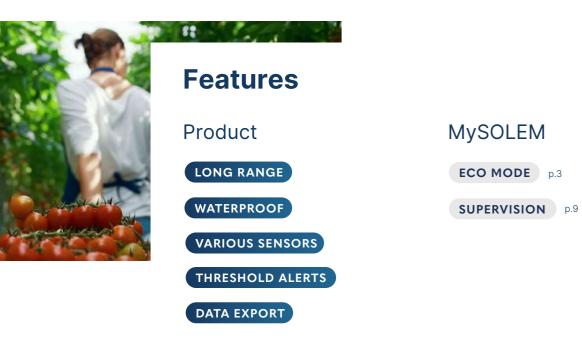




3-year WARRANTY

The LR-MS is a battery-powered, waterproof LoRa<sup>TM</sup> sensor data acquisition module. It can connect a wide range of sensors, from weather probes (rain, humidity, anemometry and temperature) to water meters, soil moisture probes, pressure sensors, level sensors and more. Paired with a WiFi or 4G gateway, access your data from anywhere. On the MySOLEM.com platform, view and retrieve your data, and even automate your watering according to your set thresholds for each sensor.

Compatibility	♣ ♦	Connection	Lora 😯 Bluetooth
Sensors input	1/4	Distance to sensor	<b>30</b> m
Power	ECO MODE (9)	Control	Remote





LR-MS-ECO KIT

**9V Sensor Module** with a Solar Panel

The LR-MS-ECO KIT is a battery-powered, waterproof LoRa<sup>™</sup> sensor data acquisition module that shares the same features as the LR-MS. It also features a rechargeable battery powered by a photovoltaic panel or mini turbine to extend the life of the 9V battery. Paired with a WiFi or 4G gateway, access your data from anywhere.

Compatibility		\$ ♦ ₩	Connection	LoRa	<b>Bluetooth</b> °
Sensors inpu	ut	1/4	Distance to sensor		<b>30</b> m
Power	ECO MODE 🕢	or	Control	Remote	



SCAN TO VIEW SPECIFICATIONS

#### **Features**

Product

LONG RANGE

WATERPROOF

VARIOUS SENSORS

THRESHOLD ALERTS

DATA EXPORT

RECHARGEABLE BATTERY

MySOLEM

ECO MODE p.3

SUPERVISION p.9



**SENSORS** 





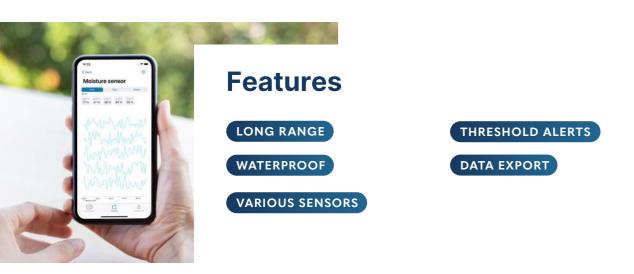




SOLEM

The LR-MS-SDI12 is a waterproof sensor data acquisition module that shares the same features as the LR-MS. This module is compatible with diverse sensors working with the SDI-12 procotol.

Compatibility	<b></b> <u> </u>	Connection	Lora 🚯 Bluetooth	
Sensor input	1	Distance to sensor	<b>30</b> m / 33 yds	
Power	9V	Control	Remote	



Compatible with\*

**HUMIDITY SENSORS** 

MULTI-LEVEL CAPACITIVE SENSORS







The LR-MS-RS485 is a waterproof sensor data acquisition module that shares the same features as the LR-MS. This module is compatible with diverse sensors working with the RS-485 procotol, such as solar radiation sensor.

