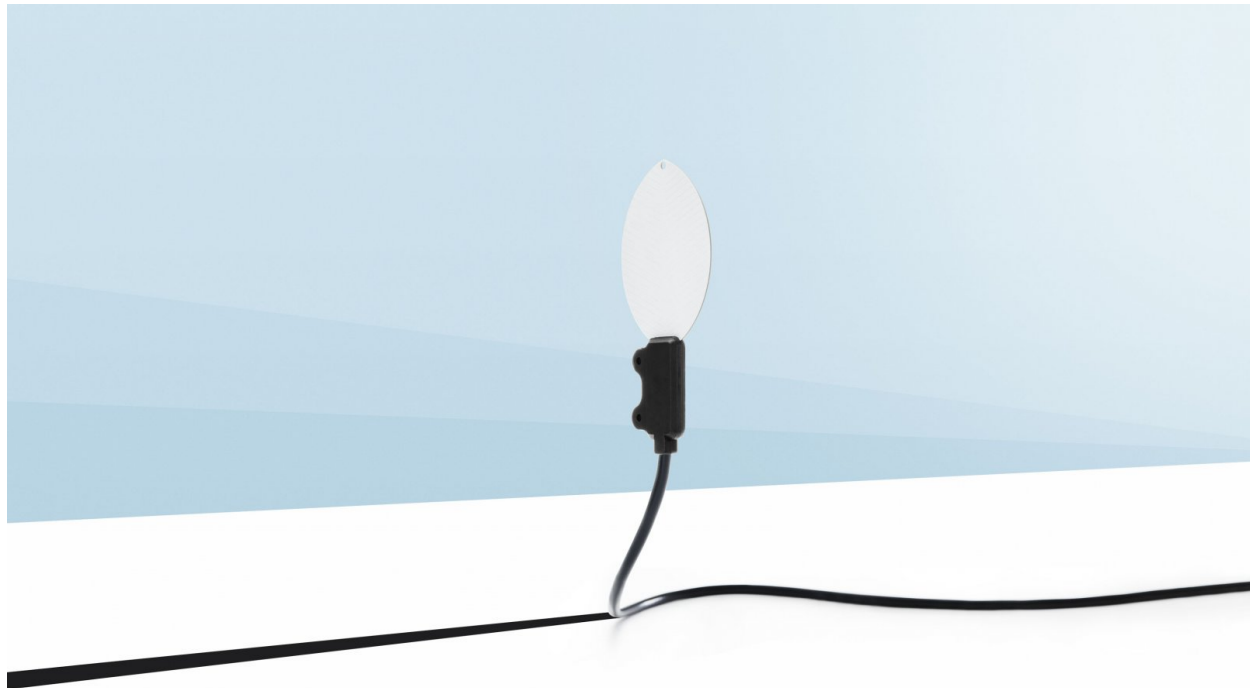


# Leaf wetness sensor

[metergroup.com/environment/products/phytos-31-leaf-wetness-sensor/](https://metergroup.com/environment/products/phytos-31-leaf-wetness-sensor/)



Looks like a leaf. Acts like one, too.

## PHYTOS 31

To spray or not to spray? Now you know.

Diseases and infections can destroy an entire crop, but at the same time, applying fungicides is costly and time-consuming. If you're deciding when to spray by monitoring leaf wetness with a resistance grid sensor, you'll have trouble accurately determining wetness duration without a lot of extra work. You need a sensor with automatic thresholds, like the PHYTOS 31.

Say goodbye to guesswork

The PHYTOS 31 lets you know leaf wetness in no uncertain terms. It measures both the onset and duration of wetness on a simulated leaf, which in turn predicts when the onset of certain diseases or infections may occur. It's not only a more accurate instrument, it's also the easiest to set up, making it a simple and straightforward solution to several problems.

Accuracy you can feel secure about

Only the PHYTOS 31 ensures that every water droplet is measured. It's able to achieve this in a couple of different ways.

First, unlike conventional leaf wetness sensors, its resistance grid doesn't use salt-laced latex paint which absorbs water. This gives it extra sensitivity to avoid false positives. So there's no having to cull data to figure out if the sensor was really wet or not.

Second, PHYTOS 31 uses capacitance technology, so it can sense sub-milligram levels of water condensing on the surface, including frost and ice formation. That way you have a threshold that not only indicates when the sensor is wet, but also senses how much water there is. This kind of moisture clarity reduces guesswork and worry about accurately predicting disease conditions.

## Simple as nature

When your moisture sensor mimics the energetics of an actual leaf, making measurements is a lot easier. There's no having to paint your sensor's non-resistance grid first to get good data. No creating thresholds. And no worrying about lots of wiring. Instead, all you have to do is plug the PHYTOS 31 into the EM60G data logger, where wet and dry threshold ranges are already programmed in. The result: you save time.

Simple. Accurate. Simply accurate.

Through sophisticated, yet simple engineering, PHYTOS 31 delivers unmatched accuracy in an easy-to-use sensor. It saves you both time and labor, while reducing your worry and guesswork.

[Get pricing](#) [Knowledge Base](#) [PHYTOS 31](#)

[Features](#) [Specifications](#) [Accessories](#) [Support / Downloads](#)

## Features

- Accurate
- Easy to use
- Detect leaf wetness and ice formation
- Sensitivity without false positives
- Mimics a real leaf, so moisture will condense/evaporate as it would on a normal leaf
- Plug and play capability
- Use with the EM60G data logger for remote data collection
- No need to create thresholds when used with the EM60G data logger
- SDI-12 compatible

## Specifications

Measurement speed	10 ms
Sensor type	Frequency domain
Output	320 - 1000 mV @ 3 V excitation
Operating environment	-40 to 60 °C
Power	2.5 VDC @ 2 mA, to 5 VDC @ 7 mA
Cable length	5 m standard, custom lengths available

Cable connector type	3.5 mm "stereo" plug or stripped and tinned lead wires (3)
Sensor dimensions	11.2 cm x 5.8 cm x .075 cm
Data logger compatibility (not exclusive)	METER <u>Em50/50G</u> , <u>EM60/60G</u> , <u>ProCheck</u> , Campbell Scientific
Expected lifetime	2+ years of continuous use
Warranty	One year, parts and labor

## Accessories

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## Splice Kit

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Probe Adaptor Pigtail for CSI Data Loggers

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Pigtail-to-Stereo Adaptor

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### 50 Foot Extension Cable

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### 10 Foot Extension Cable

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### Support

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Have a question or problem? Our support team can help.

We manufacture, test, calibrate, and repair every instrument in house. Our scientists and technicians use the instruments every day in our product testing lab. No matter what your question is, we have someone who can help you answer it.

Email: [support.environment@metergroup.com](mailto:support.environment@metergroup.com)

Phone US: +1 509-332-5600

Phone Europe: +49 89 12 66 52 0

## Downloads

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[PHYTOS 31/Leaf Wetness Sensor manual PDF / 1.54 MB](#)

## Related Products

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### ATMOS 41

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The world's best all-in-one weather station for atmospheric measurements that doesn't limit you with other sensors.

[Learn more](#)

[Get pricing](#)



## EM60G

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The EM60G is a plug-and-play data logger for environmental monitoring.

[Learn more](#)

[Get pricing](#)

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