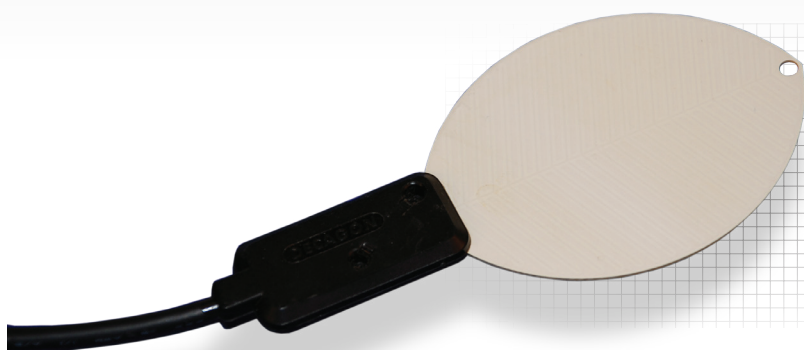


**LWS**

Leaf Wetness Sensor



Sensitive yet Durable

Compatible with all Campbell
Scientific dataloggers

Overview

Decagon's LWS can detect small amounts of water or ice on the sensor surface for leaf wetness applications. Because the LWS measures the dielectric constant of the sensor's upper surface, it can detect the presence of water or ice anywhere on the sensor's surface. All of our dataloggers can measure its output signal.

The LWS is designed to be deployed either in the canopy or on a weather station mast. Two holes in the non-sensing portion of the sensor body are provided for attaching the sensor to a pole or branch via twist ties or with 4-40 bolts.

Benefits and Features

- › Imitates characteristics of a leaf
- › Does not require painting or calibration of individual sensors
- › Compatible with the CWS900-series interfaces, allowing it to be used in a wireless sensor network
- › Detects trace amounts of water or ice on the leaf surface

Specifications

- › Measurement Time: 10 ms
- › Power: 2.5 Vdc @ 2 mA to 5 Vdc @ 7 mA
- › Output Range: 250 mV to 1500 mV
- › Operating Temperature Range: -20° to 60°C
- › Expected Lifetime: > 2 years continuous use
- › Dimensions: 11.2 x 5.8 x 0.075 cm (4.4 x 2.3 x 0.0295 in.)
- › Weight: 0.14 kg (5 oz) with 15-ft cable

Ordering Information

Leaf Wetness Sensor

LWS-L Decagon leaf wetness sensor with user-specified cable length. Enter cable length, in feet, after -L. The length must be an increment of 5 feet (e.g., 15, 20, 25, 30). Recommended cable length is 25 ft (LWS-L25). Must choose a cable termination option (see below).

Cable Termination Options (choose one)

- PT** Cable terminates in stripped and tinned leads for direct connection to a datalogger's terminals.
- PW** Cable terminates in connector for attachment to a prewired enclosure.
- CWS** Cable terminates in a connector for attachment to a CWS900-series interface. Connection to a CWS900-series interface allows this sensor to be used in a wireless sensor network.



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