

SMART AGRO

Smart Irrigation Management

HOW CAN TELEFÓNICA TECH HELP?

We help you deploy smart irrigation remote control systems for more efficient water consumption, contributing to sustainability, as well as optimizing management time and reducing costs.

Water is an essential resource for agriculture which, due to climate change, is facing increasing scarcity due to reduced rainfall and availability. This forces the agricultural sector to adopt smart, efficient, and sustainable solutions to manage this key resource.

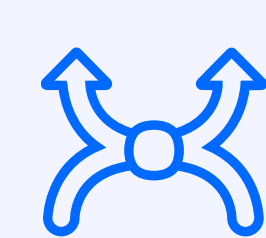
Telefónica Tech offers a solution based on telemetry and remote control that **allows for the automation and optimization of water consumption according to the specific needs of the crop.**

It is possible to smartly program irrigation systems, receive alerts for possible leaks and guarantee sustainable water use thanks to the integration with IoT devices that monitor parameters such as soil moisture, crop water stress, and flow.

WHO IS THIS SERVICE FOR?



Agricultural **holdings and agri-food producers, farmers' cooperatives, and associations**, as well as **companies providing agronomic advice** or agronomic consultancy services that want to digitalize their irrigation systems to optimize water consumption.



Irrigation communities interested in implementing intelligent irrigation control systems that allow for more efficient management in the distribution and use.

OUR VALUE PROPOSITION

Our service

Our **Smart Irrigation Management** solution automates and optimizes water consumption, adjusting to the specific water needs of the crops.

This service is implemented using IoT devices connected via NB-IoT technology, integrated with a cloud platform that collects additional information from climate and soil sensors. This platform enables:

- › **Smart irrigation management:** Using data measured by sensors to adapt water consumption efficiently.
- › **Advanced monitoring:** Real-time control of consumption and flow pressure.
- › **Efficient irrigation recommendations:** Based on artificial intelligence algorithms.
- › **Alerts and notifications:** In case of excess pressure, flow or possible leaks.

The combination of information sources, such as sensors and satellite images, with AI-based telemetry and remote-control systems, allows farms and irrigation communities to maximize the efficient use of water resources, reducing water consumption and improving operational performance.

What does it allow you to do?

This service will allow you to:

- › **Remote control:** Operate irrigation valves from anywhere, ensuring precise control in real-time.
- › **Advanced integration:** Connect flow meters and pressure sensors to adjust irrigation according to the specific needs of the terrain.
- › **Flexible programming:** Configure irrigation automatically or manually, adapting to the particularities of each crop.
- › **Adaptation to the environment:** Adjust irrigation according to soil and climate conditions, maximizing water use efficiency.
- › **Alert management:** Set up notifications for excess flow or pressure, allowing for an immediate response to incidents that may affect the system.
- › **Real-time monitoring:** Connect sensors that collect data on soil moisture and temperature, facilitating more precise and efficient irrigation management.
- › **Guaranteed connection:** Use NB-IoT communications, ideal for areas with difficult access, with low energy consumption and long battery life, ensuring the continuous operation of the smart irrigation system.

Benefits

Optimization of water consumption

The irrigation system adapts to the crop's water needs thanks to precise monitoring, significantly reducing water consumption.

Cost savings

Efficient water use reduces the costs associated with unnecessary consumption, optimizing available resources.

Crop sustainability

Automation and remote control of irrigation reduce energy consumption, minimize travel within the farm and avoid polluting emissions, contributing to environmental and economic sustainability.

Acting in advance of leaks

The system's alerts allow for the identification and anticipation of water leaks or losses, facilitating immediate intervention to minimize damage, and waste.

Telefónica Tech's differential value



Data analysis adapted to the needs of the customer:

Tools that are designed to interpret and visualize data in an understandable way, facilitating decision making.



Leading technological integration in the AgroTech sector:

Incorporation of the best solutions on the market in telemetry and remote-control systems, together with IoT devices.



Training and continuous support:

Comprehensive support throughout the entire irrigation system digitization process, ensuring that customers obtain maximum performance and efficiency from the implemented solution.

BUSINESS MODEL

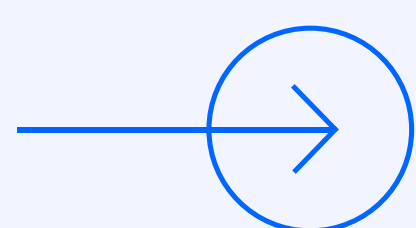
We carry out a personalized analysis of the farm to design a modular solution that includes the necessary hardware and software, with the option of installation according to the customer's needs.

The flexibility of the service allows for the adaptation of components or the implementation of the complete system to maximize efficiency and sustainability.

RELATED SERVICES

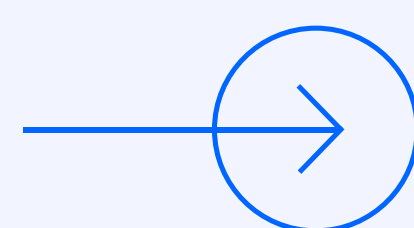
Precision Agriculture

We help you to achieve a more efficient and sustainable management of your farm through the digitalization and monitoring of your crops.



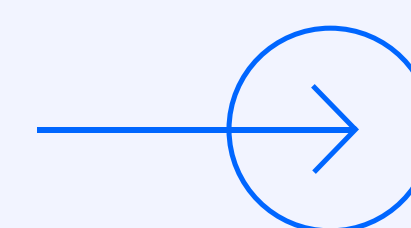
Smart Water Management

We provide digital solutions for precise water volume control. Our offering includes remote reading of smart meters through telemetering and advanced data analytics to optimize water management.



OT & IoT Security Professional Services

Our experts support you in developing industrial cybersecurity master plans, conducting regulatory compliance analyses, providing technical consultancy, and performing penetration tests, including security assessments for robots.



Contact us to start the digital transformation of your organization.

