

## E-PV 300 W – 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 4 mm, framed in a special, patented aluminium profile.

Cells are soldered without a contact with the use of hot air, what 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, what guarantees high quality and repetitiveness of a lamination.

Photovoltaic module E-PV 300W 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 E-PV 300W:

- photovoltaic module E-PV 300W 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.

	Symbol	Unit	Value
Width	A	mm	1006
Height	B	mm	2007
Depth	C	mm	485
Surface	S	m <sup>2</sup>	2,02
Casing	Patented aluminium profile		
Glass thickness	4,0		
Electrical parameters			
<b>Peak power (with 1000 W/m<sup>2</sup>)</b>	<b>Pmax</b>	<b>W</b>	<b>300</b>
Type of cells	Polycrystalline		
Amount of cells		pcs	72
Size of cells		mm	156 x 156
Nominal current	Impp	A	8,15
Short-circuit current	Isc	A	8,78
Nominal voltage	Vmpp	V	36,82
Open-circuit voltage	Voc	V	45,31
Maximum system voltage		V	1000DC
Temperature range		°C	-40-85

