

240-120 SP-Lite2 Silicon Pyranometer

The 240-120 SP-Lite2 Silicon Pyranometer is designed for routine global solar radiation measurements on a plane surface. It is suitable for all weather operation. The sensor measures the solar energy received from the entire hemisphere. It is ideal for measuring available energy. Applications include photo voltaic/solar energy monitoring, agricultural evapotranspiration estimation, air pollution dispersion calculations using the Delta-T method, and educational uses. The SP-Lite2 employs a photo-diode detector that generates a voltage output signal proportional to the total amount of incoming solar radiation. Sensitivity is proportional to the cosine of the solar angle of incidence, allowing for accurate and consistent measurement. The good cosine response performance is due to the unique conical shaped self-cleaning diffuser design. The SP-Lite2 is suitable for use with a digital voltmeter or data logger. Irradiance in W/m² units can be derived by dividing sensor output signal violtage by the factory supplied calibration coefficient.



Specifications

Sensitivity: Approx 80 mV/1000 W/m² Spectral response: Equals silicon Temperature range: -30 to +70 °C Response time: Less than 1 sec

Range: +2000 W/m²

Temperature dependence: ± 0.15%/°C Cosine error up to 80 degrees: < 10% Spectral range: 0.4-1.1 micron

The SP-Lite2 Silicon Pyranometer compares favorably to ISO 9060 specified First Class Thermopile Pyranometers under clear and unobstructed natural daylight conditions and fully complies with CE directives.

Ordering Information

240-120 SP-Lite2 Silicon Pyranometer

includes 3 meters cable

240-153 Tower Mount, 1' boom with tower mounting hardware

240-120-A Amplifier PCB, specify output

330-0220S Cable, 2-conductor, 20 AWG shielded