



## Sensitive yet Durable

Compatible with most Campbell Scientific dataloggers

### Overview

The LWS, manufactured by METER Environment, 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.

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.

*Note: The LWS was previously ordered as the LWS-L.*

### Benefits and Features

- ▶ Imitates characteristics of a leaf
- ▶ Does not require painting or calibration of individual sensors
- ▶ Detects trace amounts of water or ice on the leaf surface

### Technical Description

The LWS measures the dielectric constant of the sensor's upper surface. This method allows the sensor to detect the

presence of water or ice anywhere on the sensor's surface.

### Specifications

Measurement Description	Dry, frosted, wet
Signal Type/Output	Analog voltage
Measurement Time	10 ms
Power	2.5 Vdc @ 2 mA to 5 Vdc @ 7 mA
Output	250 to 1500 mV (millivolt reading relates to moisture state)

Operating Temperature Range	-40° to +60°C
Life Expectancy	2+ years (continuous use)
Painting	Does not require painting.
Dimensions	12.0 x 5.8 x 0.8 cm (4.7 x 2.3 x 0.3 in.)
Weight	0.14 kg (5 oz) with 4.57 m (15 ft) cable

For comprehensive details, visit: [www.campbellsci.eu/lws](http://www.campbellsci.eu/lws) 