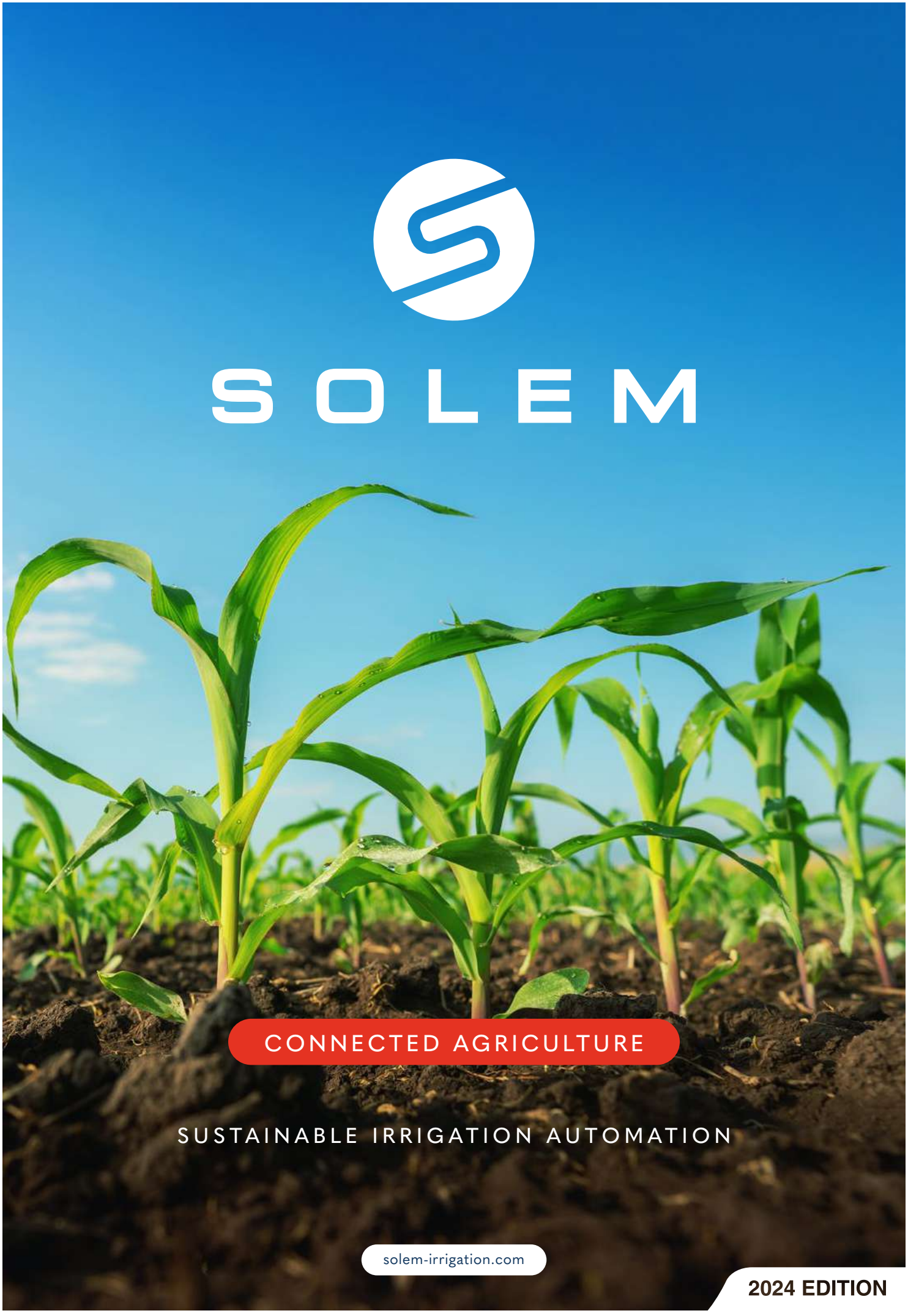

SOLEM
CONNECTED AGRICULTURE
SUSTAINABLE IRRIGATION AUTOMATION
solem-irrigation.com
2024 EDITION

SOLEM

Innovation at the heart of our profession
for **efficient** and **responsible irrigation**

Key figures

40 years
of experience

150
employees

50%
international sales

27
countries

+500k
on-site products

Market gardening

Horticulture

Arboriculture

FREE APP & ONLINE PLATFORM

Download on the App Store · GET IT ON Google Play

MySOLEM

CONTROL THE AGRICULTURAL IRRIGATION OF YOUR FIELDS WITH OUR APP

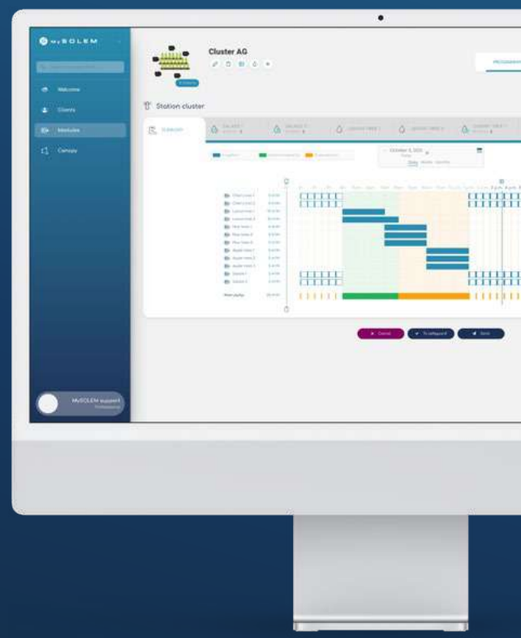
The free MySOLEM app is available on the App Store and Google Play. Is optimized with the Bluetooth® Smart V4 version available on most tablets and smartphones.

MySOLEM

PROFESSIONAL ACCOUNT

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.



