

Solar Radiation Sensor/Transmitter

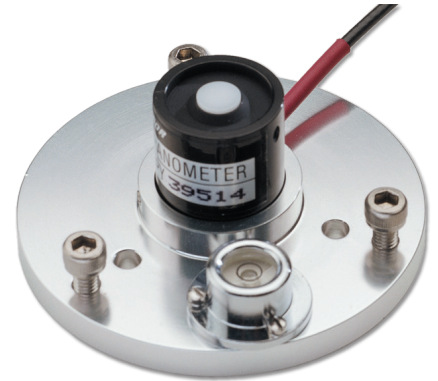
Global Water's WE300 Solar Radiation Sensor is a precision pyranometer that uses a high stability silicon photovoltaic detector (blue enhanced) to obtain accurate readings. The WE300 includes a bubble level, leveling screws, and mounting hardware for a quality installation. The sensor is attached to electronics by 10 feet of cable, and the electronics are attached to 25 feet of marine grade cable, with lengths up to 500 feet available. The sensor's output is 4-20 mA with a two wire configuration.

In addition, Global Water offers the GL500 Solar Radiation Recorder, which adds recording capabilities to the solar radiation sensors. The GL500 Solar Radiation Recorder connects to the pyranometer's 4-20mA output to record data.

- 4-20 mA output
- Marine grade cable with strain relief
- Mounting plate included

Why Measure Solar Radiation?

Atmospheric circulation is driven by solar radiation. Determining the solar radiation and its interaction with the atmosphere and the Earth's surface is important, since solar radiation accounts for almost all of the energy available to the Earth. There are two ways solar radiation reaches the Earth's surface. The first is direct solar radiation where the solar radiation is directly transmitted through the atmosphere. The second is diffuse solar radiation where the incoming solar radiation is scattered or reflected to the Earth's surface. Almost 50% of shortwave solar radiation is absorbed by the Earth's surface and changed into thermal infrared radiation. Direct solar radiation is measured by using solar radiation sensors or pyranometers. These type of solar radiation sensors have a transparent hemisphere which measures the total amount of shortwave solar radiation. Solar radiation sensors or pyranometers measure the total radiation or sum of the direct radiation and the diffuse solar radiation.



The WE300 can be used with the GL500-2-1 and GL500-7-2 dataloggers for data recording.



Weather

Ideal for agriculture, education, environmental studies, landfills, reclamation, wastewater facilities, water conservation, and more.

Specifications

Sampler	
Detector	High-stability silicon photovoltaic detector (blue enhanced).
Output	4-20 mA
Range	0 to 1500W/ m2
Spectral Response	400 to 1100 nm
Accuracy	1% of full scale
Operating Voltage	10-36 VDC
Current Draw	Same as sensor output
Warm Up Time	3 seconds minimum
Operating Temperature	-40° to +131°F (-40° to +55°C)
Sensor Size	3inch diameter x 1-1/2 inch (7.6 cm dia. x 3.8 cm long)
Weight	1/4 lb. (114 g)
For Ordering information and Options; please visit www.globalw.com/products/we300.html.	