



**MAGDA**  
INNOVATIVE SENSING FOR FARMING

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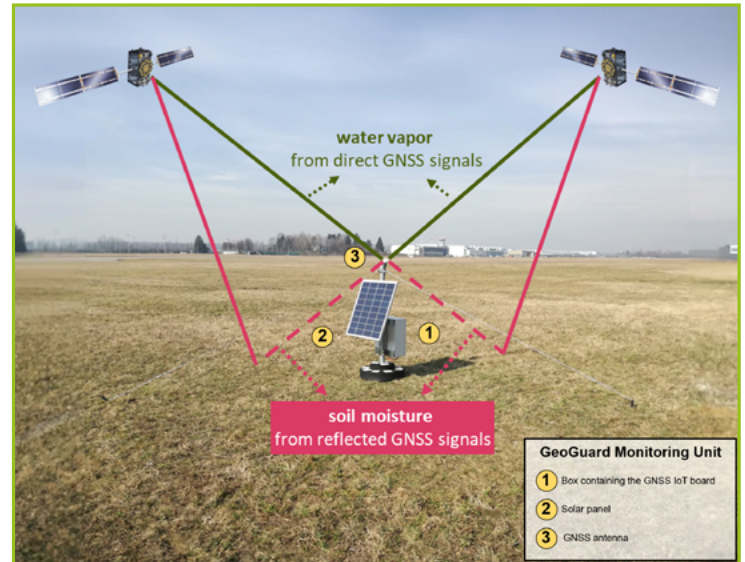


## Name of the device:

**GeoGuard Monitoring Unit**

## Nature of the device

This IoT sensor continuously collects, logs and send the so called “raw” GNSS data, i.e. observations related to each GNSS satellite in view, to a cloud-based computing center. By processing these data by means of innovative algorithms, it is possible to retrieve the atmospheric water vapor and the soil moisture, two variables that will be used in the MAGDA project as input to enhance the performance of the meteorological and hydrological model.



## Trivia on the device

The sensor is based on mass-market GNSS components.

## The demo sites

Three demo sites have been chosen for MAGDA project including this one! Demo sites are situated in Piedmont, Italy, Braila, Romania and Burgundy, France. The italian demo site is on arboriculture, the romanian site mainly on cereals and the french site focuses on viticulture.

## MAGDA project general info

MAGDA aims to provide valuable weather and irrigation information directly to farmers and agricultural operators, by exploiting the strengths of atmosphere and soil sensing technologies.

The developed system will improve the prediction of severe weather events (rainfall, snow, hail, wind, heat and cold waves) as well as of weather-driven agricultural pests. Moreover, in combination with the hydrological model it will improve irrigation performance and therefore increase food security and sustainable water management in Europe.

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