MY CONNECTED CROPS

05 **FUNCTIONALITIES**

GATEWAYS

16 IRRIGATION STATION — 4G Gateway & climate data

17 LR-BST-REACT — 4G Gateway

17 LR-MB — Indoor WiFi Gateway

CONTROLLERS

19 LR-AG — 9V Agricultural Controller

20 LR-PM / RELAY — 9V Controller for Master Valve or Pump

CONNECTED SENSORS

24 LR-MS — 9V Sensor Module

24 LR-MS SDI12 / RS485 — 9V Sensor Module NEW

25 LR-MS-ECO — 9V Substainable Sensor Module ECO RANGE

26 SENSORS — Individual Sensors or in Kit

30 LR-PR — 9V Connected Pressure Sensor Kit

FUNCTIONALITIES

CANOPY

Your past, present & future irrigation

Manage your crop fields

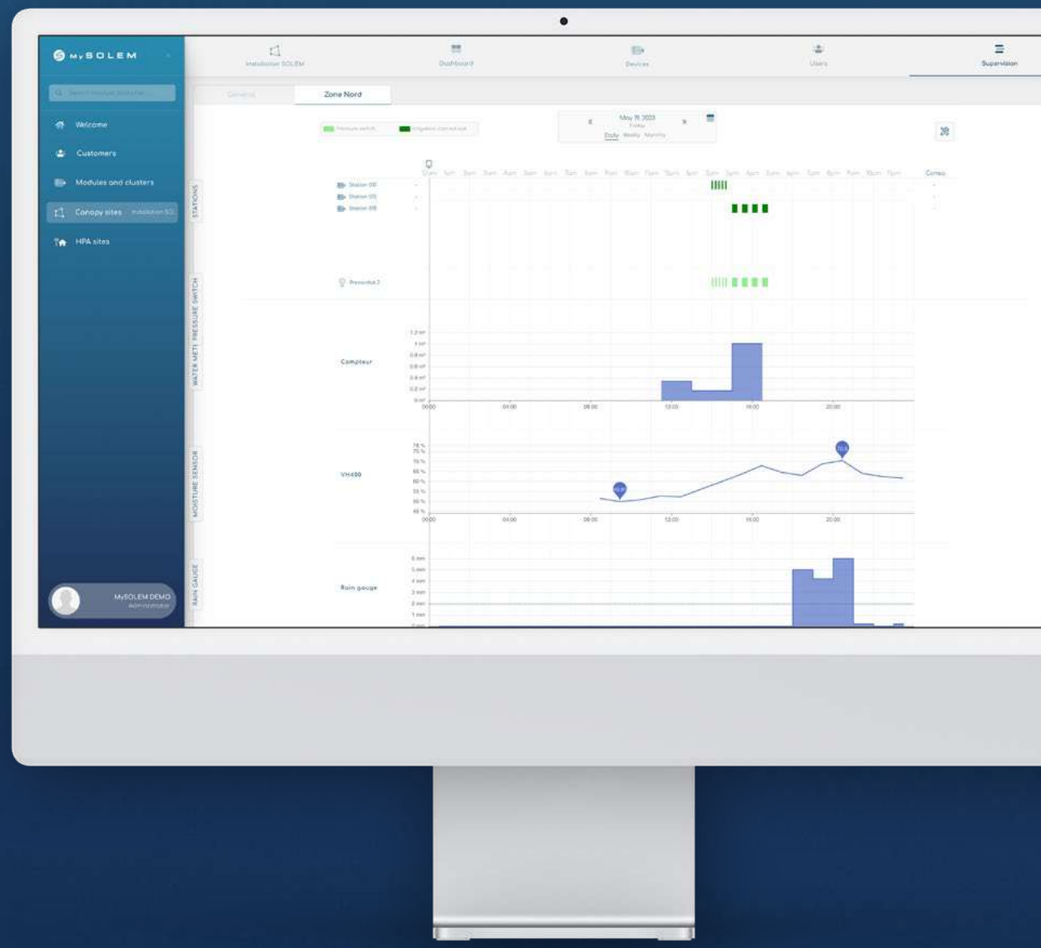
CANOPY is a feature of the MySOLEM platform that allows you to manage your crop fields.

- 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 how your systems are working thanks to a dedicated dashboard for each of your crop fields 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.
- Verify the compliance of your hydraulic network by associating your valves and sensors.
- Customize your monitoring interface with your own supervision tabs.

DISCOVER CANOPY!

FUNCTIONALITIES

CONSOLIDATE YOUR WATERWAYS
thanks to CLUSTER

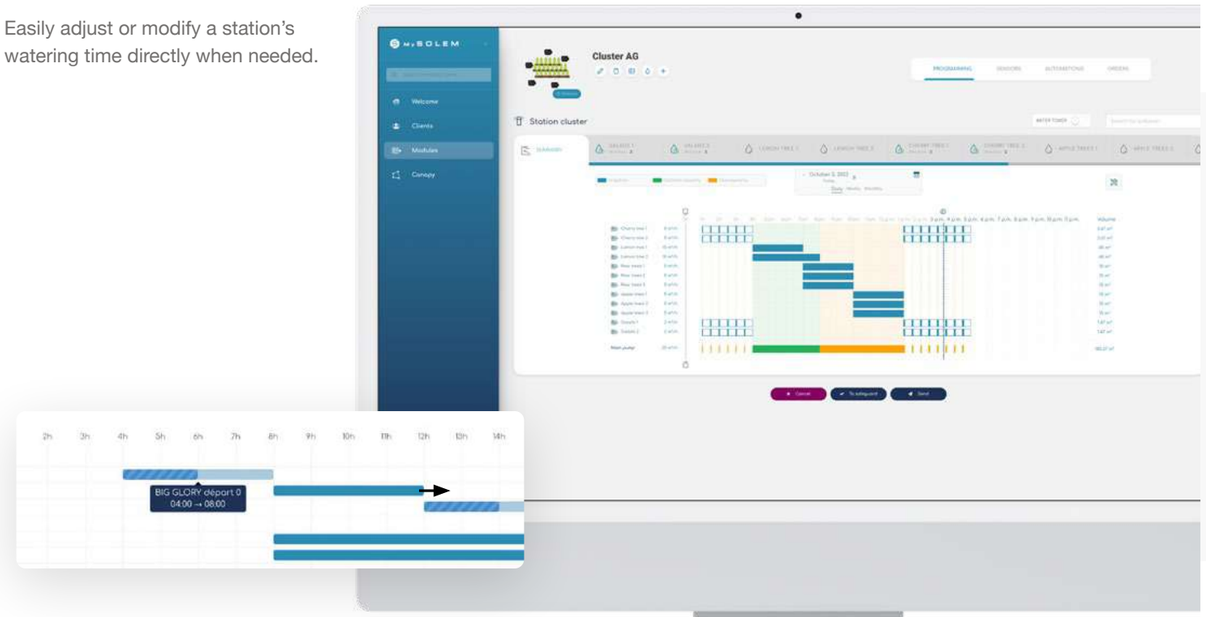
View all your programs
in one single board

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 your master valve to avoid risks of overpressure.
- % See the impact of your water budget on your programming.

