

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 lense 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

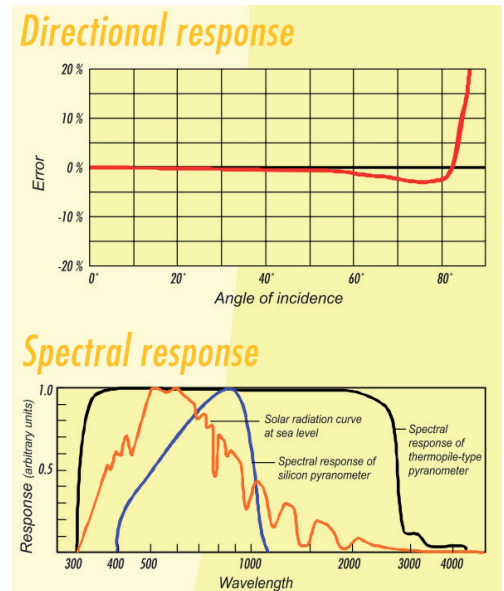
Technical data

Dimensions	460 x 90 x 88mm
Weight	615 g (incl. arm & cable)
Spectral Range	400 ... 1100 nm
Sensitivity (nominal)	60 ... 100µV / W / m ²
Sensitivity change	< 2% per year
Response Time	less than 2 sec.
Max. Irradiance	2000 W/m ²
Temperature Dependence	+ 0,15% / °C (typical)

Directional Error	± 5% at 80 degrees
Output Signal	0 ... 2,5VDC, linear
Power Supply	5,5 VDC ... 7,2 VDC
Operating Temperature	-30°C ... +70°C
Cable & Connector	200cm, 7-pin M9 Binder male
Mounting	mast mounting bracket for poles with Ø 35-40mm; clamps included
Ordering Information:	
200.733.020	SP-Lite Pyranometer



Pyranometer SP-Lite with mast mounting arm



(Graphics Copyright of Kipp & Zonen)