

## MODEL 4015 Solar Radiation Sensor

### General Description

The Model 4015 Solar Radiation Sensor measures total sun and sky (global) radiation. A silicon photovoltaic cell provides a millivolt output signal proportional to solar radiation energy from 0 to 1400 W/m<sup>2</sup>. The sensor responds to a 100% change in incoming radiation within one millisecond. Signal conditioning is provided to produce a 0-5 Vdc output.

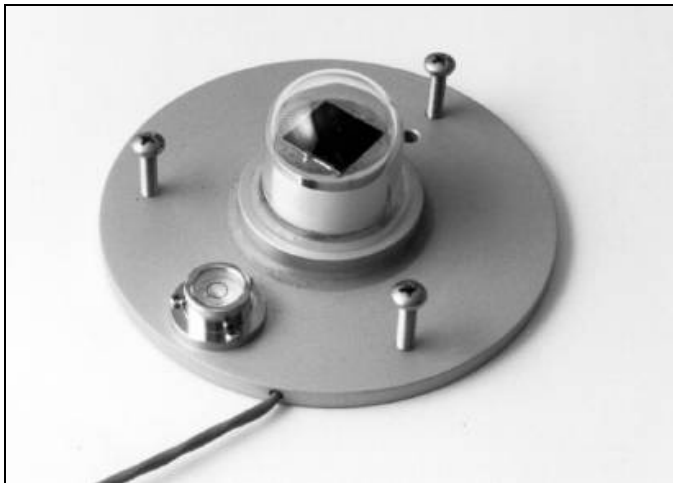
Each sensor is provided with a calibration certificate. Sensors are calibrated for the entire solar spectrum by comparison with thermopile type radiometers in bright sunshine on clear days. Cosine effects and air mass corrections are made during calibration. A Pyrex glass dome, sealed with desiccant, protects the silicone cell from dust and moisture. The desiccant can be replaced by the user as necessary to ensure consistent long-term performance.

### Specifications

Sensor: ..... Silicon photovoltaic cell  
Spectral response:..... 0.35 to 1.15 microns  
Output:..... 0 to 5 Vdc (0 to 1400 W/m<sup>2</sup>)  
Accuracy:..... ±5%  
Temperature compensation: .... -40° F to +140° F  
Full scale response time: ..... Less than 1 ms  
Standard cable:..... 25 ft. with MS connector  
Size:..... 5 in. diameter x 2 in. high  
Shipping weight: ..... 1-1/2 lbs.

### Ordering Information

4015 ..... Solar Radiation Sensor, 10 ft. cable with MS Connector  
with Model 4015MB Mounting Bracket  
4015C ..... Additional Cable, per foot  
4015SC..... Replacement Signal Conditioning Card



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