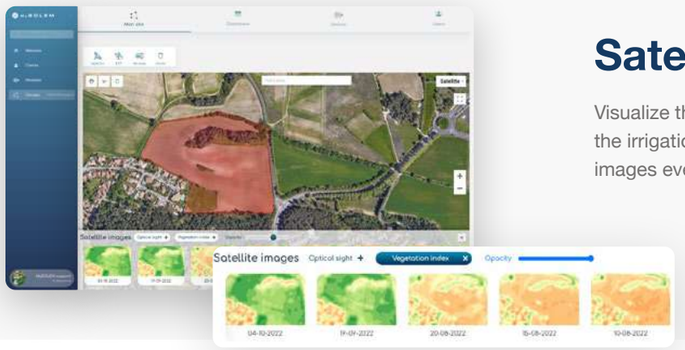
Modify your programming
directly on the graph

Easily adjust or modify a station's watering time directly when needed.



FUNCTIONALITIES

MYSOLEM EVOLUTION
New features for a precise irrigation

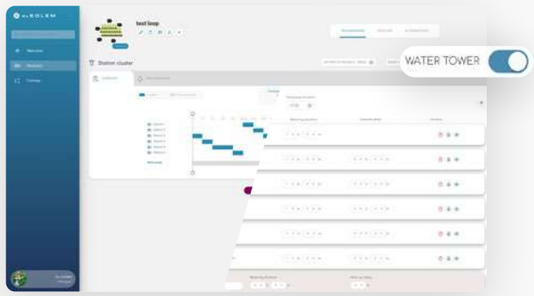


Satellite view

Visualize the evolution of your crops to guarantee the irrigation performance by obtaining satellite images every 5 days.

Evapotranspiration
& solar radiation

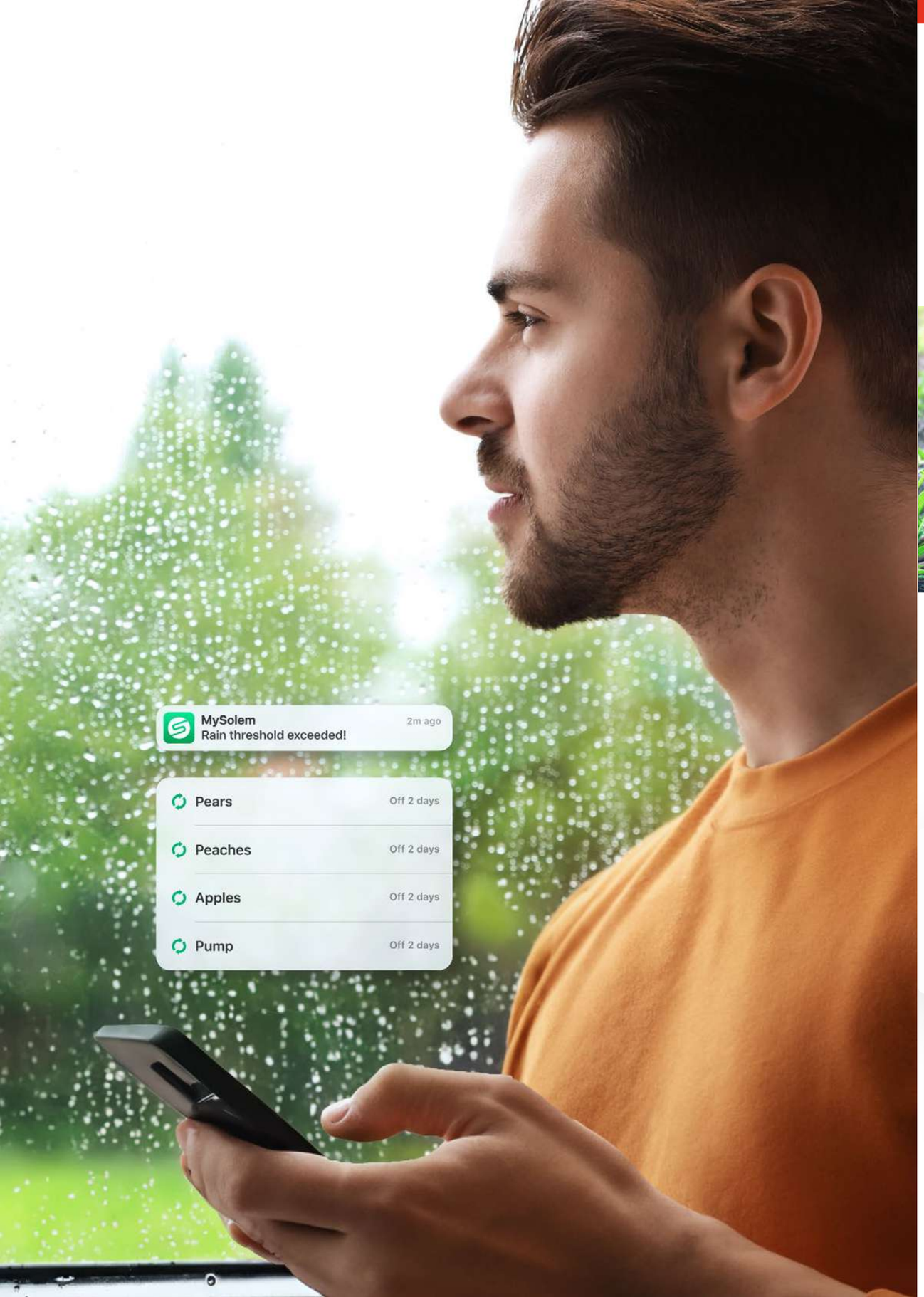
Switch to precision irrigation by taking into account the online weather data of your area.



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 once a cluster of controllers has been created.



