



# RD455

## Solarimeter

### Technical features

#### • SL 200 Instrument

Solar irrigation measuring range.....	from 1 W/m <sup>2</sup> to 1300 W/m <sup>2</sup>
Energetic exposure measuring range...	from 1 Wh/m <sup>2</sup> to 500 kWh/m <sup>2</sup>
Frequency of the measure.....	2 / s
Accuracy.....	5% of measurement
Calculation frequency (W/m <sup>2</sup> ).....	1 / min (average on 60 seconds)
Storage capacity.....	31 days, 44640 saved recording points
Fast datas 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
Package dimensions.....	58 x 120 x 33 mm
Autonomy.....	more than 72 hours in continuous mode Unlimited with power supply adapter
Power supply.....	3 LR3-AAA batteries
Electronic.....	Digital
Electronic card.....	Varnish
Conformity.....	in accordance with RoHS directives



#### • Solar cell

Spectral response.....	from 400 to 1100 nm
Nominal sensitivity.....	100mv for 1000W/m <sup>2</sup> *
Response in cosine.....	corrected until 80°
Coefficient in temperature.....	+0,1% /°C
Effective area.....	1 cm <sup>2</sup>
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
Cell weight.....	60g
Cell dimensions.....	30 x 32 mm
Cable length.....	1,25 m (can be unplugged)

\* SL200 is supplied with a calibration certificate in reference to the WRR (World Radiometric Reference).

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



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

- **Measurement and spot check of the solar irrigation in W/m<sup>2</sup>**  
(instantaneous, average, time-recording, min/max values, hold function)
- **Calculation of the energetic exposure in Wh/m<sup>2</sup>**  
during the timed measures campaign\*
- **Storage and saving of average values**  
of power and updating the energetic exposure calculation every minutes
- **Recorded datas can be read on the display, and the graphic function allows a fast interpretation of the measure file**

### SL 200

- Easy to use, for immediate informations
- Evaluation of the produced electric powers, optimum orientation of solar panels and performances follow-up.
- Analysis of sunshine on site, on short and long-term period.
- Choice and determination of the thermal or photovoltaic generators features
- Storage and saving of average values of power; update of energetic exposure calculation every minute
- Easy use of datas stored in memory,
- Reading and graphical approximation of datas by 24 hours via transfer data software.



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

## Presentation

- ① ② ③ Functions keys
- ④ Delete and Back screen key
- ⑤ Screen key
- ⑥ On/Off key



## 1. Measurement

Instantaneous  $W/m^2$  → 756  $W/m^2$

Maximum value → max. 757

Minimum value → min. 6

Pause - Hold → [Inst.] [▶]

Instantaneous  $W/m^2$  → Irr: 369  $W/m^2$

Average  $W/m^2$  → M: 332  $W/m^2$

Energetic exposure → E: 7  $Wh/m^2$

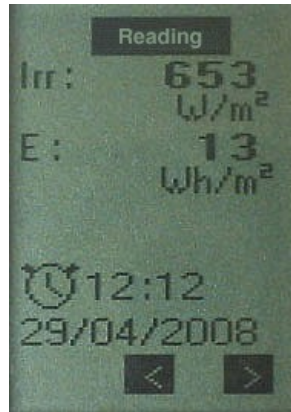
Time → 18:45:07

Duration → 00:01:20

## 2. Reading



Global values



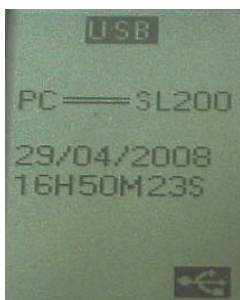
Time-recorded stored values



Graphic display 00H /24H

Scrolling of the successive graphs 00H-24H

## 3. Transfer



### Supplied with ...

- 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, datas transfer software.
- Calibration certificate

### Optional

- Tripod
- Fixing kit for solar panels  
Extensions : 5m, 10m and on demand
- Power supply adapter

