

# Solar Radiation Sensor Model PYR

## Specifications:

**Cable length:** 3 m

**Range:** 0 to 1,750 W m<sup>-2</sup> (0 - 350 mV)

**Dimensions:** 2.4 cm diameter, 2.75 cm high

**Warranty:** 1 year parts and labor

**Logger Requirements:** Em50 firmware 1.12 or newer

## Conversion Equation:

Use the following equation to convert the raw data recorded by the Em50 logger to get solar radiation (Watts per square meter):

$$W\ m^{-2} = RAW * (1500/4096) * 5.0$$

Installation and maintenance information on the back.

2365 NE Hopkins Court Pullman WA 99163  
tel: 1(509)332-2756 fax: 1(509) 332-5158  
www.decagon.com soils@decagon.com



## Installation:

The sensor should be mounted with the cable pointing toward the nearest magnetic pole. For example: in the Northern Hemisphere, point the cable toward the North Pole. In the Southern Hemisphere, point the cable toward the South Pole.

## Common Errors:

The biggest error is often caused by dirt on the lens of the sensor. The domed top is self-cleaning, but measurement accuracy will be improved if the lens is wiped with a clean, soft cloth at frequent intervals.

Small changes in the level of the sensor can also cause errors. Make sure that the top of the domed sensor body is kept horizontal. Use the included leveling plate to ensure the sensor is level.

Decagon and Apogee recommend calibrating your PYR Solar Radiation Sensor every 1 to 2 years. Please contact Apogee Instruments for information on their calibration services:

Apogee Instruments  
708 W 1800 N  
Logan, UT 84321  
Phone: 435-792-4700

13438-01

[www.apogeeinstruments.com](http://www.apogeeinstruments.com)

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