AUTOMATION

MYSOLEM AUTOMATION
Let your sensors control your valves

Track & export
your data

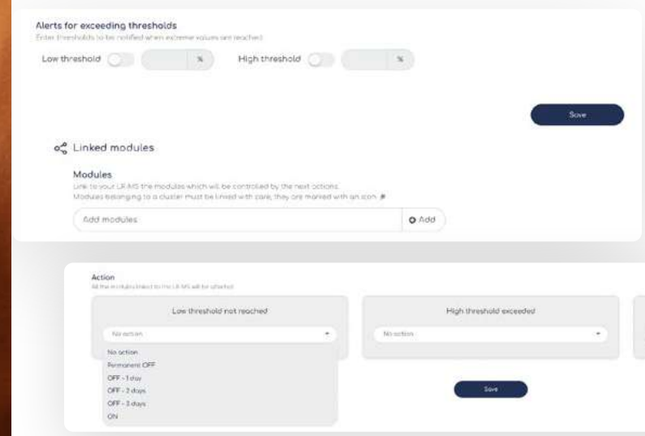
Thanks to our 4G and WiFi gateways, your sensors' data will automatically upload to the MySOLEM platform. You can then follow and export your data (Excel, CGS, JSON) and adjust your programs automatically if needed.

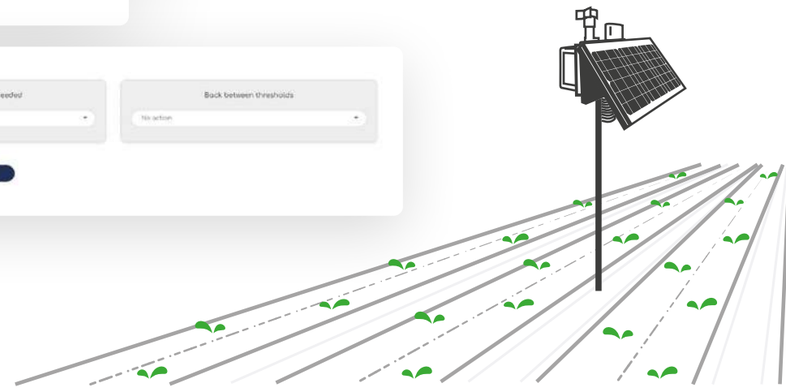
Exploit your data
to automate your irrigation

By defining min/max thresholds for your sensors, you can automate actions on your controllers via the MySOLEM platform. Irrigate at the right time, with the right volume of water.

Start and stop a main valve or a pump

Turn on or off your modules automatically

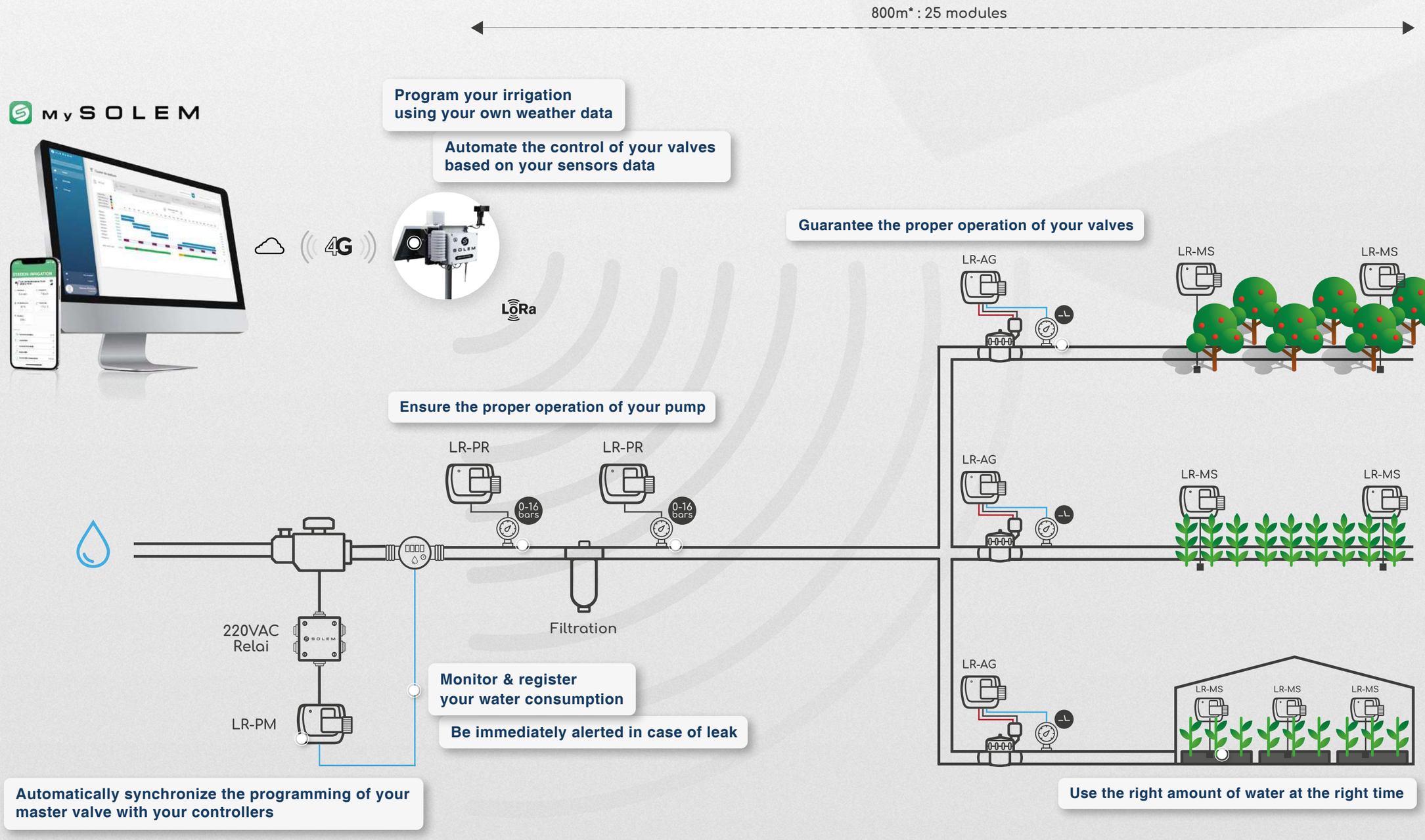




LONG RANGE IRRIGATION

CONTROL YOUR IRRIGATION REMOTELY WITH LORA™

AUTOMATE YOUR ENTIRE IRRIGATION SYSTEM WITH SOLEM



LONG RANGE IRRIGATION

CONTROL YOUR IRRIGATION SYSTEM REMOTELY FROM ANYWHERE WITH LORA™

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.

