



Leaf Wetness Sensor Single and Dual Leaf (LW Series)

Features

- Can differentiate between dew and rain
- Graphed output data is equivalent to standard hemp or string recorder
- Sensitivity can be set by user to detect low levels of moisture
- Large area provides averages

Applications

- Crop studies
- Irrigation scheduling
- Plant Breeding
- Black spot warnings

The LW10 Series Leaf Wetness Sensor is designed to give an output proportional to leaf wetness with approximately the same wetting and drying characteristics as a leaf.

The sensor gives 0% for a dry sensor and 100% when the sensor is immersed in water. However, 100% is not normally achieved in the field, even during rainfall.

Typical maximums are 60-70%.

It is not intended that the percentage wetness is exactly proportional to leaf wetness, but that it is a reliable and repeatable measurement, and does indicate more than just wet or dry.



LW10 Single Leaf Sensor



LW12 Dual Leaf Sensor

Your own observations will indicate the wetness level that you are interested in. The sensor should be attached to the crop or tree and set to an angle similar to the leaves under test. Normally this is approximately horizontal.

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Specifications

Sensing Element:

Canvas mounted in frame

Measurement Units:

Percentage Wetness (%)

Operating Range:

0% to 100% Wetness

Drift:

± 0.2 % per year

Calibration Method:

Single point calibration (mid range). Checks at 0% and 100%

Calibration Accuracy:

± 5% at 0% and at 100%

Reliability:

Typically five (5) years operation possible before overhaul.

Housing:

Black - High impact PVC

Sealing:

Sensor is immune to damage from water except for constant pressure or total immersion.

Operating Conditions:

Temperature: -10°C to +50°C

Humidity: 0% to 100%

Sensor Mounting:

Sensor attached, at appropriate angle, to tree or crop.

Supply Voltage:

5.5 to 7 Volts DC

Current Drain:

< 0.25 mA

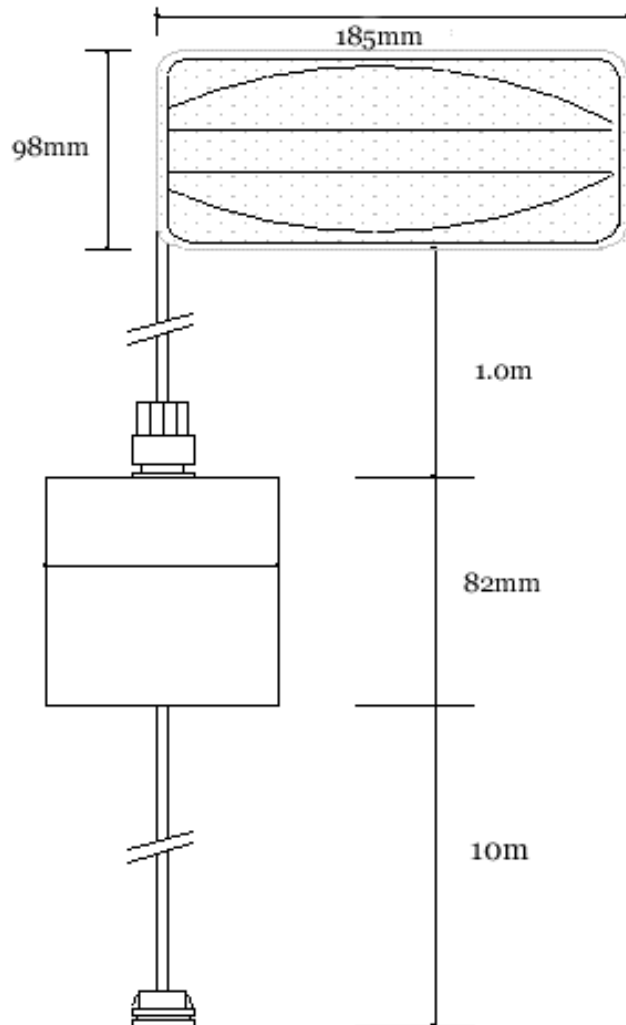
Output:

+5 Volt pulse

Configurations:

Model:	LW10	LW11
Output 0%	7.7	430
Output 100%	18	1000
Cable Type:	3 core shielded	3 core shielded
Cable Length:	10m	10m

Dimensions (mm)



Ordering Information:

Model:

LW10

LW11

Shipping Weight:

1kg

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