

## **MONO-CRYSTALLINE SOLAR MODULE**

### **36 CELLS**

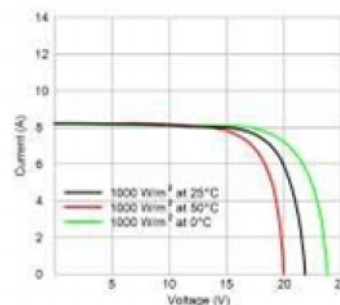
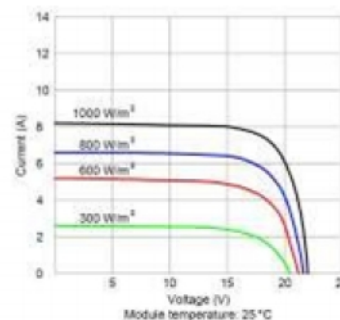
- **SP70M**
- **SP75M**
- **SP80M**
- **SP85M**
- **SP90M**

#### **FEATURES**

- High reliability with 0/+5% power output tolerance
- Withstands high wind-pressure and snow load, and extreme temperature variations
- High transparency tempered glass, 3.2 mm
- Maybe customized to meet customer specifications
- Rigorous quality control meeting the highest international standards

#### **WARRANTIES**

- 10 years limited product warranty
- 5 years at 95% of the minimal rated power output
- 10 years at 90% of the minimal rated power output
- 18 years at 85% of the minimal rated power output
- 25 years at 80% of the minimal rated power output



## Electrical Data

Model		SP70M	SP75M	SP80M	SP85M	SP90M
Maximum Power at STC (P <sub>m</sub> )	W <sub>p</sub>	70	75	80	85	90
Maximum Power Voltage (V <sub>mp</sub> )	V	17.5	17.5	17.5	17.5	17.5
Maximum Power Current (I <sub>mp</sub> )	A	4.00	4.29	4.57	4.86	5.14
Open Circuit Voltage (V <sub>oc</sub> )	V	21	21.5	21.5	21.5	21.5
Short Circuit Current (I <sub>sc</sub> )	A	4.52	4.29	4.57	4.86	5.14
Cell Efficiency	%	13.12	14.52	14.99	15.93	16.86
Panel Efficiency	%	10.83	11.60	12.37	13.15	13.92
Maximum System Voltage	V	715				
Operating Temperature	°C	From -40 to +85				
Power Tolerance	%	0/+5%				

## Components, Mechanical Data, Certifications

Cell Type		Mono-crystalline Silicon Solar Cells
Dimensions of Cell	mm	125 x 125
No. of Cells and Connections		36 (4 x 9)
Certifications		TÜV Application Class A 1000 VDC
Dimension of Module	mm	1195 x 541 x 40
Weight	kg	7.9

## Temperature Coefficient

Model		SP70M	SP75M	SP80M	SP85M	SP90M
Short Circuit Current Temperature Coefficient	%/°C	0.017	0.017	0.017	0.017	0.017
Open Circuit Voltage Temperature Coefficient	%/°C	-0.34	-0.34	-0.34	-0.34	-0.34
Maximum Power Temperature Coefficient	%/°C	-0.48	-0.48	-0.48	-0.48	-0.48
NOCT	°C	47 ±2				

The electrical specifications are measured under standard conditions (STC):

- Irradiance 1,000 W/m<sup>2</sup>
- Module Temperature 25°C
- AM 1.5

