



Sensor Humidec[®]

- Conductivity range: 10 μ S/cm to 40 mS/cm
- Soil Humidity range: 20% to 1% in weight
- May detect freezing of water in soil
- Easy to use
- Long life time
- Low maintenance
- Small size
- Compatible with existing control systems
- Selectable Voltage (0-3V) or current (4-20 mA) output

Options

- Hand reader with display
- Up to four sensors reader
- Switchable output to activate latch valves or rele's
- RS-232 output
- Compatible with standard communication systems: radio, GSM/GPRS, Bluetooth, etc.
- 512 kBytes memory for its use as data logger (reading capacity of 4 canales along 45days)



Humidity Sensor Humidec[®]

"The new tool for irrigation control and optimizacion"

CEEI - Impiva Award to the Best Business Project 2006

Information and orders

Xop Física S.L.

www.xopfisica.com

Tlf: +34 964 38 73 51 / +34 964 72 80 24

e-mail: info@xopfisica.es

Xop Física, S.L.



Parc Científic Espaitec

Edifici Investigació

Universitat Jaume I

Avda. Vicent Sos Baynat s/n

12071 Castelló de la Plana

Tlf: +34 964 38 73 51 / +34 964 72 80 24

e-mail: info@xopfisica.es

XOP FÍSICA

It is a company led by a well known research group at Universitat Jaume I. Their mission is the development of devices and knowledge to improve water administration, clean energy production and saving in energy consumption.

THE NEW SENSOR

Humidec[®] is a conductivity sensor, with the size of a coin, that allows to measure soil humidity in an easy and immediate way. Therefore it is possible to provide water according to the real needs of the plants. It is robust, has a long life time, low maintenance and very competitive price.

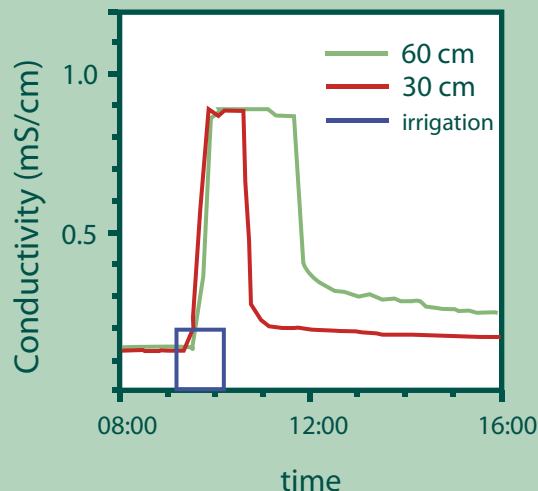


HOW IT WORKS

Humidec[®] measures the conductivity of earth which, below the field capacity is proportional to the quantity of water present in the soil. The sensor has to be buried in the land at the depth wished for the measurements and it is connected to a waterproof box where the electronics make the measurements and, optionally, save the data.

GETTING THE DATA

Measurements given by Humidec[®] sensor may be analyzed with any data treatment software. Alternatively a specific software developed by XOP FÍSICA may be used.



Example of the behavior of sensors buried at different depths to irrigation: The water front arrives with certain delay after irrigation has started. The delay is longer for the deeper sensor. High conductivity attained at the beginning belongs to the liquid water filling the pores of soil. Once the excess liquid has percolated only the water absorbed by the soil is measured by the sensor.

APPLICATIONS

- Measurements of soil humidity
- Measurements of water conductivity
- Soil salinity control
- Irrigation control
- Water quality control in the environment and industrial applications
- Ferti-irrigation control
- Hydroponic crops
- Forest fire prevention
- Forest farming
- Connection to earth