# bio 280-300

BIOENERGY Solar Photovoltaic Panels stand for quality, durability and most importantly, high-performance. Our experience, capacity of research, continuing development and improvement have turned us into a company recognized in the sector by the high value offered to our clients.

Highly transparent solar glass of 3.2 mm.and anodized aluminum frame for a perfect stability and a long duration. Sheeting at constant temperature provides a perfect cure of the module avoiding the formation of bubbles. The distance between the edge of the frame and the cell circuitry is optimized to ensure both waterproof sealing and maximum module size reduction.



# **Electrical Characteristics**

	280	285	290	300
Reference	P110280	P110285	P110290	P110300
Maximum power (Wp)	280 Wp	285 Wp	290 Wp	300 Wp
Max. power voltage (Vmax)	33.80	34.10	34.40	35.00
Max. power current (Imax)	8.29	8.36	8.44	8.58
Open circuit voltage (Voc)	40.2	40.40	40.70	41.30
Short circuit voltage (Isc)	9.10	9.15	9.20	9.30
Modulle Eff. (%)	14.5	14.7	14.9	15.50
Operating temperature	-40°C + 85°C			
Maximum system voltage	1000 V(IEC)			
Power tolerance (%)	0-3%			

### **Mechanical Characteristics**

Solar cells	Monocristalline
Dimensions	1956 x 992 x 45 mm
Weight	26 kg
No. Cells	72 cells (156 x 156 mm) configured geometrically for 6 x 12 matrix connected in series
Output cables length	1000 mm
Cable cross section	4 mm <sup>2</sup>
Construction	Front: High transmission 3.2 mm tempered glass. Low Iron.
Junction box	3 bypasses
Connectors	MC4 compatible

## **Temperature Coefficients**

Nominal operating cell temperature (NOCT)	45 °C ± 2°C
Temperature coefficient of power (PMAX)	-0.43 %/°C
Temperature coefficient (VOC)	-0.31 %/°C
Temperature coefficient (ISC)	0.03 %/°C
Hail diameter 23 m/s	Up to 25mm
Continuous wind pressure	< E400 Pa

The 10 years product warranty surpasses the warranty required by law.

The performance warranty is for 25 years: After 10 years, modules still produce a minimumt 90% of their nominal performance. After 25 years modules still produce a minimum 80% or their nominal performance.

### **Dimensions**



