Lora4UProbes

Spec Sheet (EN)

aquagri

Fraunhofer PORTUGAL

Project Designation:

Lora4UProbes | Long Range Communication For Underground Sensing Probes

Operation Code:

POCI-01-0247-FEDER-046943

Operation Tipology:

Sistema de Incentivos à Investigação e Desenvolvimento Tecnológico – Projetos em CoPromoção

Main objective:

Reforçar a investigação, o desenvolvimento tecnológico e a inovação

Intervention Region:

Alentejo; Norte

Beneficiary entity:

AQUAGRI IIM - INTERNATIONAL IRRIGATION MANAGEMENT LDA

CoPromoters

Associação Fraunhofer Portugal Research

Projeto Lora4UProbes	**AQUAGRI IIM**
Total eligible cost:	Total eligible cost:
346.295,01 €	**116.192,06 €**
EU financial support:	EU financial support:
250.242,20 € (FEDER)	**77.664,99 € (FEDER)**

Projects's Overview

Today the shortage of water supplies is a big challenge, as the FAO (*Food and Agriculture Organization of the United Nations*) data shows: water consumption rate grew disproportionally to the World's population growth rate. Studies also show that agricultural production – consumer of 70% of clean water resources - will have to increase by 60% until 2050 to guarantee food for a growing world population.

If we consider the application of clean water in urban green areas – essential for the well-being of citizens and for the sustainable development of cities – the situation is even more serious.

To meet the OMS' goal of having 9m2 of green area for each person, it is expected that this kind of spaces increase and therefore so does the water spending.

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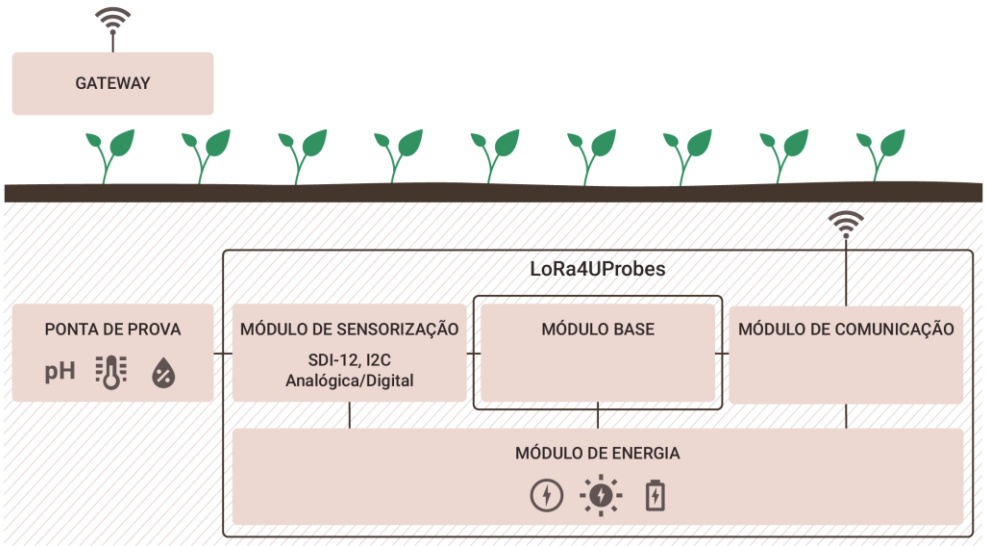
In this context, it is very important to carefully manage water supplies, especially when irrigation is often done with clean water.

The project *Long Range Communication for Underground Sensing Probes* (LoRa4UProbes) aims to contribute to a sustainable use of water by developing a new soil monitoring solution aligned with the Internet of Things (IoT) concept, and that can be easily integrated in different precision farming use cases.

LoRa4UProbes stands out in the market of soil monitoring for agricultural areas and public spaces, by presenting itself as a solution with extended range communication capability, able to to operate underground, and modular to support different sensing modules.

Result of a joint initiative between Aquagri and Fraunhofer, the project LoRa4UProbes aims to create the *Know-How* to show the added value of this kind of devices – making it more durable and more efficient in what concerns underground-aboveground communication – also showing its applicability in different irrigation contexts.

Photos, videos and other dissemination materials



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