WATER CONSUMPTION MONITORING

FREE FEATURE

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, centralizes your sensors, 100% self-sufficient with solar panel

3-year WARRANTY

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	**800*** m / 875* yds	Connection	4G LoRa Bluetooth
Modules	up to **24**	Mounting	**Pole provided**
Power		Control	**Remote**

Features

- WEATHER DATA
- PRE-WIRED PROBES
- SOLAR-POWERED
- REAL-TIME CONNECTION[1]

SCAN TO VIEW PRODUCT SHEET

*Up to 800m range. It variates according to system configuration.
[1]Synchronization to server every 15 minutes

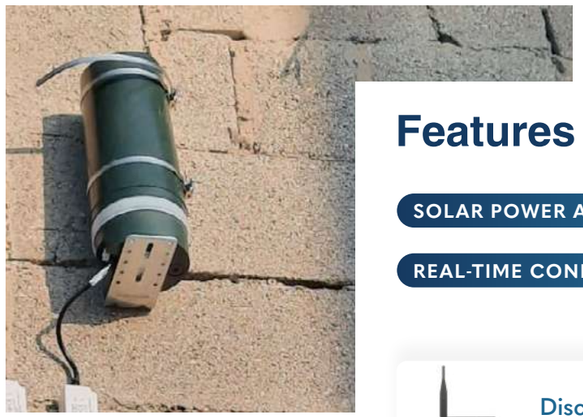
LR-BST-REACT

4G Gateway to manage your modules remotely

3-year WARRANTY

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	**800*** m / 875* yds	Connection	4G LoRa Bluetooth
Modules	up to **25**	Mounting	**Fixings included**
Power		Control	**Remote**



Features

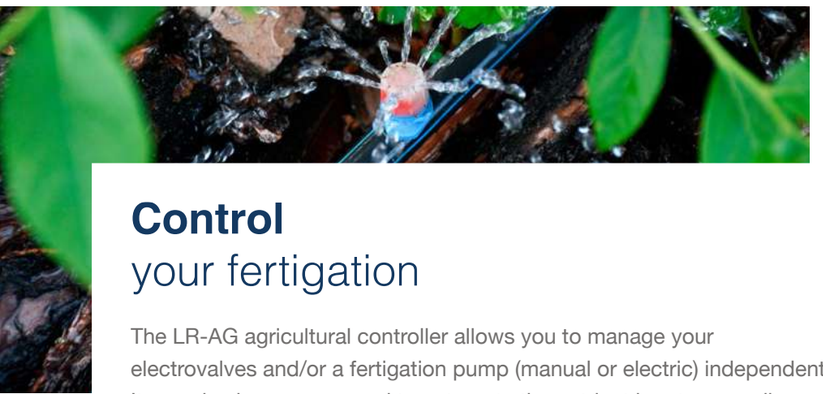
- SOLAR POWER AVAILABLE
- REAL-TIME CONNECTION[1]

Discover also our indoor WiFi gateway: LR-MB

SCAN TO VIEW PRODUCT SHEET

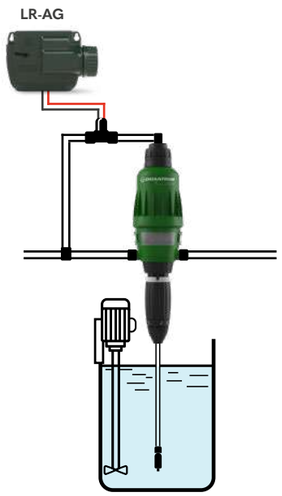
*Up to 800m range. It variates according to system configuration.
[1]Synchronization to server every 15 minutes

MANAGE YOUR FERTIGATION
with the LR-AG



Control
your fertigation

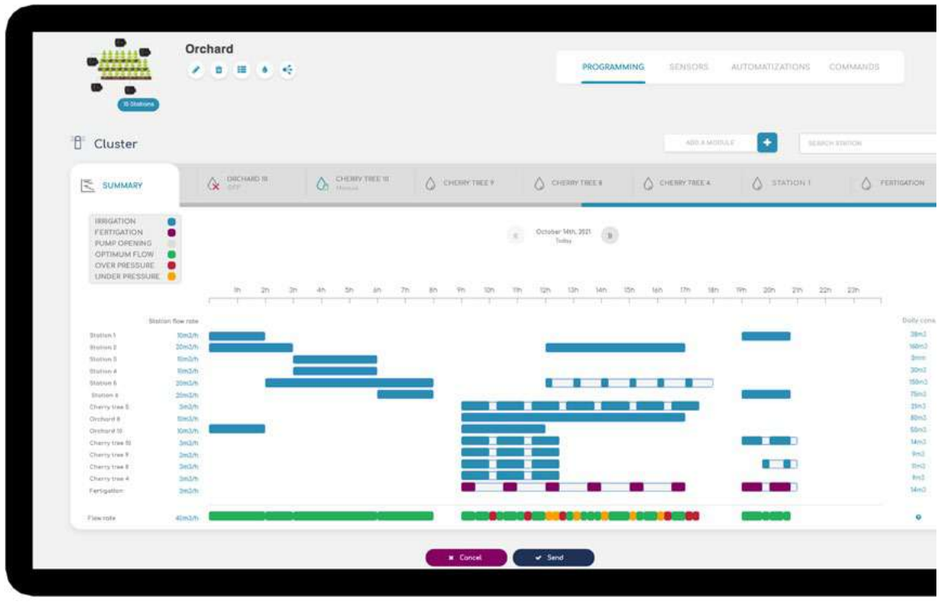
The LR-AG agricultural controller allows you to manage your electrovalves and/or a fertigation pump (manual or electric) independently. It can also be programmed to automate the nutrient inputs according to your programs when used within a cluster.



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.

Your program doesn't suit you? Modify it immediately by adjusting the bars directly on the graph.



Long Range Connected Agricultural Controller

3-year WARRANTY

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

Compatibility	9V	Connection	LoRa Bluetooth®
Stations	**1/2/4/6**	Range to gateway	**800*** m / 875* yds
Power	9V	Control	**Remote**

Features

- WATERPROOF
- SIMULTANEOUS VALVE OPENING
- CYCLIC PROGRAMMING
- p.15 WATER CONSUMPTION CONTROL
- PRESSURE CONTROL
- VOLUMETRIC PROGRAMMING
- MILIMETRIC PROGRAMMING

SCAN TO VIEW SPECIFICATIONS

*Up to 800m range. It variates according to system configuration.

