

FIELD MONITORING SYSTEM



PRODUCTIVITY
EFFICIENCY
ENERGY SAVING



CULTIVATION COSTS
WORKING HOURS



ama



**Data collection
and analysis**



**Agronomic
advice**



**Quick and effective
intervention**

ABOUT INFIELD

InField is a monitoring system that makes it possible to manage agricultural fields remotely, **optimising performance and reducing the risk of damage to crops**. Its platform provides useful suggestions concerning irrigation and spraying. Data is collected and transmitted from the field to a platform via **InStation, an independent monitoring system** equipped with sensors to be positioned in the ground and weather sensors. The collection of data such as soil humidity, air temperature and wind speed enable **quick and effective intervention**. The integrated control unit gives information about weather conditions, sun exposure, incline/grade and soil texture. It is recommended to install more than one system in fields with significant pedoclimatic differences.

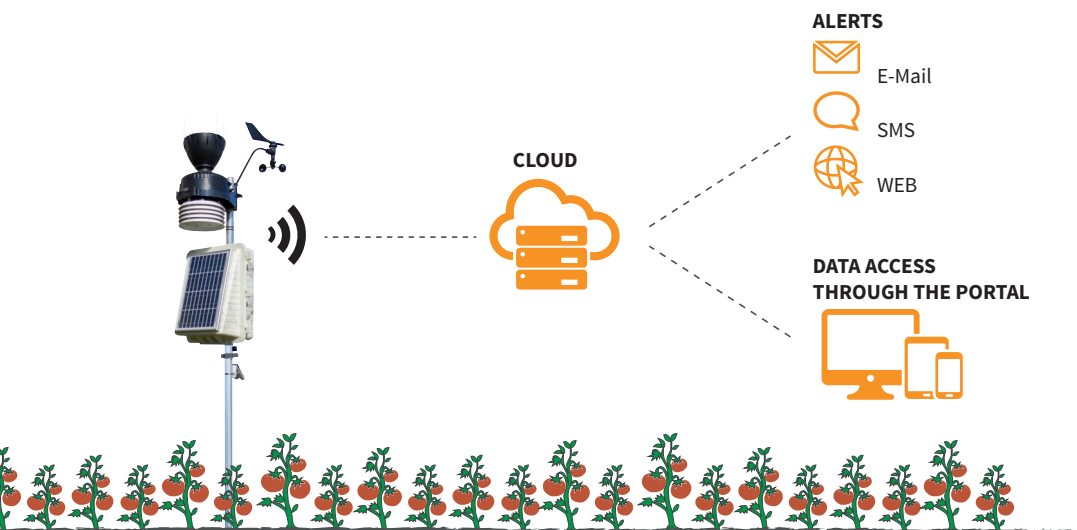
Instation is a monitoring system with weather and fields parameters. It is equipped with an independent unit of control that collects and processes data coming from wired sensors. **The control units** are available with **2G and 3G** access technology, both with insertable SIM card and **SIM on chip**. Thanks to the **integrated GPS**, the geolocation system detects the location of the system in the relevant field. The data is sent to **the cloud** via an integrated modem and the information is accessible via the web platform. Being equipped with **a photovoltaic panel** and three lead batteries, the system is fully automated.

inStation



- GSM and GPS
- WIRELESS CONNECTION
- PHOTOVOLTAIC PANEL 10W












HOW IT WORKS (OPERATING MODE)



WHAT DOES IT MONITOR?

InField constantly monitors the state of the soil and crops, monitoring water stress and disease risk conditions.

Some monitorable crops

 Durum wheat	 Kiwi
 Soft wheat	 Tomato
 Corn	 Lettuce
 Apple	 Soy
 Pear	 Sugar cane
 Grapevine	

Diseases

- Stem rust
- Downy mildew of grape
- Grey mould of grape
- Early blight of tomato
- Downy mildew of tomato
- Fusarium ear rot of corn
- Helminthosporium leaf blights of corn

SENSORS



RAIN
GAUGE



3 SOIL MOISTURE SENSORS
(60 CM/40 CM/20 CM)



LEAF WETNESS
SENSOR



ANEMOMETER



AIR TEMPERATURE &
HUMIDITY SENSOR



PAR SENSOR

AGRONOMIC ADVICE

InField provides a **decision support system** that helps farmers with their business activities. It manages automatic alerts set by an algorithm, which **provide recommendations concerning irrigation and the risk of disease**, and alerts set by the user through ad hoc parameters and manually entered thresholds.



Irrigation alert



Risk of diseases alert

When the threshold values are reached, **the user receives notifications via SMS, email or from the portal.**

WHAT ARE THE BENEFITS?



The InField system helps the farmer by:

- detecting when irrigation is needed
- detecting the risk of disease
- better managing of timings and of the agromechanical work

With **InField**, the farmer can irrigate when the amount of water in the soil available to the plants has reached a critical level. Choosing the right timing and the right amount of water for irrigation is a winning decision: **it saves water, fuel, energy and labour**. You get **quantitatively and qualitatively higher production**. Thanks to InField, the quantity of treatments is reduced, and greater results are obtained, allowing an **economic saving of 20%**.



-20%

Fuel and
time



-10%

Treatments



-14%

Carbon dioxide
emissions

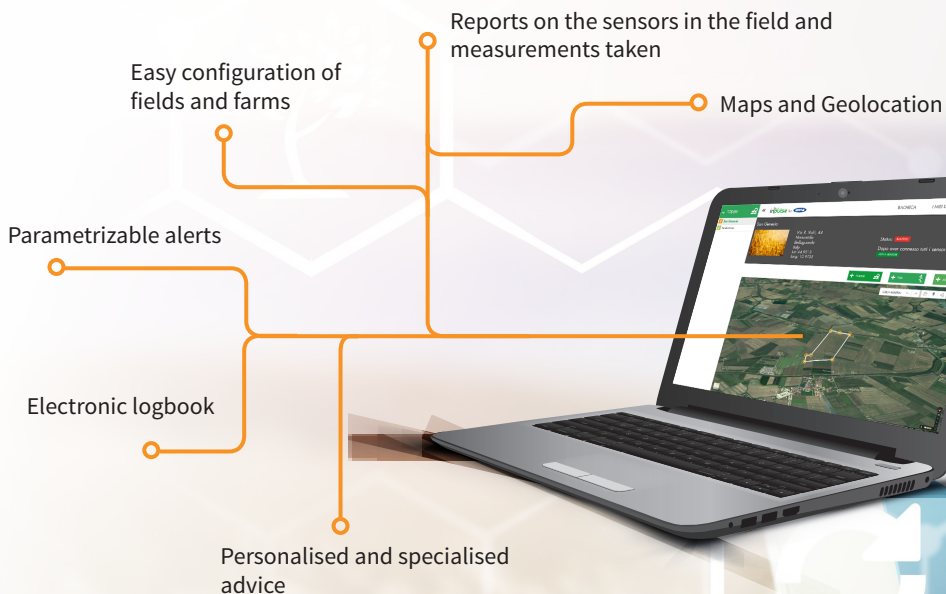


+15%

Productivity

AMA reserves the right to verify the functionality of the system and signal coverage based on the specific request of the customer, geographical area and type of crop.

INFIELD PORTAL



**ACCESS TO DATA
AND COMPLETE
VIEW OF THE FIELD**

The intuitive, flexible and fast web application, accessible from computers and tablets, always at hand and easy to set up. It provides a complete view of the field and comprehensive insights of the most important indicators.





www.inpulse.tech



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