**9V Sensor Module** 

LR-MS-RS485

Compatibility	<i>&gt;</i> ;	Connection	<b>LõR</b> a Bluetooth
Sensor input	1	Distance to sensor	<b>30</b> m / 33 yds
Power	<del>+ -</del> 9V	Control	Remote



THRESHOLD ALERTS

DATA EXPORT

Compatible with\*

SOLAR RADIATION SENSOR







<sup>\*</sup>And more: a wide range of sensors can be connected, as long as they comply with the RS-485 protocol.



# **Customize the monitoring of your irrigation system**



Tensiometer WATERMARK



Humidity sensor WATERSCOUT SM100 /
DECAGON EC-5 & EC-10 HS / TEROS 10 & 12 /
Multi-level capacitive HYDRASCOUT / SENTEK



Rain gauge DAVIS and HONDE



ANEMO4403



ulse water meter



emperature sensor PT100



Pressure sensor HUBACONTROL / WIKA



HM 1500 LF



Level sensor /12 HUBACON I ROL

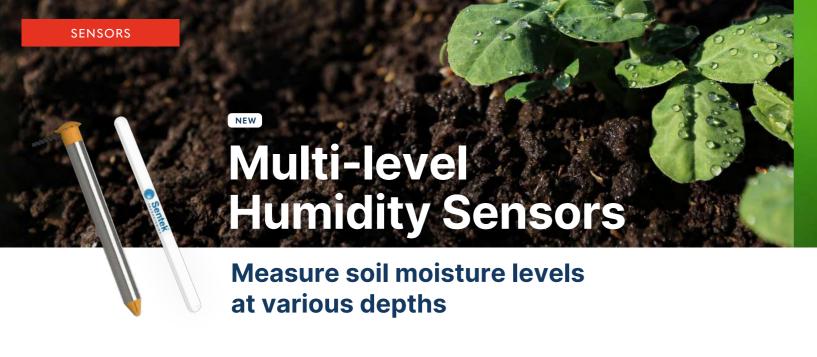
# How to choose your sensor modules?

SENSORS	SENSOR MODULES						
	LR-MS1	LR-MS4	LR-MS1 ECO	LR-MS4 ECO	LR-MS SDI12	LR-MS RS485	LR-PR
Temperature		•		•			
Rainfall	•	•	•	•			
Anemometry	•	•	•	•			
Flow measuring	•	•	•	•			
Soil moisture	•	•	•	•	•		
Tensiometry	•	•	•	•			
Pressure							•
Hygrometry	•	•	•	•			
Level (water)	•	•	•	•			
Solar radiation						•	

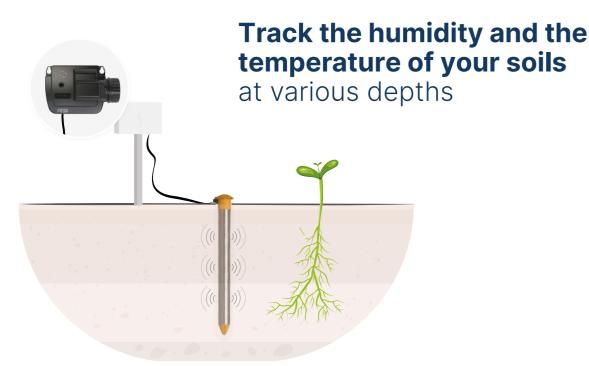


For more informations, contact our sales team.





Thanks to multi-level sensors, optimize the water quantity provided to your crops: maintain an optimal humidity level by measuring soil or substrate humidity level at different levels. Be alerted in time and use the right amount of water at the right time!







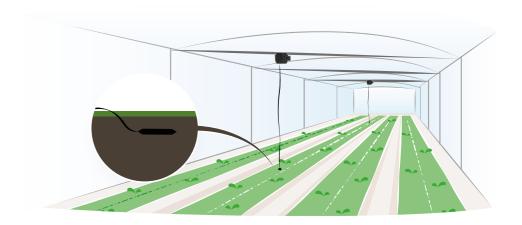
# **Humidity Sensors**

#### Measure soil moisture levels

Thanks to humidity sensors, optimize the water quantity provided to your crops: maintain an optimal humidity level by measuring soil or substrate humidity level thanks to specific sensor positioning (single or multiple). Be alerted in time and use the right amount of water at the right time!

