



New

# HidroFarm

DIGITAL  
SOIL  
MOISTURE  
METER



Rational use of water  
resources in agriculture





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## What is the importance of water resource management in agriculture?

Water resource management is a crucial step in modern agriculture and is vital to ensure healthy and sustainable production. Therefore, it is essential to maintain adequate soil moisture levels for each crop in order to maximize productivity and avoid waste of natural resources.

Excessive irrigation, for example, can bring numerous problems, including water waste, unnecessary expenses, the emergence of diseases, and the loss of soil and nutrients through surface runoff. On the other hand, water deficiency in the soil hinders the full development of plants, directly affecting their productivity and health.

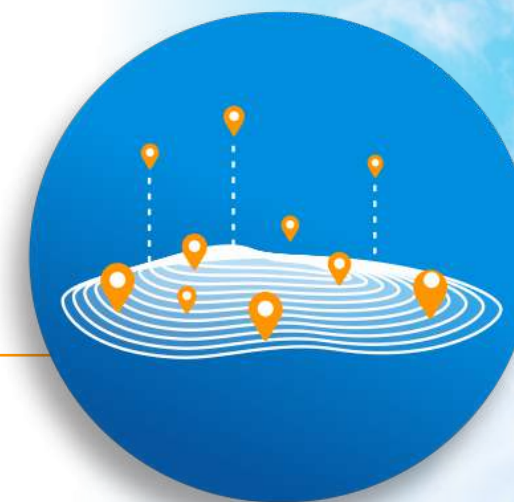
By carefully controlling soil moisture levels, it is possible to prevent problems related to water excess or deficiency. Moreover, this efficient water resource management helps ensure more sustainable production, reducing environmental impact and production costs. Water resource management is fundamental to guarantee healthy, sustainable, and profitable production.

## USE

### 1. Installation

On pivots, at least 1 sensor per quadrant (for pivots over 75ha, at least 2 sensors per quadrant).

*If you work with Precision Agriculture, sensors can be installed to monitor the different regions identified.*



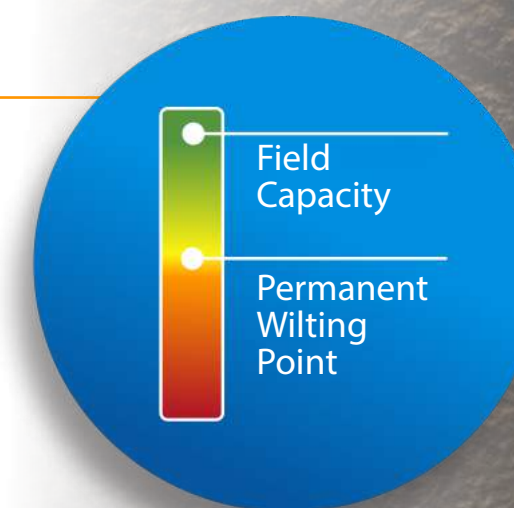
### 2. Local Calibration

After installation, it guarantees greater precision in the local conditions of use. (Local calibration is optional).



### 3. Know the soil

Classify the soil according to its clay, sand and silt content.



### 4. Limits

Field Capacity (FC) and Permanent Wilting Point (PWP) are considered the maximum and minimum limits of water available in the soil. Determine the PWP and FC for your soil.

### 5. Measurements

Take measurements as per your irrigation cycle. The measurement takes just a few seconds.

### 6. Decision

It is not recommended that moisture reach the PWP, so establish the Optimal Water Range (OWR) according to your soil type which represents approximately 75% of the FC. Control the irrigation depth with periodic measurements to maintain moisture between FC and OWR.





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## NEW

### + PRATICALITY

All your maps and history in only one App.

### + TECHNOLOGY

Attached GPS for georeferencing.

### + DESIGN

Compact and safe in agricultural handling.

