

Water Stress in Agronomy



The Product

The LDVT technology is perfectly adapted for the harshest environment. The capability of the LVDT to detect the smallest possible movement is a key for very small displacement.

This application generally claims dedicated products to match with delicate surface like trees or fruits
The large range of sensors both 'off the shelf' and 'customer specials' that are better able to satisfy today's demanding on such research applications.

Range: 5 mm to 300 mm – Accuracy: Up to 0.1% FSO – Resolution: Below 0.02 μ m – Hermetically sealed and submersible on request



The Challenge

Nowadays, the climate issues are one of the most important and specialized science fields. The analysing methods on lack of water impacts are constantly changing. In order to help the agronomy world to understand the irrigation processes and their influence.

Displacements sensors will be used to watch the growth's process and link it with the standard stimulus, water, sun exposure, pollution toxins, earth quality, chemicals etc.

The system must be compact and not interfere with the trees or fruits developments.

Each specie has it's own behaviour and the scientist in charge of the analysis would be able to classify each type of plants for each type of lands.



Our OEM makes an adapted fixture to fix the LVDT directly on the samples. The tests could be also engaged directly on the field, everywhere on the globe. The communication will be handled by a low power consumption electronics, including a GPRS transfer mode.

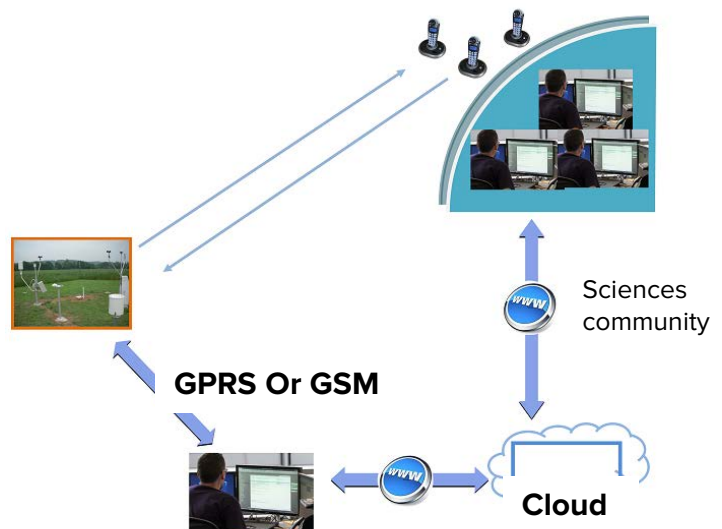
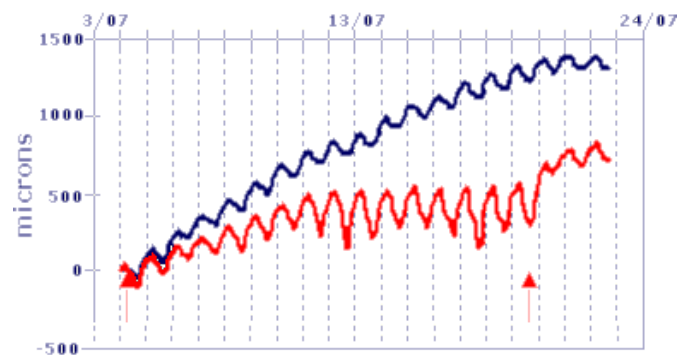
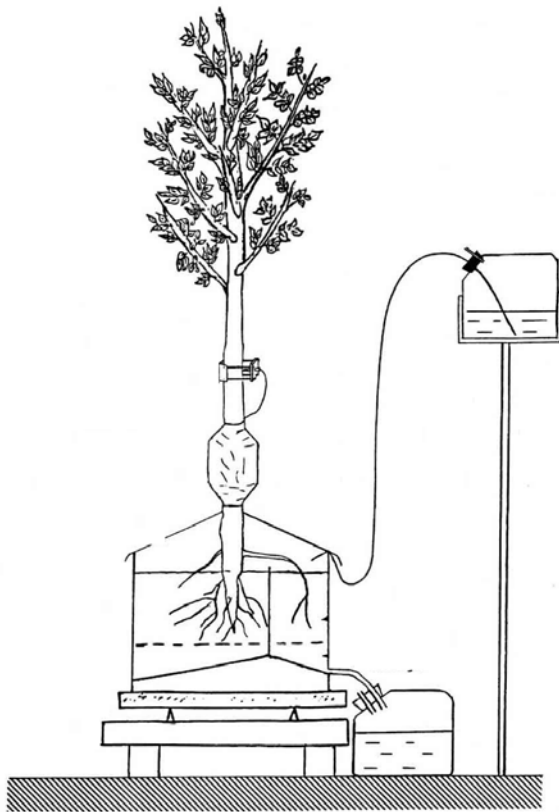
The Index of protection must be as high as possible IP67.

The Solution

Analog S Series or SR Series sets have been selected. Their enlarged ranges and the flexibility of their mechanical options is the perfect combination.

IP67 or IP68 with stainless steel body and sealing is 100% compatible with the exterior environment.

The customer would use a wireless tablet or a laptop to analyse the system behaviour. The device could send some alerts directly via a GPRS communication device in case of emergency.



<http://www.cimel.fr/?lang=en>

The stability and the accuracy of the electronics satisfy the customers aims in his water cycle's evaluation. The universality of the device in every operation mode, in lab or in fields provides a perfect way for the understanding of physical and physiological processes related with water savings and uses.

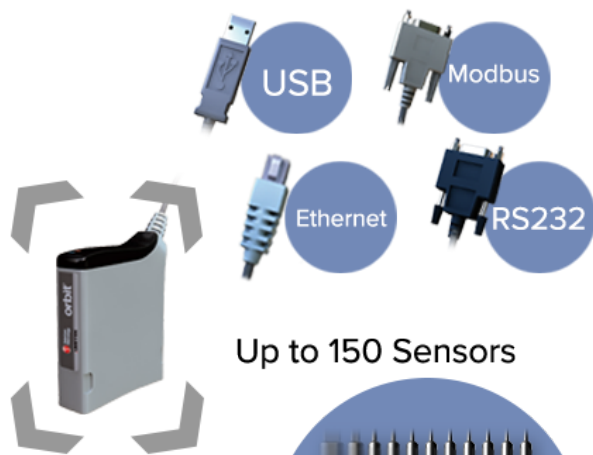
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