

# Polycrystalline Photovoltaic Modules 50-70Wp (24 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.



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Electrical Data				
Designation		BSM50P-24	BSM60P-24	BSM70P-24
Peak Power	P	50 W	60 W	70 W
Positive Tolerance		+ 3 %	+ 3 %	+ 3 %
Efficiency	$\eta$	10,70 %	11,90 %	14,00 %
Rated Current	$V_m$ (V)	18,20	17,50	17,50
Rated Voltage	$I_m$ (A)	2,77	3,43	4,00
Maximum System Voltage	VDC (V)		1000	
Open Circuit Voltage	VOC (V)	21,80	20,80	21,80
Short Circuit Current	ISC (A)	3,05	4,08	4,49
Working Temperature			- 40 ± 85 °C	
Temperature Coefficients	Power	$\eta$ (P <sub>MAX</sub> )		- 0,45 %/°C
	Voltage	$\beta$ (VOC)		- 0,35 %/°C
	Current	$\alpha$ (ISC)		0,05 %/°C

Valores em CTS: AM 1.5, 1000W/m2, 25°C)

Mechanical Data	
Output Cables	100 cm length cables 4 mm <sup>2</sup> 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	770x670x35 (mm)
Weight	15,35 (Kg)
Cells	125x125 (mm)
Solar Cells	24 (4x6)

## I-V Curve

## Dimensions

