



Senses Sub-Milligram Levels of Water, Frost and Ice.

Standardized, calibrated and ready to use.

Overview

The PHYTOS 31 measures leaf surface wetness by measuring the dielectric constant of the sensor's upper surface. The PHYTOS is a leaf wetness sensor that is standardized, calibrated, and designed to detect wetness (presence and duration) and ice formation on the leaf surface. The sensor surface coating is non-hygroscopic, eliminating false wetness detection.

The sensor's thin (0.65 mm) fiberglass construction closely approximates the overall radiation balance of a healthy leaf, so moisture will condense and evaporate from the sensor at the same rate as it would on a normal leaf.

The PHYTOS 31 has a very low power requirement, which gives you the ability to make as many measurements as you want over a long period of time (such as a growing season) with minimal battery usage.

No painting, programming or calibration required just install the PHYTOS 31 sensor, set the clock and measurement intervals, and start logging leaf wetness data.

The Leaf wetness sensor is ideal for predicting when to spray crops, quantifying water storage in a plant canopy, and in studying and monitoring crops for foliar diseases including rust and blight.

Specifications

Dimensions

| | |
|--------|------------------|
| Length | 12.0 cm (4.7 in) |
| Width | 5.8 cm (2.3 in) |
| Height | 0.8 cm (0.3 in) |

Operating Temperature Range

| | |
|---------|--------|
| Minimum | -40 °C |
| Typical | NA |
| Maximum | +60 °C |

NOTE: Sensors may be used at higher temperatures under certain conditions; contact Customer Support for assistance.

Cable Length

| | |
|--------------|----------------|
| Cable Length | 5 m (standard) |
|--------------|----------------|

- › NOTE: Non-standard cable length available upon request.
- › 40 m (maximum custom cable length)

Connector Types

| | |
|-----------------|---------------------------|
| Connector Types | Stripped and tinned wires |
|-----------------|---------------------------|

Supply Voltage

| | |
|---------|---------|
| Minimum | 2.5 VDC |
|---------|---------|

| | |
|---------|----|
| Typical | NA |
|---------|----|

| | |
|---------|---------|
| Maximum | 5.0 VDC |
|---------|---------|

Settling Time

| | |
|---------------|-------|
| Settling Time | 10 ms |
|---------------|-------|

Output

| | |
|--------|--|
| Output | 300–1,250 mV (depends on excitation voltage) |
|--------|--|

Data Logger Compatibility

| | |
|---------------------------|--|
| Data Logger Compatibility | *Campbell Scientific: CR10X, CR850, 1000, 3000, etc. |
|---------------------------|--|

Compliance

| | |
|------------|--|
| Compliance | Manufactured under ISO 9001:2015 EM ISO/IEC 17050:2010 (CE Mark) |
|------------|--|

For comprehensive details, visit: www.campbellsci.ca/phytos31-



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