

DATA SHEET

SL 200



Solarimeter



Easy to use, for immediate information



Optimum orientation of solar panels and performances follow-up



Evaluation of the produced electric powers



Choice and determination of the thermal or photovoltaic generators features

The portable autonomous solarimeter measures the solar irrigation for the control of photovoltaic and thermal installations on test or on site.

For the QualiSOL, QualiPV certificated professionals, the office control for the Guarantee of Solar Result

Features

- Measurement and spot check of the solar irrigation in W/m^2 (instantaneous, average, time-recording**, min/max values, hold function)
- Calculation of the energetic exposure in Wh/m^2 during the timed measures campaign
- Storage and saving of average values of power and updating the energetic exposure calculation every minutes
- Recorded data can be read on the display, and the graphic function allows a fast interpretation of the measure file
- Analysis of sunshine on site, on short and long-term period
- Storage and saving of average values of power; update of energetic exposure calculation every minute
- Easy use of data stored in memory, reading and graphical approximation of datas by 24 hours via transfer data software

Technical specifications

SL 200 instrument

Solar irrigation measuring range	From 1 W/m^2 to 1300 W/m^2
Energetic exposure measuring range	From 1 Wh/m^2 to 500 kWh/m^2 **
Frequency of the measure	2 / s
Accuracy	5% of measurement
Calculation frequency (W/m^2)	1 / min (average on 60 seconds)
Storage capacity	31 days, 44 640 saved recording points
Fast data download	1000 values/second
Detection	Out of range and sensor default
Operating temperature	From -10 °C to +50 °C
Storage temperature	From -10 °C to +55 °C
Housing dimensions	58 x 120 x 33 mm
Autonomy	More than 48 hours in continuous mode Unlimited with power supply adapter
Power supply	3 LR3-AAA batteries
Electronic	Digital
Electronic board	Varnish
Conformity	In accordance with RoHS directive

Solar cell



Spectral response	From 400 to 1100 nm
Nominal sensitivity	100 mv for 1000 W/m^2 **
Response in cosine	Corrected up to 80°
Coefficient in temperature	+0,1% / °C
Effective area	1 cm^2
Operating temperature	From -30 °C to +60 °C
Humidity dependence	100% RH
UV performance	Excellent (PMMA filter)
Mode	Photovoltaic
Material	Polycrystallin silicon
Front face	Translucent PMMA
Tightness	Polyurethane resin and housing in PMMA and polyacetol
Weight and dimensions	60 g. 30 x 32 mm
Cable length	1.25 m

*Timed: duration of dataset is expressed in DD/HH/MM/SS.

**SL 200 is supplied with a calibration certificate in reference to the WRR (World Radiometric Reference).

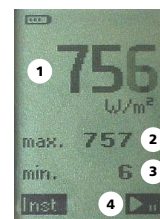
Presentation



1. 2. 3. Function keys
4. Delete and backscreen key
5. Screen key
6. ON/OFF key

1. Measurement

1. Instantaneous W/m^2
2. Maximum value
3. Minimum value
4. Pause - Hold

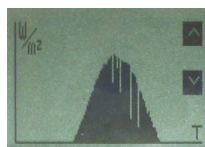


1. Instantaneous W/m^2
2. Average W/m^2
3. Energetic exposure
4. Duration



2. Reading

Global values



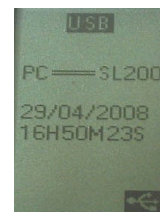
Graphic display 00h-24h

Time-recorded stored values



Scrolling of the successive graphs 00h-24h

3. Transfer



Kit content

- Transport case with protective foam
- Mini-USB connection cable
- 3 LR3-AAA batteries
- CD-ROM with the Instructions for use, setup software for USB driver, data transfer software
- Calibration certificate

Accessories

- Tripod
- Fixing kit for solar panels
- Extensions : (possibility to connect 2 extensions max.)
- Power supply adapter

