Leaf Wetness Data Logger
Part of the NOMAD® Family

OM-CP-LF101A-KIT

✓ Durable Weather Resistant Enclosure for Logger
✓ Precision Leaf Wetness Sensor
✓ Multiple Start/Stop Function
✓ Ultra High Speed Download
✓ 1 Million Reading Storage Capacity
✓ Battery Life Indicator
✓ Optional Password Protection
✓ Programmable Alarm
✓ Field Upgradeable

The OM-CP-LF101A-KIT is a complete data logging system that accurately measures and records leaf wetness. Not only does it record the presence of water but also logs the amount of water on the sensor. The sensor responds to environments the same way a real leaf does and can also detect when ice is present. This low cost system comes complete with a data logger, weatherproof enclosure and leaf wetness sensor.

The OM-CP-LF101A-KIT is ideal for plant disease forecasting, irrigation studies and monitoring frost cycles. It features a multiple start/stop function, ultra-high speed download capability, 1,000,000 reading storage capacity, optional memory wrap, battery life indicator, optional password protection, programmable alarms and more.

An OM-CP-IFC200 interface cable and software package is required for use with the OM-CP-LF101A-KIT. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere.

Specifications

DATA LOGGER

Measurement Range:
- Dry: 266 mV typical
- 100% Saturated: 833 mV typical

Resolution: 50 µV

Accuracy: ±0.1 mV

Specified Accuracy: Nominal range @ 25ºC

Temperature Effect on Span/Offset: <25 µV over -40 to 80ºC (-40 to 176ºF)

Probe Measurement Time: 10 ms

Probe Power: 2.5 Vdc @ 2 mA to 5 Vdc @ 7 mA

Reading Rate: 4 Hz to 1 every 24 hrs

Memory: 1,000,000 readings; software configurable memory wrap; 330,000 readings in multiple start/stop

Wrap Around: Yes

Start Modes:
- Immediate start
- Delay start up to 24 months
- Multiple pushbutton start/stop

Stop Modes:
- Manual through software
- Timed (specific date and time)

Multiple Start/Stop Mode: Start and stop the device multiple times without having to download data or communicate with a PC

Multiple Start/Stop Mode Activation:
To Start the Device:
Press and hold the pushbutton for 5 seconds, the green LED will flash during this time; the device has started logging

To Stop the Device:
Press and hold the pushbutton for 5 seconds, the red LED will flash for three seconds and then the green LED will flash for two seconds; the device has stopped logging

Leaf wetness sensor (included).
Real Time Recording: The device may be used with PC to monitor and record data in real-time

LED Functionality:
- **Green LED Blinks**: 10 second rate to indicate logging, 15 second rate to indicate delay start mode
- **Red LED Blinks**: 10 second rate to indicate low battery and/or full memory, 1 second rate to indicate an alarm condition

Password Protection:
An optional password may be programmed into the device to restrict access to configuration options; data may be read out without the password

Engineering Units: Native measurement units can be scaled to display measurement units of another type.

Battery Type: 3.6V lithium battery included; user replaceable

Battery Life: 10 months typical at a 1 minute reading rate

Time Accuracy: ±1 minute/month (at 20°C (68°F), stand alone data logging)

Computer Interface: USB (interface cable required); 115,200 baud

Software: XP SP3/Vista/7 and 8 (32- and 64-bit)

Operating Environment:
-10 to 60°C (14 to 140°F), 0 to 100% RH non-condensing

IP Rating: IP65

Dimensions:
- **Data Logger**: 36 H x 64 W x 16 mm D (1.4 x 2.5 x 0.6")
- **Probe**: 111 L x 58 W x 0.76 mm thick (4.4 x 2.3 x 0.03")
- **Cable Length**: 5 m (16')
- **Water Box**: 74 H x 148 W x 39 mm D (2.9 x 5.8 x 1.5")
- **Weight (OM-CP-LF101A-KIT)**: 226 g (8 oz)

Materials:
- **Data Logger**: ABS plastic
- **Waterbox**: Black Anodized Aluminum

**To Order**

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<tr>
<th>Model No.</th>
<th>Description</th>
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<tr>
<td>OM-CP-LF101A-KIT</td>
<td>Leaf wetness data logger, weatherproof enclosure and leaf wetness sensor</td>
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<tr>
<td>OM-CPFSENSOR-400</td>
<td>Replacement leaf wetness sensor</td>
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<tr>
<td>OM-CP-WATERBOX101A</td>
<td>Replacement weatherproof NEMA 4 (IP65) enclosure for data logger</td>
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<tr>
<td>OM-CP-WATERBOX101A-KIT</td>
<td>Maintenance kit for OM-CP-WATERBOX101A</td>
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<tr>
<td>OM-CP-IFC200</td>
<td>Windows software and 1.8 m (6') USB interface cable</td>
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<tr>
<td>OM-CP-BAT105</td>
<td>Replacement 3.6V battery</td>
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Comes complete with 3.6V lithium battery. Operator’s manual and USB interface cable are included with the OM-CP-IFC200 software/cable package (required for data logger operation, sold separately).

Ordering Example: OM-CP-LF101A-KIT, leaf wetness data logger, weatherproof enclosure and leaf wetness sensor.