## **Track soil moisture levels**

in real time\*



#### Which sensor module to choose?

SEN	SENSORS		SENSOR MODULES									
		LR-MS1	LR-MS4	LR-MS1- ECO	LR-MS4-ECO							
-	SMT50	•	•	•	•							
	EC5	•	•	•	•							
	EC10HS	•	•	•	•							



<sup>\*</sup>Depending on the installation configuration.







Monitor the root development of your plants. Save water.

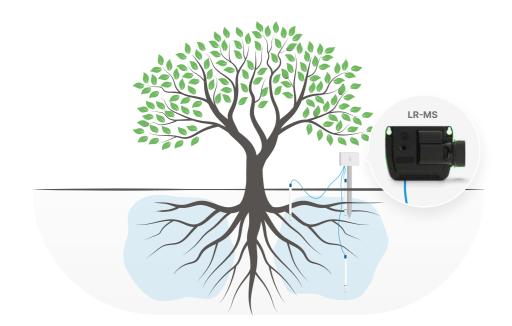




Monitor your soil stress level and water intake time by positioning your sensors at different depths depending on the type of soil, plant, root system, etc.



Adapt your watering programs to provide the proper amount of water at the right time.







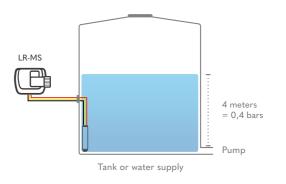
## Measure and track the level of your water tank

The level probe can be used to measure any type of tank. When connected to an LR-MS probe module associated with a gateway, it will provide data feedback and alert you according to the defined thresholds.

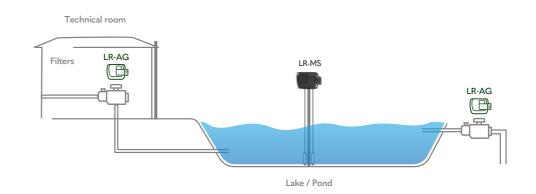


## Monitor the water level of your tanks

Connect a LoRa™ controller to your pump and automate the filling of your tank.



### Automate your installation











The LR-PR is a kit composed of a Bluetooth® / LoRa™ acquisition module equipped with a pressure sensor. The kit transmits pressure data **from 0 to 16 bars** to the MySOLEM online platform. Once the thresholds are defined, MySOLEM will alert you in case of overpressure so you can protect your equipment. It can also automatically stop your pump to prevent any leaks or damage to your system.

Compatibility pressure sensor Connection

Connection

Connection

Control

Remote

Power

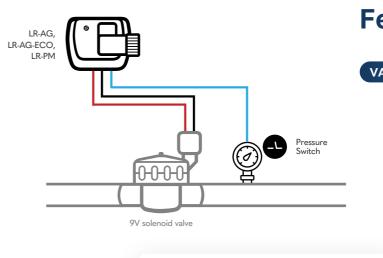
The pressure switch guarantees the proper functioning of your solenoid valves depending on the programming of your controllers. It is also helpful when analyzing technical problems in the hydraulic network. Receive an alert on your mobile phone or by e-mail in case of anomaly.

Compatibility LR-AG//LR-AG-ECO/LR-PM Wire connection



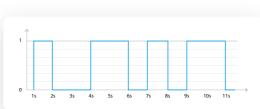






#### **Features**

VALVE STATUS CONTROL





<sup>\*</sup>The warranty covers the sensor module only.









The BL-AG is a waterproof Bluetooth® irrigation controller capable of programming up to 4 valves independently. Easily program the irrigation of your crops with your smartphone!

