



## Solar Radiation

### S1115W / S1115Z

- +/- 1% linearity
- Temperature compensated
- High precision

This Pyranometer Model is used for the measurement of global, reflected, and diffuse short-wave radiation. The detector is a differential thermopile with the hot-junction receivers blackened and the cold-junction receivers whitened.

The element is of radial wire-wound-plated construction with the black segments coated with 3M black and the white with Barium Sulfate. Built-in temperature compensation with thermistor circuitry is incorporated to free the instrument from the effects of ambient temperature. A precision ground optical glass hemisphere of Schott glass WG295 uniformly transmits energy from .285 to 2.800 micrometers. This hemispherical envelope seals the instrument from the weather, but is readily removable for instrument repair.

The cast aluminum case carries a circular spirit

level and adjustable leveling screws. Also supplied is a desiccator, which can be inspected readily.





## Technical Specifications

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### Measurement

Sensitivity:	11 microvolts per $w/m^2$
Temp. Dependency:	+/- 1.5% constancy from $-20^{\circ}C$ to $+40^{\circ}C$
Impedance:	350 ohms
Linearity:	+/- 1% for 0 to $1400 w/m^2$
Response Time:	5 seconds
Glass Transparency:	280—2800 nm
Cosine Response:	+/- 2% from normalization $0-70^{\circ}$ Zenith angle +/- 5% $70^{\circ} - 80^{\circ}$ Zenith angle

### PHYSICAL

Size:	5 $\frac{3}{4}$ in. diameter, 3 $\frac{3}{4}$ in. high
Weight:	2 lbs.