



Photovoltaic mode



0-10 V or 4-20 mA outputs

## Global sensor of solar radiation

Dedicated to monitor the proper operating of plants using solar radiation :

- Hot water production
- Photovoltaic electricity production
- Applications in agronomy
- Meteorological monitoring
- ...

## Sends 0-10 V or 4-20 mA analogue signal proportional to the radiated solar power

via the interface module connected to a PLC or a data acquisition system.

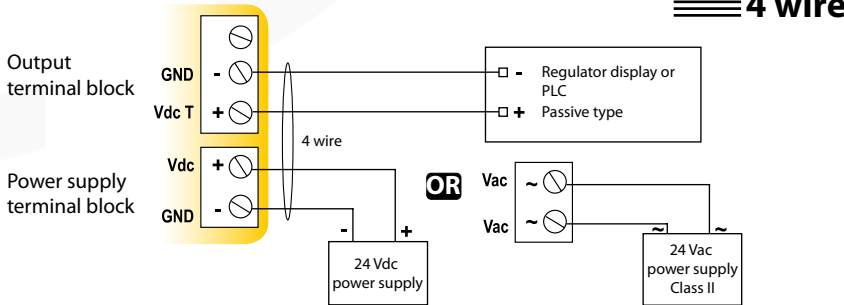
## Allows monitoring of plants performance

**Removable, it can be periodically adjusted** to guarantee measurement accuracy.

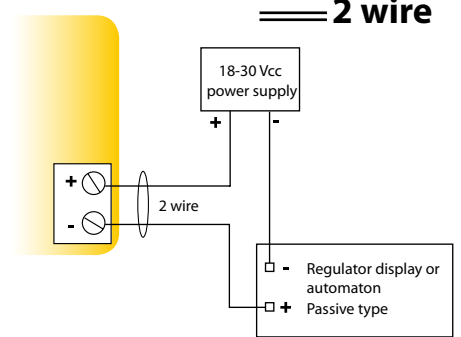
For QualiSOL, QualiPV certificated professionals and control office for the Guarantee of Solar Result.



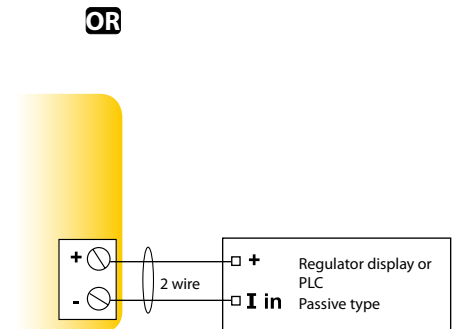
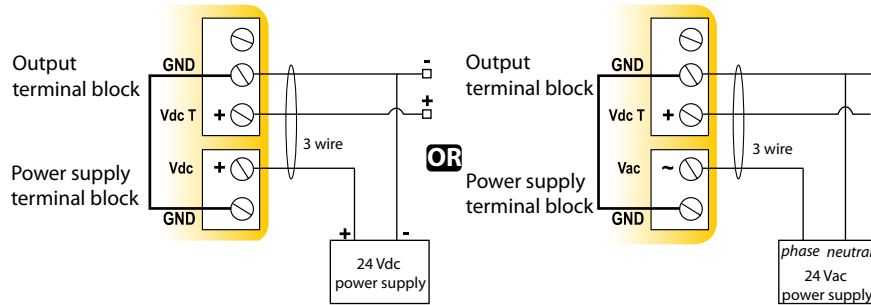
## 0-10V output - Active



## 4-20 mA output - Passive



For a 3 wire connection, before power up, connect ground output with ground input. Eg : wiring diagram above .



## Technical features

### Interface module

- Output / Power supply :
  - CR101 0-10 V active sensor  
10 % 24 Vac/Vdc power supply, 3-4 wire
  - CR100 4-20 mA passive loop sensor  
18/30 Vdc power supply, 2 wire
- Peak load : 500 Ohms (4-20 mA)
- Minimum load : 1 K Ohms (0-10 V)
- Consumption : 2 VA (0-10V) or 22 mA (4-20 mA) max.
- Electromagnetic compatibility : EN 61326
- Electrical connection : terminal block with screw for cables of 1,5 mm<sup>2</sup> max.
- Operating temperature : from -20 to +50°C
- Housing : ABS
- Fire class : H-B as per UL94
- Housing overall dimensions : 100x100x42 mm
- Protection : IP65
- Wiring grommet : for cables of 7 mm max.
- Weight : 110 g



Supplied with calibration certificate



### Solar cell

- Measuring range : from 0 to 1300W/m<sup>2</sup>
- Spectral response : from 400 to 1100 nm
- Nominal sensitivity : 100mv for 1000W/m<sup>2</sup> STC\*
- Response in cosine : corrected until 80°
- Coefficient in temperature : +0,1%/°C
- Effective area : 1 cm<sup>2</sup>
- Operating temperature : from -30° 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 32mm

\*S.T.C : Standard Test Conditions  
25°C - Solar spectrum AM 1,5

## Optional

### Supplied with

- Sensor and 5 m cable
- Interface module
- Correspondence certificate of levels for adaptation to the data acquisition system.

