

VEROSUN- PV Range

PV 300 | Photovoltaic module PV

Photovoltaic module E-PV 300W is a device used for conversion of a solar radiation energy into electrical current.



Module has a polycrystalline silicone 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 72 cells connected in a series-parallel way, tightly laminated, covered with a tempered glass with a thickness of 4mm, framed in a special, patented aluminium profile.

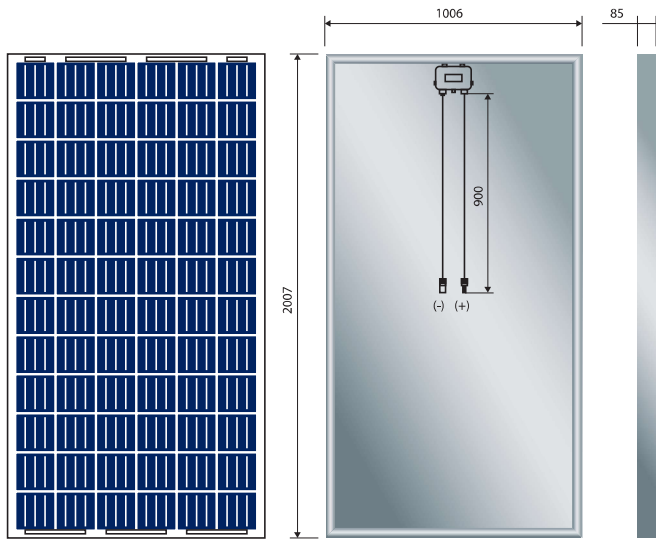
Cells are soldered without a contact with the use of hot air, which minimizes creation of micro-tensions in the structure of cells. The whole soldering process of a photovoltaic module is held in the high-class laminators in conditions of deep vacuum. Lamination parameters are strictly defined by technology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

Photovoltaic module PV 300 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 300:

- > Photovoltaic module PV 300 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 | 1006 mm |
| height | 2007 mm |
| depth | 85 mm |
| glass thickness | 4 mm |
| surface | 2,02 m ² |
| housing | patented aluminium profile |
| electrical parameters | |
| Peak power (for 1000 W/m ²) | 300 W |
| type of cell | polycrystalline |
| amount of cells | 72 |
| size of cells | 156 x 156 mm |
| rated current | 8,15 A |
| short-circuit current | 8,78 A |
| nominal voltage | 36,82 V |
| open-circuit voltage | 45,31 V |
| efficiency | 15,4% |
| maximum system voltage | 1000 VDC |
| temperature range | -40 ÷ 85 °C |

