

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.

Due to their engineered hollow-section frame and its 4mm special solar glass (standard solar module has 3.2mm), BIOENERGY PLUS modules meet the maximum demands with regard to stability and corrosion resistance.

Thanks to their high performance BIOENERGY PLUS modules are prepared for changes in legislation. These panels will produce 5% more than any other of the same features.



#### Electrical Characteristics

	280	285	290	300
Reference	P111280	P111285	P111290	P111300
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
Module 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	Mono-crystalline
Dimensions	1956 x 992 x 45 mm
Weight	26 kg
Junction Box	IP65
No. Cells	72 pcs (156 x 156 mm) Poly-Crystalline (6x12mm)
Output cables length	900 mm
Cable cross section size	4 mm <sup>2</sup>
Construction	High Transmission, Low Iron, Tempered Glass 4 mm
Bypass-Diodes	3 bypass
Connectors	MC4 compatible

#### Temperature Coefficients

Nominal operating cell temperature (NOCT)	47 °C ± 2°C
Temperature coefficient of power (P <sub>MAX</sub> )	-0.43 %/°C
Temperature coefficient (VOC)	-0.31 %/°C
Temperature coefficient (ISC)	0.03 %/°C
Continuous wind pressure	<5400 Pa

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

The performance warranty is for 30 years: after 12 years, modules still produce a minimum 90% of their nominal performance, after 30 years modules still produce a minimum 80% of their nominal performance.

#### Dimensions

