

# Pyranometer SP-Lite

The SP-Lite silicon-pyranometer was designed for routine measurement of solar radiation under all weather conditions. The sensor measures the solar energy received from the entire hemisphere.

Under clear sky conditions the SP-Lite compares favourably to ISO 9060-specified First Class Thermopile Pyranometers and fully complies with CE directives for solar radiation measurement.

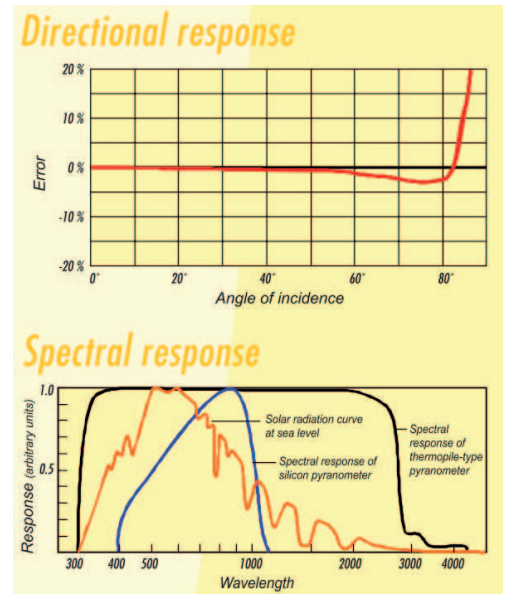
The SP-Lite uses a photodiode detector, which creates a voltage output proportional to the incoming radiation. The hardened crystal lens of the sensor is far more scratch-resistant than plastic lenses and provides an excellent cosine response. Its pyramid shape creates a self-cleaning effect, avoiding build-up of dust and agrochemicals. The sensor contains an integrated amplifier that linearizes the photodiode output to a 0-2.5V signal. The sensor is fitted with a 7-pin Binder cable for direct connection to an Adcon RTU.



Pyranometer SP-Lite with mast mounting arm

## Applications

- Agricultural Weather Stations (ETo calculation)
- Monitoring of solar power installations
- Educational purposes



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## Technical data

Dimensions	460 x 90 x 88mm	Directional Error	± 5% at 80 degrees
Weight	615 g (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 <sup>2</sup>	Operating Temperature	-30°C ... +70°C
Sensitivity change	< 2% per year	Cable & Connector	200cm, 7-pin M9 Binder male
Response Time	less than 2 sec.	Mounting	mast mounting bracket for poles with Ø 35-40mm; clamps included
Max. Irradiance	2000 W/m <sup>2</sup>	Ordering Information:	
Temperature Dependence	+ 0.15% / °C (typical)	200.733.020	SP-Lite Pyranometer