



**LABCELL LTD**  
SPECIALIST INSTRUMENTATION

38925p  
4 June 2019

## **Low-cost PHYTOS 31 Leaf Wetness Sensor helps to prevent plant diseases and infections**



[Labcell](#), the UK distributor for METER Group, is introducing the [PHYTOS 31 Leaf Wetness Sensor](#) for use by researchers as well as in agriculture and horticulture. This accurate sensor benefits from automatic thresholds and therefore eliminates the guesswork that would be required when deciding whether or not to spray crops if a resistance grid sensor was being used to monitor leaf wetness. Determining leaf wetness with better accuracy helps to prevent plant diseases and infections, which, in turn, avoids entire crops from being lost or yields reduced. It also saves money by reducing the use of fungicides.

With its clever simulated leaf, the PHYTOS 31 detects the onset and duration of leaf wetness. It is simple and quick to set up and, if required, can be readily incorporated within a comprehensive data acquisition system.

Unlike other leaf wetness sensors that use salt-laced latex paint, which absorbs water, the PHYTOS 31 avoids giving false-positive readings, so there is no need to cull data prior to analysis. In addition, the PHYTOS 31's superior capacitance-based sensing technology measures sub-milligram levels of moisture condensing on the surface, including frost and ice formation. This means the sensor not only indicates when the simulated leaf is wet, but it also provides a quantitative measurement of the moisture. Because the sensor mimics the behaviour of a real leaf, moisture condenses and evaporates the same as it would on a real leaf, resulting in very accurate readings.

When the PHYTOS 31 Leaf Wetness Sensor is connected to a METER ZL6 Data-logger, wet and dry threshold ranges are pre-programmed, which represents a significant time saving. Furthermore, other sensors can also be connected data logger – such as soil moisture sensors and air temperature sensors – to create a comprehensive instrumentation system for maximising productivity and optimising the use of irrigation and biocides. Users can access data from the ZL6 in near-real-time via the ZENTRA Cloud and any web browser. Alternatively, the PHYTOS 31 Leaf Wetness Sensor is SDI-12 compatible if users want to incorporate it within existing digital data acquisition systems.

Labcell is the sole UK distributor for the METER range of instrumentation. Download detailed data sheets directly from Labcell's website at [www.labcell.com](http://www.labcell.com) or contact the company with specific enquiries or to request a demonstration by telephone on +44 (0)1420 568150 or email [mail@labcell.com](mailto:mail@labcell.com).

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