



# leaf wetness sensor

digital, low cost leaf & canopy wetness sensor

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## overview

- Mimic moisture dynamics within the canopy
- Ideal for canopy disease and frost monitoring and management
- Low cost, calibrated, easy to install and maintain
- SDI-12 digital output that is ideal for IoT devices such as LoRa WAN



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The LWS Leaf Wetness Sensor detects when water or ice builds on its surface.

The LWS can be oriented to mimic the leaf orientation of your target species, increasing the accuracy and relevancy of your measurements.

Each sensor is precisely factory-calibrated to detect tiny amounts of water and/or ice on the leaf surface. The sensor surface coating is non-hygroscopic, eliminating false wetness detection.

The sensor's thin (0.65 mm) fiberglass construction closely approximates the overall radiation balance of a healthy leaf, so moisture will condense and evaporate from the sensor at the same rate as it would on a normal leaf.

**use the LWS Leaf Wetness Sensor:**

- To predict when to spray crops.
- To quantify water storage in the plant canopy.

- In studying and monitoring crops for foliar diseases including rust and blight.

#### whole system monitoring solutions



Edaphic Scientific is a one-stop shop for a whole system monitoring solution. We provide plant and soil monitoring systems for researchers and growers.

Our systems not only support leaf wetness sensors, but related sensors such as sap flow, soil moisture, weather parameters, and more.

At Edaphic Scientific we want to work with you from the start of your project through to its completion. We can provide:

- Assistance with project and experimental design
- Procurement of all monitoring equipment, including sensors, data loggers and data management software. Edaphic Scientific is a one-stop shop where we can source and find any necessary equipment for your project from our preferred suppliers or third party suppliers
- Installation and training
- On-going assistance with data interpretation and equipment maintenance
- Data correction and analysis, including statistical analysis with the R-package
- Report and publication preparation including tables, figures, graphs, and

manuscript writing

advanced data collection and management solutions



Edaphic Scientific recognises the need for flexible and adaptable sensor and [data logging solutions](#) for experimental or environmental monitoring projects.

Data can be downloaded directly in the field from data loggers. A direct connection between the data loggers and your computer, via a USB cable, can be used for manual downloading of data.

Alternatively, data can be [downloaded over the internet](#) on your iPhone, iPad or desktop computer with the Eagle cloud-based, data management software solutions. Through this remote based downloading capabilities, you can download, view and manage your data, and system, anywhere in the world and at anytime.

## specifications

feature	specification
Measuring Range	0 to 100 %
Resolution	0.04 %
Accuracy	not specified
Output	SDI-12



<b>feature</b>	<b>specification</b>
Power Input	6 to 16 VDC
Operating Temperature	-40°C to 80°C
Dimensions of Leaf Element	60 x 40 mm
Cable Length	5m (standard)   60m (maximum)

## manual & docs

## related products

- [Data loggers and monitoring systems](#)
- [Weather stations](#)
- [Soil moisture sensors, probes and meters](#)
- [Sap flow sensors](#)
- [Canopy temperature sensors](#)