Stations	1/2/4	Control	Short range
Sensor input: 1		Connection	<b>Bluetooth</b> *
Compatibility	9V	Power	9V



SIMULTANEOUS VALVE OPENING

CYCLE / SOAK PROGRAMMING

VOLUMETRIC / MILLIMETRIC PROG.







# **Quality** products & services

SOLEM is committed to provide a secure and efficient service.



#### **APPLICATION** & PLATFORM

Free and available 24/7\* to manage any SOLEM product remotely.



#### **MODULAR** SYSTEM

Ability to handle an unlimited amount of products.



#### **DATA PROTECTION**

Our servers are managed by SOLEM exclusively. SOLEM guarantees that your data is secured and will never be shared with third parties.



#### DATA BACKUP

A backup is generated every 6 hours to limit the risk of data loss.



#### TECHNICAL SUPPORT

Our experts are at your service to advise you on your irrigation projects.



#### **3-YEAR** WARRANTY

All SOLEM products have a 3-year warranty (with the exception of accessories and spare parts).

#### **Useful** links



**MySOLEM** 



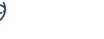
**Platform** 

MySOLEM.com



Website

solem-irrigation.com





E-learning platform support.mysolem.com

\*About 12 hours of maintenance per year.





# LEARN BY YOURSELF VIA OUR E-LEARNING ONLINE PLATFORM!

https://support.mysolem.com



Installation video tutorials



MySOLEM video tutorials



FAQ



Product documentation



#### SCAN & DISCOVER!

#### Request professional access

- 1. Go to https://support.mysolem.com/en.
- 2. Click "Request Access" at the upper right corner.
- 3. Click "Login with MySOLEM"
- 4. **Login** via MySOLEM & fill in the form.
- 5. Validation of your access within 2 working days.



# OUR PRODUCT RANGE

	<u>\$</u>			<b>P</b>	<b>@</b>	<b>♦</b>	**	(WiFi)	LogRa	3G 4G	ANTI-THEFT	<u> </u>	Ϋ́		
		Application					Communication			Power					
	Internet gateway	Irrigation	Water meter	Pressure	Pressure switch	Sensors	Bluetooth®	WiFi	LoRa <sup>TM</sup>	36 / 46	ANTI-THEFT	9V battery	230V AC power	Solar power	Inputs/Outputs/ Number of stations
Short-range management,	9V battery	•													
BL-AG		•									•				1-2-4 stations
Remote access, long range	e, battery	or AC	powered	d				<u>'</u>							
Irrigation Station	•					•	•		•	•	•		•	•	25 modules
LR-BST-REACT	•						•		•	•	•		•	•	25 modules
LR-MB-30	•						•	•	•		•		•		30 modules
LR-AG		•	•		•		•		•		•	•			1-2-4-6 stations
LR-AG-ECO KIT		•	•		•		•		•		•	•		•	1-2-4-6 stations
LR-PM		•	•		•		•		•		•	•			1 water meter input 1 main valve or pump output
LR-MS4			•	•		•	•		•		•	•			1 temperature-dedicated input + 3 sensor or water meter input
LR-MS4-ECO KIT			•	•		•	•		•		•	•		•	1 temperature-dedicated input + 3 sensor or water meter input
LR-MS-SDI12						•	•		•			•			1 sensor input
LR-MS-RS485						•	•		•			•			1 sensor input
LR-PR								İ		İ	•				1 pressure sensor input

Lexicon:

**BL**: Bluetooth®

**LR**: LoRa™

**IP**: 9V Battery IS: AC power

MB: Mother Board

MS: Module Sensors

**PR**: Pressure







### **CONTACT**

To find out more about our different product ranges, please contact us.

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# **SOLEM** is also an **expert** in **connected solutions** for:





MUNICIPALITY

**RESIDENTIAL** 

solem-irrigation.com











ISO 9001 certification, version 2015, for the design, industrialization, manufacturing, sale and customer care of connected electronic products