

## **MLT331 Light Meter Probe**

*Transducer Series*

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### **Description**

The MLT331 is a fast response, directional specific, visible to IR light meter probe. It contains a fast response silicon photodiode that is active in the visible to IR region of the RF spectrum, and produces a current that is proportional to the logarithm of the incident light intensity. Light enters the probe through a Fresnel lens and the diode is positioned within the protective housing to prevent stray light from the side reaching active area of the diode. It can be mounted using a clamp or stand and the cable is terminated in a BNC connector.



### **Application**

The probe can be used to measure light intensity over a wide dynamic range associated with:

- 1) direct sunlight
- 2) internal lighting from powered lamps, or
- 3) light associated with the growth of plants or algae
- 4) changes of intensity with distance from source

The probe needs to be pointing or facing the direction of the light source to maximise the light reaching the active surface of the probe.

The probe outputs a current that is linear with incident light levels over the range  $10^{-12}$  W to  $10^{-2}$  W. When used with an ML330 Light Meter pod, the probe outputs a signal that is proportional to the illuminance on the active area of the probe. Illuminance varies inversely with the square of the distance from the source, such that if the distance from the source is doubled, then the illuminance is reduced by a quarter.

The probe is not water proof.

## Caution

Read “Statement of Intended Use” on our website or in “Getting Started with PowerLab” before use.

## Specifications

### Photodiode

|                       |                             |
|-----------------------|-----------------------------|
| Range:                | $10^{-12}$ W to $10^{-2}$ W |
| Active area:          | 6.7 mm <sup>2</sup>         |
| Rise time:            | <<1 ms                      |
| Spectral sensitivity: | 320-1100 nm ( peak 960 nm)  |
| Connector:            | BNC                         |
| Cable Length:         | 800 mm                      |
| Lens:                 | Fresnel                     |
| Housing:              | 11 mm OD                    |

**Note: Not Water Proof**

## Ordering Information:

MLT331 Light Meter Probe

For use with:

ML330 Light Meter Pod