CONTROLLERS

800m*

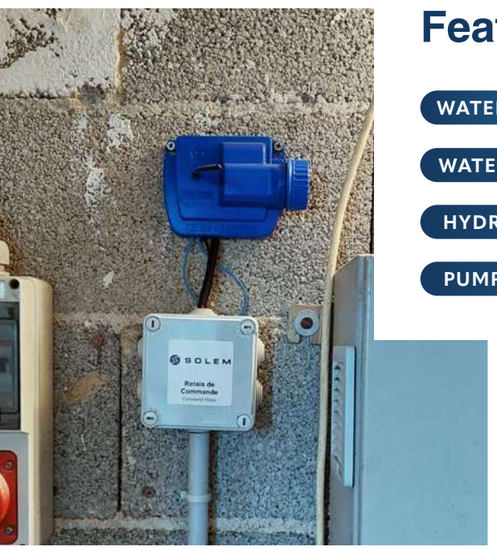
LR-PM

9V Long Range Master Valve / Pump Controller

3-year WARRANTY

The LR-PM is a battery-powered, waterproof Bluetooth® and LoRa™ watering 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 compatible). View all your programs at a glance and optimize pump flow according to your valve programming.

Compatibility	9V	Connection	LoRa Bluetooth®
Stations	1	Range to gateway	800* m / 875* yds
Power	9V	Control	Remote



Features

- WATERPROOF
- WATER CONSUMPTION CONTROL p.15
- HYDRAULIC NETWORK SECURITY
- PUMP IGNITION CONTROL

SCAN TO VIEW SPECIFICATIONS

*Up to 800m range. It variates according to system configuration.

RELAY

RELAY

Electrical Power Relay

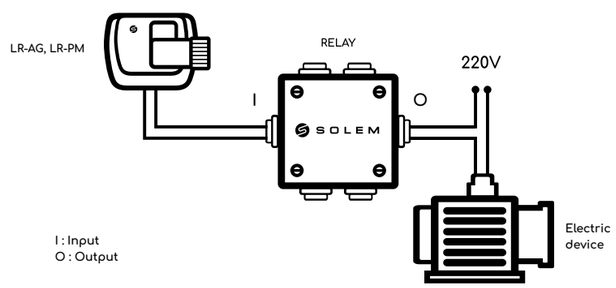
3-year WARRANTY

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	
Input	1	Max. distance to wire	For input 30 m / 33 yds

Control **remotely**

Control remotely thqnks to a 9V LoRa™ and Bluetooth® controller (associated with a LR-MB-30 or LR-BST-REACT/25 access point).



I : Input
O : Output

SCAN TO VIEW SPECIFICATIONS

CONNECT ALL OF
YOUR SENSORS

OPTIMIZE YOUR CROPS
WITH THE PROPER IRRIGATION

LR-MS

9V Sensor Module

3-year WARRANTY

The LR-MS is a battery-powered, waterproof LoRa™ 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. Choose the version compatible with the sensors you plan on using.

Compatibility	...	Connection	Bluetooth® LoRa™
Inputs	**1 / 4**	Distance to sensor	**30** m / 33 yds
Power	9V	Control	**Remote**

Features

- WATERPROOF
- MULTI-SENSOR
- ALERT THRESHOLDS
- DATA EXPORT

Extended versions

- SDI-12 PROTOCOL — NEW
- RS-485 PROTOCOL — NEW

SCAN TO VIEW SPECIFICATIONS

ECO RANGE

LR-MS-ECO

9V Dual Power Sensor Module

3-year WARRANTY

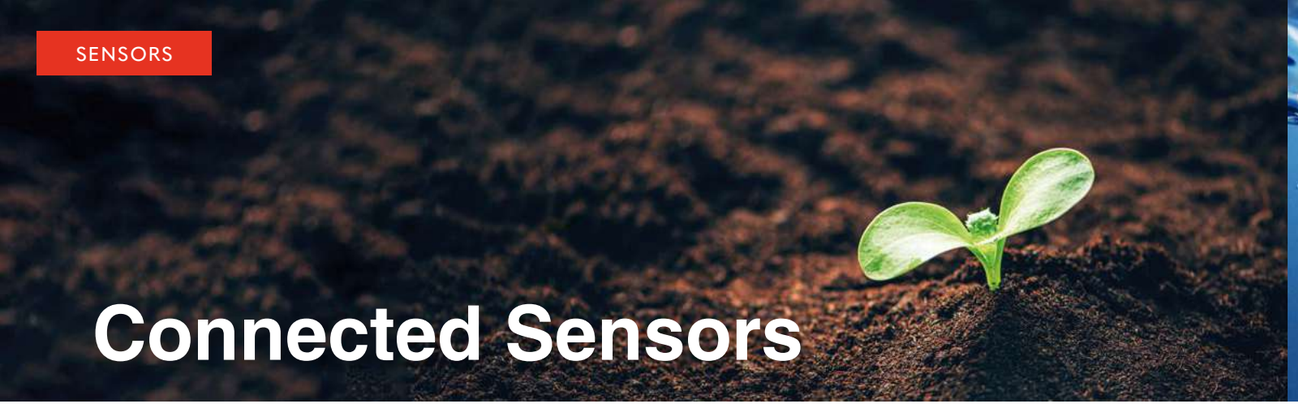
The LR-MS-ECO is a battery-powered, waterproof LoRa™ sensor data acquisition module that shares the same features as the LR-MS. It also features a rechargeable battery powered by a photovoltaic panel to extend the life of the 9V battery. Paired with a WiFi or 4G gateway, access your data from anywhere.

Compatibility	...	Connection	Bluetooth® LoRa™
Inputs	**1 / 4**	Distance to sensor	**30** m / 33 yds
Power	9V	Control	**Remote**

Features

- WATERPROOF
- MULTI-SENSOR
- ALERT THRESHOLDS
- DATA EXPORT
- EXTENDED 9V BATTERY LIFE

SCAN TO VIEW SPECIFICATIONS



Connected Sensors

Customize the monitoring of your irrigation system

Tensiometry

Humidity Tensiometer WATERMARK

Moisture

Humidity sensor WATERSCOUT SM100 / DECAGON EC-5 & EC-10 HS

Rainfall

Rain gauge DAVIS

Anemometry

Anemometry IED ELECTRONICS ANEMO4403

Flow measuring

Pulse water meter

Temperature

Temperature sensor PT100

Pressure

Pressure sensor HUBACONTROL / WIKA

Hygrometry

HM 1500 LF

Level NEW

Level sensor 712 HUBACONTROL

How to choose your sensor module?

