LI-COR LI-200R PYRANOMETER

Recommended for early stage prospecting, the Li-Cor LI-200R pyranometer is an excellent general purpose solar radiation sensor.

Li-Cor LI-200R Pyranometer (#10162)

DESCRIPTION	
Sensor type	Total solar radiation sensor
Applications	• Solar resource assessment • Meteorological studies • Environmental monitoring
Sensor range	0 W/m² to 3000 W/m²
Instrument compatibility	All RNRG data loggers.
Measurement range	• SymphoniePRO measurement range = 0 W/m² to 2200 W/m², typical • Symphonie, SymphoniePLUS and SymphoniePLUS3 measurement range = 0 W/m² to 1600 W/m², typical
Signal conditioning module	• SymphoniePRO with '0 to 160µA SE Input' P-SCM (#9129) • Symphonie, SymphoniePLUS and SymphoniePLUS3 loggers with LI-COR Pyranometer SCM (#3154)
OUTPUT SIGNAL	
Signal type	Microamp current proportional to total solar radiation
Sensitivity	Typically 75 µA per 1000 W/m²
Linearity	Maximum deviation of 1 % up to 3000 W/m²
Response time	Less than 1 µs
Transfer function	Included on calibration certificate

Calibration	• Calibration sheet included with each sensor defines output in microamps per 1000 Watts/square meter • Calibrated against Eppley Precision Spectral Pyranometer (PSP) under natural daylight conditions. Absolute uncertainty under these conditions is +/-3 % typical, +/-5 % maximum
Output signal range	0 µA to 225 µA, typical
PERFORMANCE CHARACTERISTICS	
Cosine correction	Cosine corrected up to 82 ° angle of incidence
Azimuth	< +/- 1 % error over 360 ° at 45 ° elevation
Tilt	No error induced from orientation
INSTALLATION	
Mounting	Mounts to tower with custom RNRG side mounting boom and hose clamps
Tools required	• Sheet metal shears or similar for hose clamps • 5/16 inch hex driver or flat blade screwdriver • 0.05 inch hex key (included); metric #4 allen wrench for level adjustment
ENVIRONMENTAL	
Operating temperature range	-40 °C to 65 °C (-40 °F to 149 °F)
Temperature dependence	+/- 0.15 % per °C maximum
Operating humidity range	0 % to 95 %, non-condensing
PHYSICAL	
Connections	3 bare wire leads
Cable length	5 m (16.4 feet)
Weight	24 g (0.85 ounces)

Dimensions	• 23.6 mm (0.93 inch) diameter • 36.3 mm (1.43 inch) height

MATERIALS

Cable	BL-type (3-wire bare leads)
Detector	High-stability silicon photovoltaic
Enclosure	Weatherproof anodized aluminum case with acrylic diffuser and stainless steel hardware

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