

## VEROSUN- PV Range

PV 250 | Photovoltaic module PV

Photovoltaic module PV 250 is a device used for conversion of a solar radiation energy into electrical current.



Module has a polycrystalline silicon cells. They can be used in off-grid installations, as well as in the installations connected to the mains (on-grid).

Module is made of 60 cells connected in a series-parallel way, tightly laminated, covered with a tempered glass with a thickness of 3,2 mm, framed in a special, patented aluminium profile.

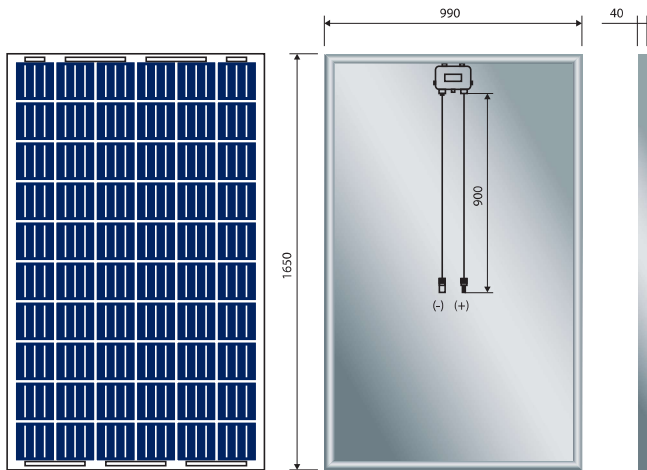
Cells are soldered without a contact with the use of hot air, which minimizes creation of micro-tensions in the structure of cells. The whole soldering process of a photovoltaic module is held in the high-class laminators in conditions of deep vacuum. Lamination parameters are strictly defined by technology and cannot be changed by its operators, which guarantees high quality and repetitiveness of a lamination.

Photovoltaic module PV 250 is controlled and monitored through the whole production process: conducting a computer controlled monitoring of the quality of cells before and after soldering, electrical parameters control on a special AAA class tester in accordance with IEC 60904-9,

### ***Advantages of a photovoltaic module PV 250:***

- > Photovoltaic module PV 250 is the purest source of electric energy
- > The use of high technology in the production process (soldering and lamination)
- > Computer monitoring of a cells soldering cells, specialistic electrical parameters control and the quality of a production process control
- > Long lifespan of a module.

### Dimensions of the collector and flow through the absorber



### Cross-section of the collector



### Technical specification

Flat solar collector	value
width	990 mm
height	1650 mm
depth	40 mm
glass thickness	3,2 mm
surface	2,02 m <sup>2</sup>
housing	patented aluminium profile
electrical parameters	
Peak power (for 1000 W/m <sup>2</sup> )	250 W
type of cell	polycrystalline
amount of cells	60
size of cells	156 x 156 mm
rated current	8,28 A
short-circuit current	8,81 A
nominal voltage	30,20 V
open-circuit voltage	37,72 V
efficiency	15,4 %
maximum system voltage	1000 V DC
temperature range	-40 ÷ 85 °C

