

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.

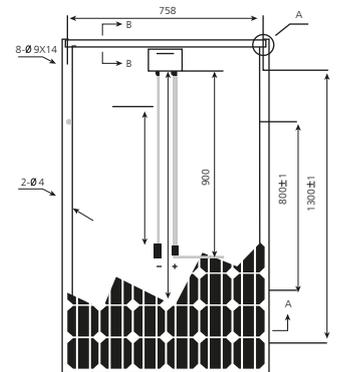
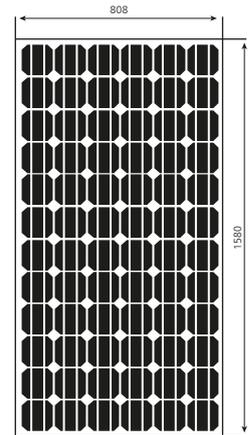
Highly transparent solar glass of 3.2mm and anodized aluminum frame for a perfect stability and a long duration. Sheeting at constant temperature provides a perfect cure of the module avoiding the formation of bubbles. The distance between the edge of the frame and the cell circuitry is optimized to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



Electrical Characteristics

	175	180	185	190	195
Reference	P110175	P110180	P110185	P110190	P110195
Maximum power (Wp)	175 Wp	180 Wp	185 Wp	190 Wp	195 Wp
Max. power voltage (Vmax)	35.3	36.5	36.7	36.8	36.94
Max. power current (Imax)	4.96	4.93	5.04	5.16	5.28
Open circuit voltage (Voc)	44.2	44.3	44.5	44.6	45.08
Short circuit voltage (Isc)	5.2	5.36	5.47	5.59	5.58
Modulle Eff. (%)	13.7	14.1	14.5	14.9	15.27
Operating temperature	-40°C + 85°C				
Maximum system voltage	1000 V(IEC)				
Power tolerance (%)	0-3%				

Dimensions



Mechanical Characteristics

Solar cells	Monocrystalline
Dimensions	1580 x 808 x 35-45 mm
Weight	15.5 kg
No. Cells	72 cells (125 x 125 mm) configured geometrically for 6x12 matrix connected in series
Output cables length	900 mm
Cable cross section	4 mm ²
Construction	Front: High transmission 3.2 mm tempered glass. Rear: White back sheet. Encapsulant: EVA
Junction box	3 bypasses
Connectors	MC4 compatible

Temperature Coefficients

Nominal operating cell temperature (NOCT)	47 °C ± 2°C
Temperature coefficient of power (P _{MAX})	-0.43 W/°C
Temperature coefficient (VOC)	-0.31 V/°C
Temperature coefficient (ISC)	0.03 A/°C
Hail diameter 23 m/s	Up to 25mm
Continuous wind pressure	<5400 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 minimum 90% of their nominal performance. After 25 years modules still produce a minimum 80% or their nominal performance.