Solarimeter
SL 200

CE

■ Technical features

• 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/m²)...............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^2 *

Response in cosine..............................corrected until 80°

Coefficient in temperature....................+0,1% /°C

Effective area.......................................1 cm²

Operating temperature.........................from -30°C to +60°C

Humidity dependence...........................100% RH

UV performance....................................excellent (PMMA filter)

Mode...photovoltaic

Material...polycristallin 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/m²**
  (instantaneous, average, time-recording, min/max values, hold function**)**

- **Calculation of the energetic exposure in Wh/m²**
  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,
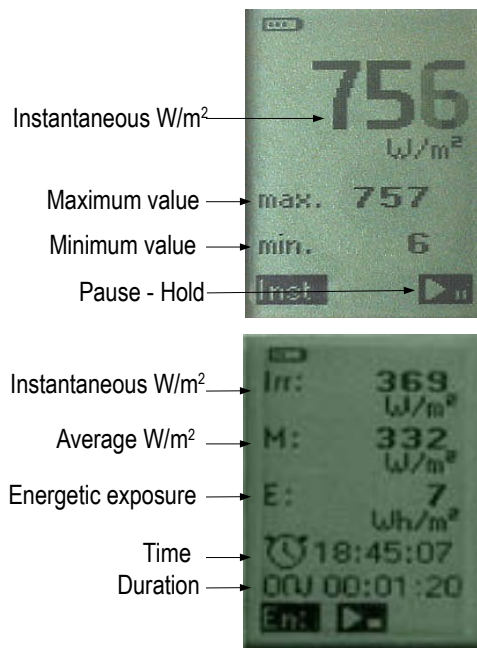- Reading and graphical approximation of datas by 24 hours via transfer data software.

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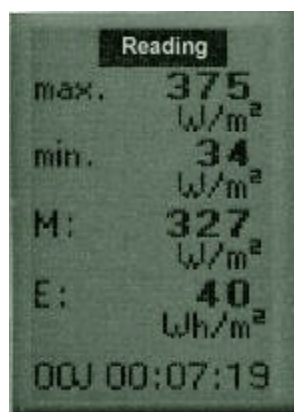
◼ Presentation

KIMO
30
W/m²
max. 44
min. 8
Inst ▶❚❚

SL 200

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

1. Measurement

Instantaneous W/m² → **756** W/m²
Maximum value → max. **757**
Minimum value → min. **6**
Pause - Hold → Inst ▶❚❚

Instantaneous W/m² → Irr: **369** W/m²
Average W/m² → M: **332** W/m²
Energetic exposure → E: **7** Wh/m²
Time → ⏱ 18:45:07
Duration → 00J 00:01:20
En: ▶■

2. Reading

Reading
max. **375** W/m²
min. **34** W/m²
M: **327** W/m²
E: **40** Wh/m²
00J 00:07:19

Global values

Reading
Irr: **653** W/m²
E: **13** Wh/m²
⏱ 12:12
29/04/2008
< >

Time-recorded stored values

Scrolling of the successive graphs 00H-24H

Graphic display 00H /24H

3. Transfer

USB
PC══SL200
29/04/2008
16H50M23S
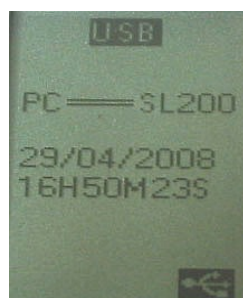
◼ Supplied with ...

• 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