

Leaf wetness sensor



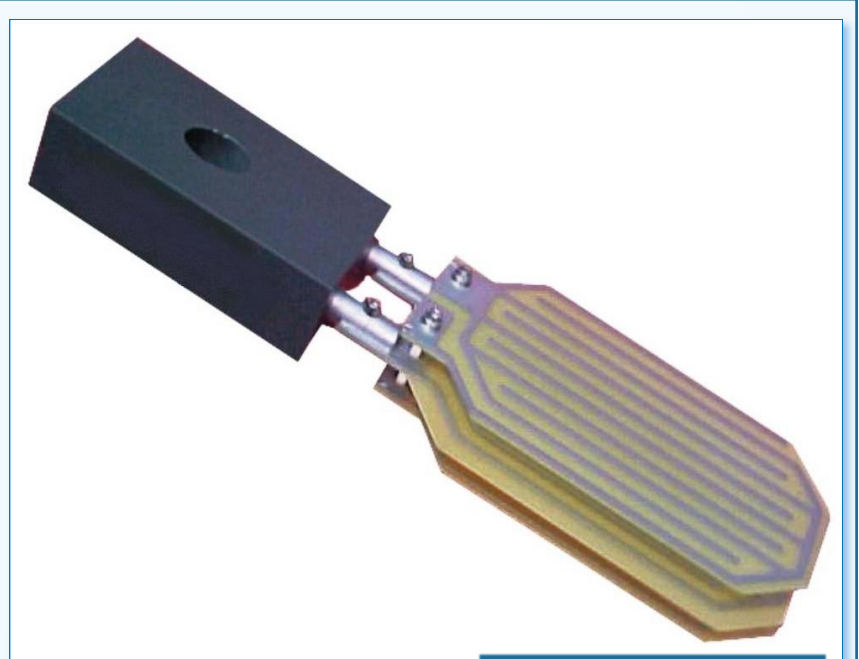
Description

The leaf wetness sensor detects the presence and duration of wetness on a leaf's surface, enabling users to forecast disease and protect plant canopies. The instrument relieves the condensation of water droplets on the leaf surface caused, as well as from rain, dew or fog, conditions which are not detectable with traditional rain gauges.

The sensor consists of three chrome plated-copper electric circuits fixed on fibreglass surfaces bound through a sensor body which is made out of PVC. According to the degree of humidity – caused by rain, dew or mist – the sensor detects a change in electrical resistance between the circuits which can be measured by the data logger. Data should be sampled frequently in order to capture correctly leaf wetness duration.

The sensor body has a through hole that allows the fixing of the sensor with an inclination of about 45° in order to simulate the typical position of the foliage and to prevent the accumulation of drops.

At the bottom of the sensor body there is a waterproof connector for power supply and measurement signal. It's a push pull self latching connector providing security against pull on the cable.



Leaf wetness sensor



Application examples

Technical specifications may be varied without prior notice

Technical Specifications

Working principle	Conductivity variation
Measuring range	0 ... 100% wetting
Operating temperature	0 ... 70°C
Electrical output	ON/OFF 0...2V (FAR753AA) ON/OFF open collector (FAR753BA) Resistive (FAR751BA)
Power supply	10 ... 24Vdc (FAR753xx)
Typical consumption	< 5mA
Dimensions	238 X 78 X 35 mm
Weight	0,4 kg
Maintenance	Periodical cleaning or replacement of the 3 circuit boards

Ordering codes

Leaf wetness sensor with ON-OFF output (0 ... 2V)	FAR753AA
Leaf wetness sensor with resistive output	FAR751BA
Leaf wetness sensor with ON-OFF output (open collector)	FAR753BA

Technical specifications may be varied without prior notice