

Pyranometer SP-Lite

The silicon-pyranometer SP-Lite was designed for routine measurement of solar radiation under all weather conditions. The sensor measures the solar energy received from the entire hemisphere. SP-Lite is ideal for measuring available energy for use in solar energy applications, plant growth, thermal convection and evapotranspiration calculation.

SP-Lite uses a photodiode detector, which creates a voltage output that is proportional to the incoming radiation. To ease installation Adcon has integrated a signal amplifier into the device that linearizes the output to a uniform 0 - 2.5VDC signal, making this a plug-and-play sensor.

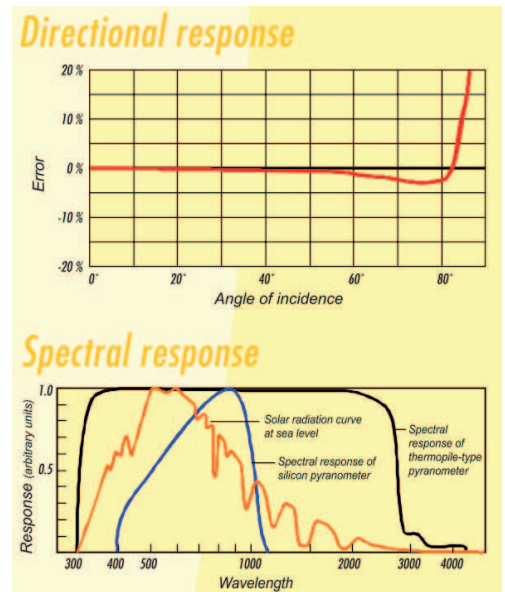
The hardened crystal lens of the sensor is far more scratch-resistant than plastic lenses. Its pyramid shape creates a self-cleaning effect, avoiding build-up of dust and agrochemicals, and provides an excellent cosine response. The SP-Lite compares favourably to ISO 9060-specified First Class Thermopile Pyranometers under clear and unobstructed natural daylight conditions, and complies to the 89/336/EEC 73/23/EEC CE directive.

Applications

- Agricultural Weather Stations (ETo calculation)
- Photo Voltaic Module monitoring
- Educational purposes



Pyranometer SP-Lite with mast mounting arm and amplifier



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Technical data

| | | | |
|------------------------|-----------------------------------|-----------------------|---|
| Dimensions | 18.11 x 3.54 x 3.46 in. | Directional Error | ± 5% at 80 degrees |
| Weight | 1.36 lb. (incl. arm & cable) | Output Signal | 0 - 2.5VDC, linear |
| Spectral Range | 400 ... 1100 nm | Power Supply | 5.5 VDC ... 7.2 VDC |
| Sensitivity (nominal) | 60 ... 100µV / W / m ² | Operating Temperature | -22°F ... +158°F |
| Sensitivity change | < 2% per year | Cable & Connector | 6.6 ft., 7-pin M9 Binder male |
| Response Time | less than 2 sec. | Mounting | mast mounting bracket for poles with 1.38" - 1.57" Ø; clamps included |
| Max. Irradiance | 2000 W/m ² | Ordering Information: | |
| Temperature Dependence | + 0.15% / °C (typical) | 200.733.020 | SP-Lite Pyranometer |