



Silicon Cell Pyranometer Model 3120

Silicon Cell Pyranometer

Description

Rugged and weatherproof, the Model 3120 Silicon Cell Pyranometer measures global solar radiation. This pyranometer is low cost, lightweight, and easy to install.

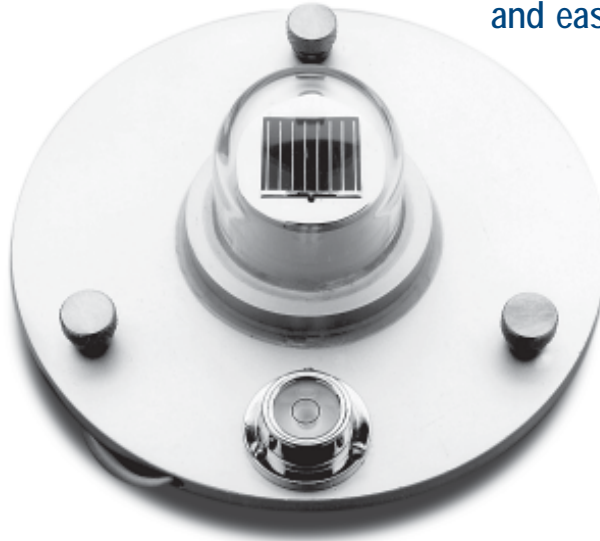
The sensor is a silicon photovoltaic cell which absorbs radiation from 0.35 to 1.15 microns. The silicon cell converts this light energy directly into electrical energy, and the output voltage (approximately 70 mV/W/m²) is essentially linear with light intensity. Full scale response time is less than 1 millisecond due to the fact that the instrument is light sensitive, not heat sensitive as the thermopile pyranometers are.

If the sensor's output is integrated over a daily period, accuracy is within ±3%. Accuracy of instantaneous values is ±5%. Temperature compensation is provided from 4° to 60°C.

Features

A Pyrex glass dome protects the silicon cell from wind and moisture. Desiccant is included to prevent moisture condensation on the inside of the glass. A 10' length of cable is provided. The positive output lead is connected internally to chassis ground, therefore requiring isolation at the mounting hardware. The Model 30318 mast adapter provides the needed isolation.

- Rugged & weatherproof
- Low-cost, lightweight and easy to install



Specifications

Spectral response	0.35 to 1.15 microns
Sensitivity	approx 70 μ V/W/m ² (50 mV/ly/min)
Sensor (transducer)	silicon photovoltaic cell
Impedance	1 ohm
Accuracy	±5%
Full-scale response time	< 1 millisecond
Temperature Compensation	+ 4° to + 60°C
Windshield	Pyrex glass dome
Leveling	circular level and 3 threaded feet
Size	5" dia x 2" H (127 x 51 mm)
Weight/shipping	1 lb/1.5 lbs (0.5 kg/0.7 kg)

Ordering Information

3120	Silicon Cell Pyranometer; includes 10' of cable
30310	Mast, 5' with mounting adapter
30318	Mast Adapter with 6' boom for mounting 3120 to Model 8500 tripod tower
30318-A	Mast Adapter without boom for mounting 3120 to 1.05" o.d. mounting stub

SENSORS