SCAN TO VIEW THE COMPATIBILITY BETWEEN OUR SENSOR MODULES AND PROBES

INSTALL YOUR SENSOR WITH MYSOLEM

NEW

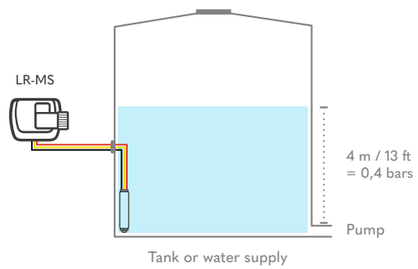
Level Sensor

Measure and track the level of your water tank

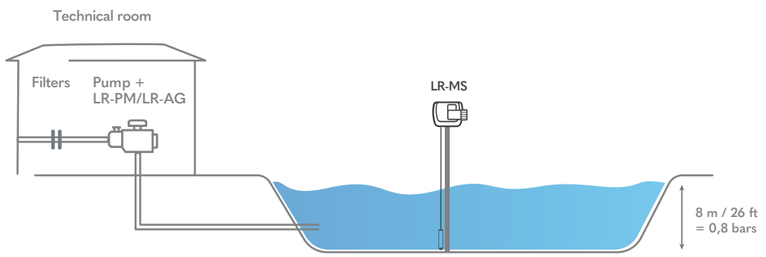
The Type 712 level probe can be used to measure any type of tank. When connected to an LR-MS probe module associated with a gateway, it will provide data feedback and alert you according to the defined parameters.

Monitor the water level of your tanks

Measure accurately the height of your water reservoir regardless of the tank's dimentions and be notified in case your min./max. thresholds are exceeded.



Tank or water supply



Lake / Pond

SCAN TO VIEW SPECIFICATIONS

Tensiometry Sensor

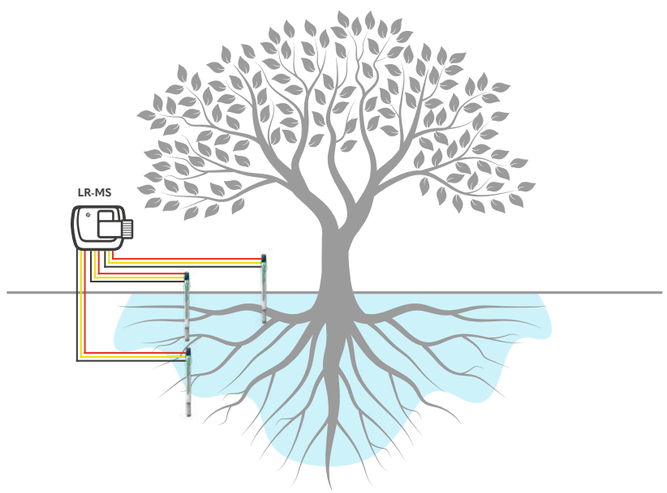
Monitor soil water stress

Ensure the proper development of your crops

Control the depth and width development of the root system of your plants and adjust your irrigation accordingly.

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

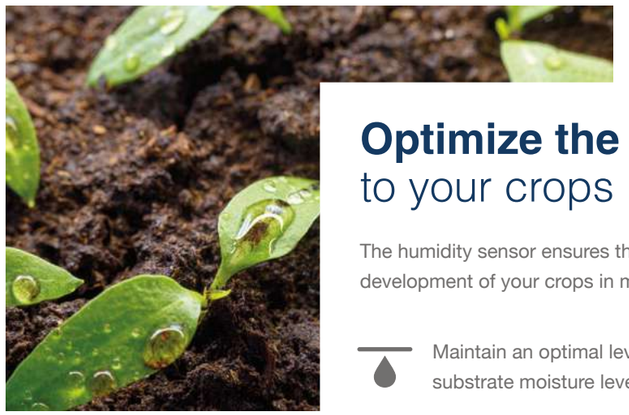
Adapt your watering programs to provide the proper amountof water at the right time.



SCAN TO VIEW SPECIFICATIONS

Humidity Sensor

Measure soil moisture levels

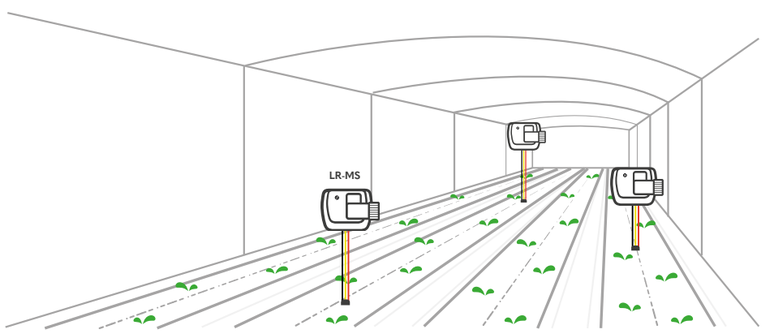


Optimize the amount of water to your crops

The humidity sensor ensures the proper development of your crops in multiple ways:

Maintain an optimal level of humidity: measure soil or substrate moisture levels with probes (single or multiple).

Provide the right amount of water at the right time.



Sensor suitable for greenhouse or open field crops.

