

Model LWS Leaf Wetness Sensor



The Model LWS leaf wetness sensor detects the presence of surface moisture. The Model LWS leaf wetness sensor is an artificial-leaf electrical resistance type, a surface contact type of sensor, which is used to measure leaf wetness with its circuitry of interlacing gold-plated fingers. The moisture or condensation on the sensor which decreasing the resistance between the fingers can be measured by a datalogger (e.g. HL20, HL10, DT12 datalogger series or other brands, etc.). As color and paint on sensor surface normally affects its performance, hence, we supply the LWS leaf wetness sensor unpainted for most applications.

Normally, a sharp change in resistance at the wet/dry transition between 10 to 200 K Ohm or even lower can be found on the LWS sensor, therefore, the resistance at the wet/dry transition point should be determined.

A sensor mounting bracket is included to hold the sensor at a 45° angel to simulate a typical leaf position and to permit runoff of excess moisture or water, and it can be mounted on a vertical post, round pipe or on a sensor mounting arm.

Technical specification:

Wet/Dry threshold : A defined resistance in K Ohm

Time of Wetness : Wet fraction in datalogger's recording interval

Power requirement: Excitation voltage (1 – 5 VDC)

Dimension: 11.5 cm (L) x 5.4 cm (W)

Accessory: Stainless steel sensor mounting bracket included