

# RD450

## Solarimeter

### ■ Technical features

#### SL100 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 measurement.....	2 / s
Accuracy.....	5% of measurement
Calculation frequency (W/m <sup>2</sup> ).....	1 / min (average on 60 seconds)
Capacity of measurement (Wh/m <sup>2</sup> )	3 days – Results saved when instrument is switched off
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 72 hours in continuous mode, when using a power supply adapter
Power supply.....	3 LR3-AAA batteries
Electronic.....	Digital
Electronic board.....	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)

\* SL100 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



Portable autonomous solarimeter can measure solar irrigation for the control of photovoltaic and thermal installations on test or on site:

#### - Measurement and spot check of solar power in W/m<sup>2</sup>

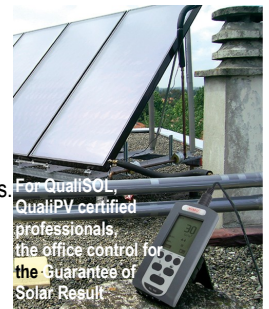
- instantaneous,
- average,
- min./max. values,
- hold function

#### - Calculation of energetic exposure in Wh/m<sup>2</sup> during timed dataset \*

#### - Results (Wh/m<sup>2</sup>) saved when instrument is switched off

### ■ SL 100

- Easy to use, for immediate information
- Evaluation of generated electric power, optimum orientation of solar panels, and performances follow-up.
- Choice and determination of thermal or photovoltaic generators features.

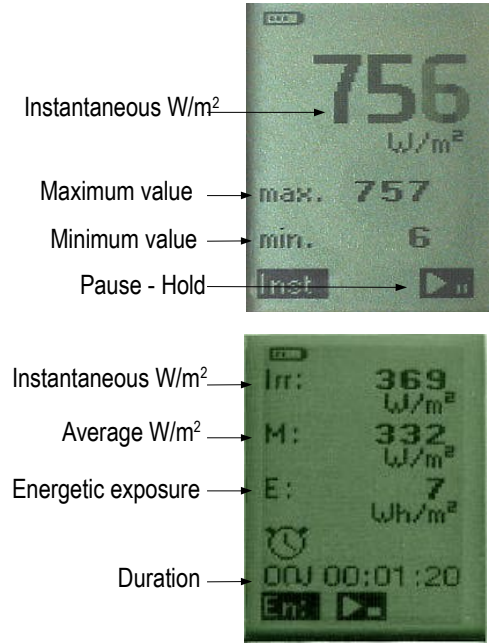


## ■ Presentation



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

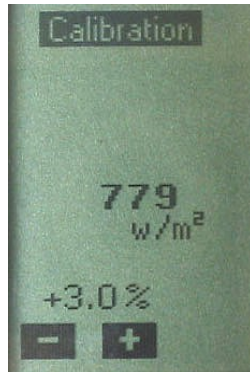
## Measurement



## Settings



*Adjust contrast and activate backlight*



*Calibrate instrument when being returned to laboratory*



*Remind last checking date*

## ■ Supplied with ...

Transport case  
3 LR3-AAA batteries  
Instructions for use  
Calibration certificate

## ■ Optional

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