SCAN TO VIEW SPECIFICATIONS

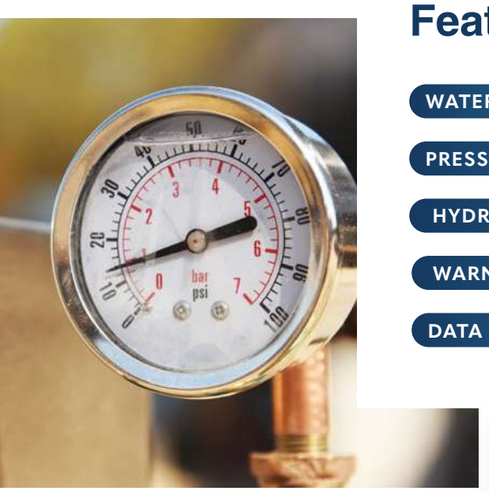
LR-PR

Connected Pressure Sensor Module

3-year WARRANTY

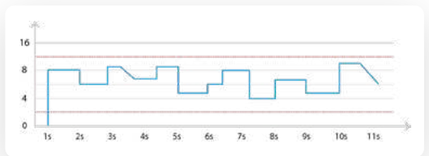
The LR-PR is a kit composed of a Bluetooth® / LoRa™ acquisition module equipped with a pressure sensor. The kit transmits pressure data **from 0 to 16 bars** to the MySOLEM online platform. Once the thresholds are defined, MySOLEM will alert you in case of overpressure so you can protect your equipment.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

Compatibility	pressure sensor 0-16 bars	Connection	LoRa Bluetooth
Input	1	Range to gateway	800* m / 875* yds
Power	9V	Control	Remote



Features

- WATERPROOF
- PRESSURE CONTROL
- HYDRAULIC NETWORK SECURITY
- WARNING THRESHOLDS
- DATA COLLECTION



SCAN TO VIEW SPECIFICATIONS

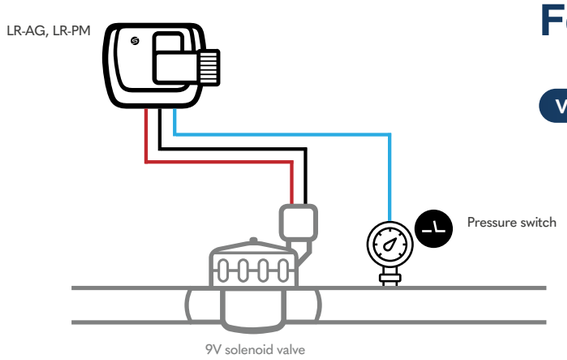
*The warranty covers the sensor module only.

Pressure Switch

Pressure switch for controllers

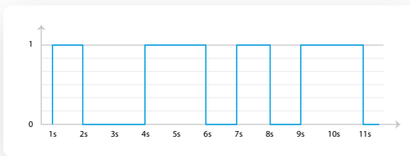
The pressure switch guarantees the proper functioning of your solenoid valves depending on the programming of your controllers. It is also helpful when analyzing technical problems in the hydraulic network. Receive an alert on your mobile phone or by e-mail in case of anomaly.

Compatibility	LR-AG/LR-PM	Wire connection	



Features

- VALVE STATUS CONTROL



SCAN TO VIEW SPECIFICATIONS

SOLEM

Quality products & services

SOLEM is committed to provide a secure and efficient service.

APPLICATION & PLATEFORM

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

3-year WARRANTY

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

Useful **links**

App **MySOLEM**

Platform **MySOLEM**.com

Website **solem-irrigation**.com

E-learning platform **support.mysolem**.com

*About 12 hours of maintenance per year.

FREE

support. MySOLEM

LEARN BY YOURSELF VIA OUR E-LEARNING ONLINE PLATFORM!

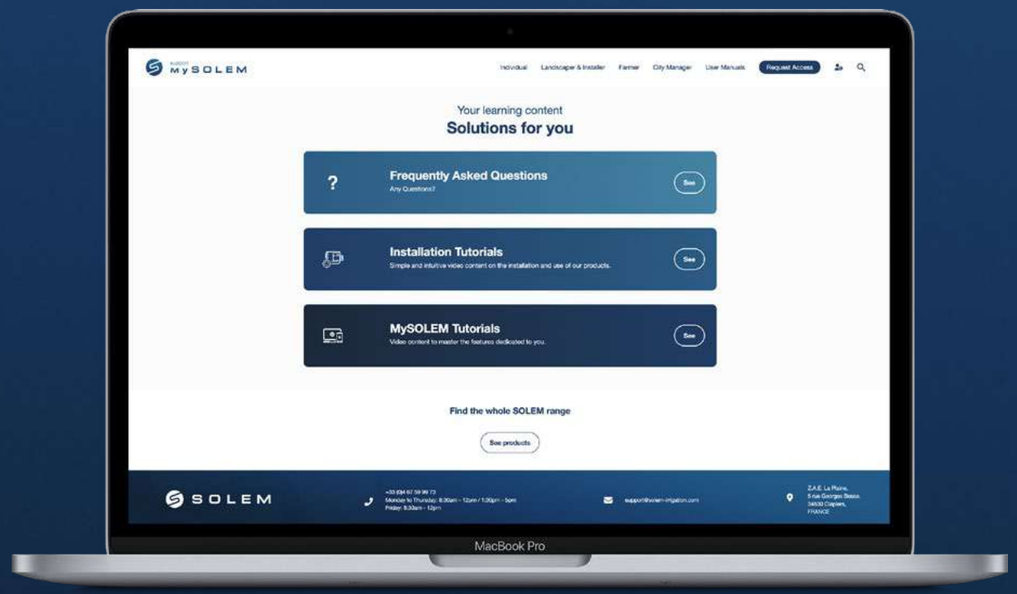
Installation video tutorials

MySOLEM video tutorials

FAQ

Product documentation

support.mysolem.com



SCAN & DISCOVER!

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OUR **PRODUCT RANGE**

		Application					Communication				Power				
		Internet gateway	Irrigation	Water meter	Pressure	Pressure switch	Sensors	Bluetooth®	WiFi	LoRa™	4G	ANTI-THEFT	9V battery	230V AC power	Solar power	Inputs/Outputs/ Number of stations
Remote access, long range, battery or mains powered																
	Station d'irrigation	•					•	•		•	•	•		•	•	25 modules
	LR-BST-REACT	•						•		•	•	•		•	•	25 modules
	LR-MB-30	•						•	•	•		•		•		30 modules
	LR-AG		•	•		•		•		•		•	•			1-2-4-6 stations
	LR-PM		•	•		•		•		•		•	•			1 water meter input 1 main valve or pump output
	LR-MS			•			•	•		•		•	•			1 temperature-dedicated input + 3 sensor or water meter inputs
	LR-MS-ECO			•			•	•		•		•	•		•	1 temperature-dedicated input + 3 sensor or water meter inputs
	LR-PR				•		•	•		•		•	•			1 pressure sensor input

Lexicon:

BL: Bluetooth®
LR: LoRa™
MB: Mother Board
IP: 9V Battery
IS: AC power
MS: Module Sensors
PR: Pressure
AG: Agriculture
PM: Pump Management

CONTACT

To find out more about our different product ranges
please contact us. Our team will be happy to help!

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