### + CONNECTIVITY

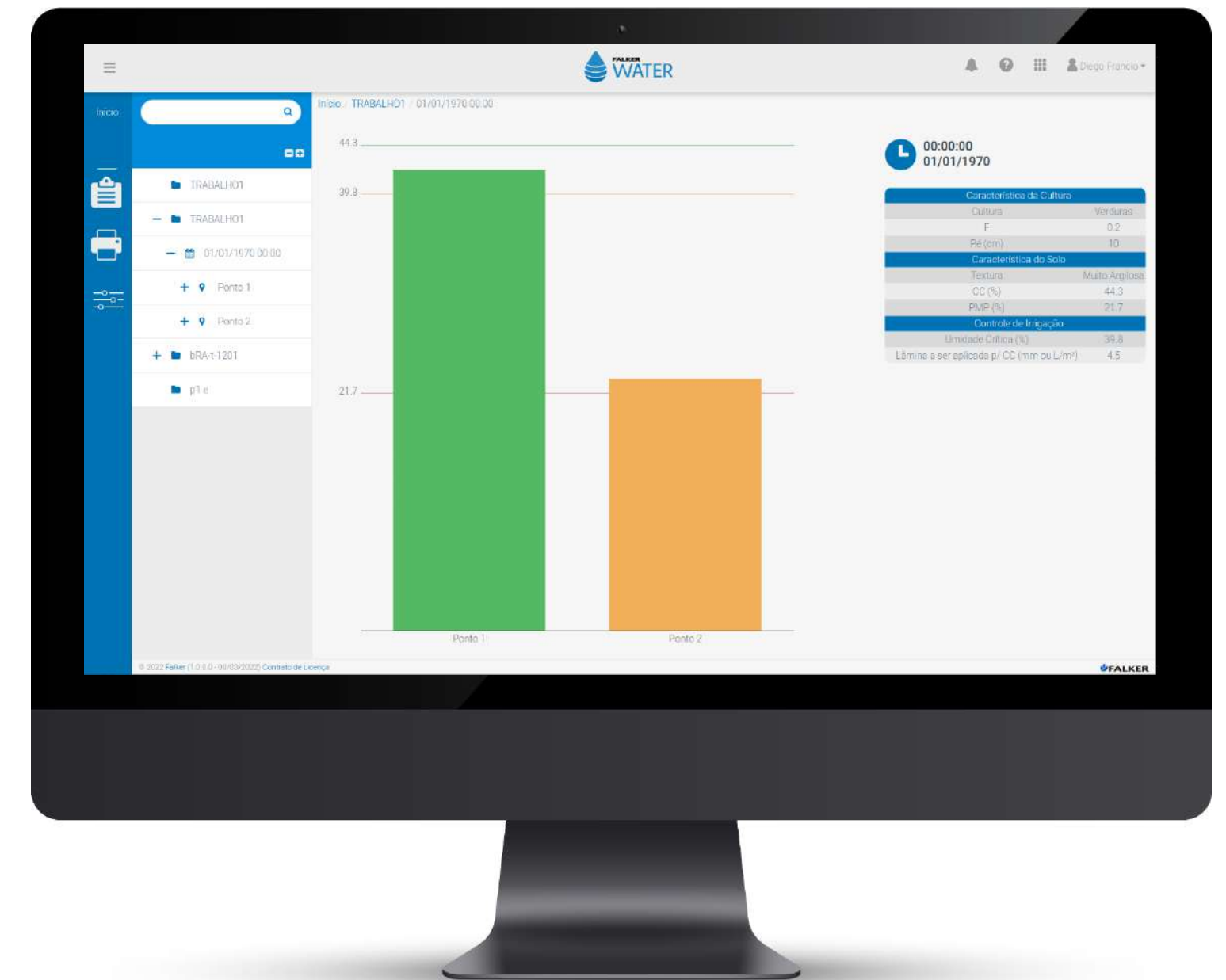
USB and Bluetooth connection for integration with the App.



App for Android and iOS  
platforms



Bluetooth  
connection



With the FalkerWater app and web system, you can store and process the data collected with HidroFarm using a simple, educational, and intuitive tool to determine the ideal water depth and regularly monitor the water needs of your crop, avoiding waste and improving productivity.



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## Soil moisture meter and sensor

In the pursuit of higher productivity and profitability, good agricultural practices suggest increasingly rational water use, always avoiding waste.

To determine the right timing for irrigation and the ideal water depth to be applied, the HidroFarm is the right precision agriculture instrument.

The HidroFarm measures the volumetric soil moisture through high-frequency soil impedance. Its sensors, made of durable material, are installed at specific points in the crop, enabling constant monitoring of soil moisture.

A modern, practical, and efficient solution for irrigation control, guiding the ideal sowing moment, planning machinery entry to avoid soil compaction, and conducting research work.

### Fast Data Collection

After installing the sensor in the field, and respecting the conditions for the soil to settle naturally around the sensor, data collection is instantaneous, without the need to take samples for analysis. Easy and agile.

### Multiple Sensors

The HidroFarm meter can be connected to several sensors already installed in the field.

### Compact

The compact size provides agility in data recording, which can then be easily transferred to the application via Bluetooth or USB cable.

### Reach

The 20cm long sensor captures the presence of water in an area 30cm in diameter and can be installed subsurface to reach deeper layers.



## Monitoring of main crops

Corn 

Winter Cereals 

Bean 

Soy 

Rice 

Cotton 

Vegetables 

Sugar Cane 

Coffee 

Tobacco 

Grassland 

Fruit 

Cassava and Potato 

## Technical Specification

HFM3030	
Precision with Factory Calibration	± 3%*
Resolution	0,1%
Measurement Scale	0 a 60%
Memory Capacity	Up to 20.000 measurements
Measurement Volume	Approximately 15cm in radius and 20 cm in depth cylinder**
Power Supply	Internal rechargeable battery
Battery charging	USB-C Conector***
Autonomy	>20 hours of use
Indication to the user	Graphic LCD screen with backlight sound indication
GPS	Integrated
App / Software web	Falker Water
Keys	4 for operations, 1 on/off
Equipment weight	250g
Communication	USB and Bluetooth
Operation Temperature	0 a 50°C

\* Factors such as soil salinity, texture and pH can interfere with this value. A specific calibration can be performed after installation to increase accuracy.

\*\* For subsurface installation, extension cables are required.

\*\*\* Compatible with cell phone chargers. The charger is sold separately.

## Itens inclusos

- HidroFarm 3030
- HFM 1010 Sensor
- Sensor Cable
- Protective Case
- Safety Strap
- USB communication and battery charging cable



+55 51 3092.6200

[www.falker.com.br/en](http://www.falker.com.br/en)

[falker@falker.com.br](mailto:falker@falker.com.br)

[falker.com.br](http://falker.com.br)

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The Most Complete Line  
for Precision Agriculture