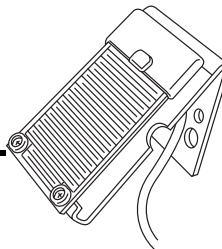


# Leaf Wetness Sensor

For the Wireless Leaf & Soil Moisture/  
Temperature Station (# 6345)

6420



Vantage Pro2™ Accessories

The Leaf Wetness Sensor detects the presence of surface moisture. The sensor is an artificial-leaf electrical-resistance type. It consists of a sensing grid, low-voltage bi-polar excitation circuit, and conductivity-sensing circuit. The Vantage Pro2 console measures the conductivity across the grid and displays the result as a moisture level, scaled from 0 to 15. The user may select the threshold level at and above which moisture-hour totals are accumulated.

The sensing grid is a gold-plated etched circuit on an epoxy-glass substrate; the excitation and sense circuits are encapsulated in black epoxy. The included mounting bracket holds the sensor at a 45° angle to simulate a typical leaf position and to permit runoff of excess moisture; it may be mounted on a vertical post, pipe, or stake, or on the Sensor Mounting Arm.

## General

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Sensor Type . . . . .	Artificial leaf electrical resistance
Excitation . . . . .	Bipolar (3V nominal) built-in
Time Constant . . . . .	2 seconds
Attached Cable Length . . . . .	40' (12 m)

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Note: Increasing the cable length above the recommended maximum cable length causes measurement error in the form of lower leaf wetness readings.

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Cable Type . . . . .	4-conductor, 26 AWG
Connector . . . . .	Modular connector (RJ-11)
Recommended Maximum Cable Length (see Note 1). . . . .	200' (61 m) using 4-conductor 26 AWG cable
Material	
Substrate . . . . .	Glass-reinforced, ceramic-filled laminate
Grid . . . . .	1 oz. copper, nickel, and 50 μ inch gold plate
Mounting Bracket. . . . .	White powder-coated aluminum
Dimensions (length x width x height)	
Leaf Wetness Sensor. . . . .	4.00" x 2.25" x 2.25" (102 mm x 58 mm x 58 mm)
Sensor Area . . . . .	4.4 in <sup>2</sup> (28 cm <sup>2</sup> )
Weight . . . . .	13 oz. (.4 kg)

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## Sensor Output

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Resolution . . . . .	1
Range . . . . .	0 to 15
Dry/Wet Threshold . . . . .	User-selectable
Accuracy . . . . .	±0.5
Update Interval . . . . .	62.5 to 75 seconds

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## Input/Output

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Supply Voltage and Current . . . . .	100 μA (typical) @ 3 VDC
Output . . . . .	2.5 to 3 VDC
Connections	
Yellow . . . . .	3 VDC
Red . . . . .	Ground
Green . . . . .	Output

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**Package Dimensions**

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<b>Product #</b>	<b>Package Dimensions (Length x Width x Height)</b>	<b>Package Weight</b>	<b>UPC Codes</b>
6420	5.75" x 4.25" x 3.25" (146 mm x 108 mm x 83 mm)	1.0 lbs. (.5 kg)	011698 00238 2