

Monocrystalline Photovoltaic Modules

80-120Wp (36 cells)



Characteristics

■ Modules Quality

BlueSun® Solar Energy modules are mounting in Portugal and ensure the highest system efficiency and the quality of our modules.

■ Highest efficiency and performance

The panel's reduced voltage-temperature coefficient, anti-reflective glass and exceptional low-light performance attributes provide outstanding energy delivery per peak power watt.

■ Guaranteed power output

Positive Tolerance + 3% ensure reliable energy production.

■ Module can bear snow loads up to 5600 Pa and wind loads up to 3800 Pa

■ High performance under low light conditions (Cloudy days, mornings and evenings)

■ High Transmission Glass

Anti-reflective coated glass delivers up to 4% more energy than standard glass.

■ Enhanced cell protection

Better cell protection thanks to robust frame and durable materials.

■ Reliable and Robust Design

Proven materials, tempered front glass, and a sturdy anodized frame allow panel to operate reliably in multiple mounting configurations.

■ TUV "Power controlled"

With the new TUV Rheinland test "Power controlled" it is guaranteed that the performance indicated for a BlueSun® solar panel is being met and that it is regularly monitored by the independent test service provider, TUV Rheinland.



Warranties and Certifications

- Warranties: 25 year limited power warranty
10 year limited product warranty

- Certifications:
IEC 61215, IEC 61730-1, IEC 61730-2, IEC 61730-3, EN 61000-6-1:2007, EN 61000-6-3:2007, IEC 5600 Pa.



Monocrystalline Photovoltaic Modules

80-120Wp (36 cells)



Electrical Data

Designation		BSM80M-36	BSM100M-36	BSM120M-36
Peak Power	P	80 W	100 W	120 W
Positive Tolerance		+ 3 %	+ 3 %	+ 3 %
Efficiency	η	14,10 %	15,20 %	15,10 %
Rated Current	V_m (V)	17,8	17,87	17,6
Rated Voltage	I_m (A)	4,50	5,77	6,83
Maximum System Voltage	VDC (V)		1000	
Open Circuit Voltage	VOC (V)	21,6	22,79	21,98
Short Circuit Current	ISC (A)	5,33	6,49	7,61
Working Temperature		- 40 \pm 85 °C		
Temperature Coefficients	Power	η (P _{MAX})	- 0,45 %/°C	
	Voltage	β (VOC)	- 0,35 %/°C	
	Current	α (ISC)	0,05 %/°C	

(STC: irradiance of 1000W/m², AM 1.5, and cell temperature 25° C)

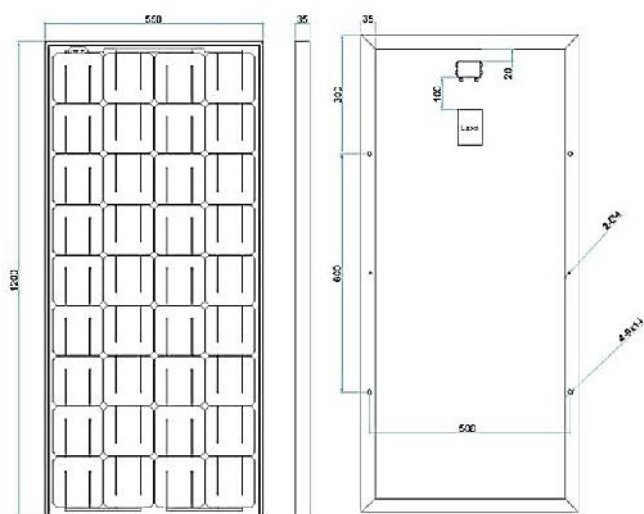
Mechanical Data

Output Cables	100 cm length cables 4 mm ² MultiContact MC4 connectors
Front Glass	High transmission tempered glass with anti-reflective (AR) coating
Caixilho	Silver or black anodized aluminum
Junction Box	IP-65 rated with 3 bypass diodes

Mechanical Data

Dimensions	80W / 100W: 1196x539x35 (mm) 120W: 1492x670x35 (mm)
Weight	80W / 100W: 10,0 (Kg) 120W: 12,0 (Kg)
Cells	125x125 (mm)
Solar Cells	36 (4x9)

Dimensions 80W / 100W



Dimensions 120W

