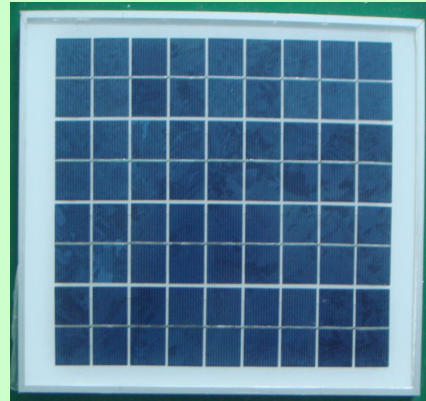


## HIGH EFFICIENCY 20W PV MODULE

The Solar module SP-P20 is designed for use in residential and Commercial systems. Reduced voltage temperature coefficient, exceptional low light performance and high sensitivity to light across the entire solar spectrum mean maximum yearly energy harvest.

Solar modules--innovative design, proven materials, outstanding performance



### FEATURES & BENEFITS

- ★ Low voltage temperature coefficient enhances high-temperature operation
- ★ Highest quality, high-transmission tempered glass provides enhanced stiffness and impact resistance
- ★ Superior aesthetics, aerospace style cell inter connects with in-plane strain relief provide extremely high reliability
- ★ Advanced EVA encapsulation system with multi-layer backsheets meets the most stringent safety requirements for high-voltage operation
- ★ A sturdy frame allows modules to be easily roof-mounted with a variety of standard mounting systems

### SP-P20 HIGH EFFICIENCY PV MODULE

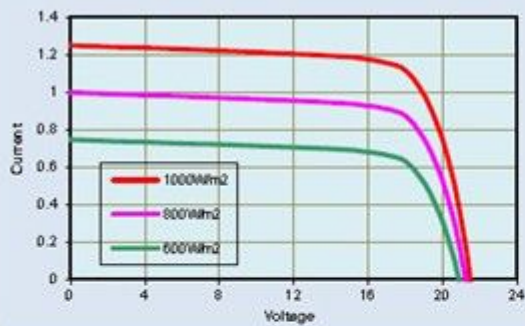
Limited warranty for 90% performance assurance on 5 years, 80% performance assurance on 25 years. Junction Box is designed according to IP65.

## SPECIFICATION

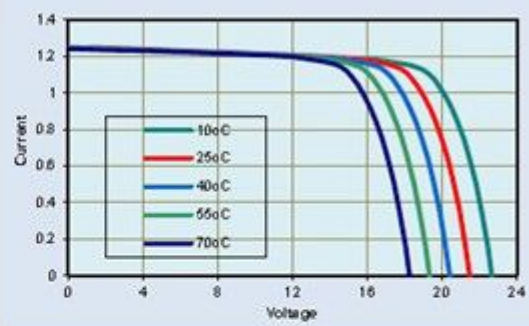
ITEM NO	SP-P20
MONO or POLY	MONO LIKE
Maximum power (Wp)	20W
Maximum power voltage (V)	17.3
Maximum power current (A)	1.16
Open circuit voltage (V)	21.6
Short circuit current (A)	1.23
Number of cells (Pcs)	36
Size of module (mm)	350*470*17mm
Maximum system voltage (V)	715
Temperature coefficients of Isc (%)	0.065+/-0.015%/°C
Temperature coefficients of Voc (%)	- (2.23+/-0.1) / °C
Temperature coefficients of Pm (%)	- (0.5+/-0.05) / °C
Temperature coefficients of Im (%)	+0.1/ °C
Temperature coefficients of Vm (%)	-0.38/ °C
Temperature Range	-40°C~+85°C
Tolerance Wattage (e.g. +/-5%)	+/-5%
Surface Maximum Load Capacity	60m/s(200kg/sq.m)
Allowable Hail Load	steel ball fall down from 1m height
Weight per piece (kg)	2.5
Junction Box Type	GY-BOX-5C
Length of Cables (mm)	None
Cell Efficiency (%)	> 15.5%
Module Efficiency (%)	> 13.2%
Output tolerance (%)	+/-5%
Frame (Material, Corners, etc.)	Aluminum
Standard Test Conditions	AM1.5 100mw/cm <sup>2</sup> 25°C
Warranty	5 years product warranty and 25years 80% of power
FF (%)	74%

## Electrical Output under Varying Light Intensity and Temperature

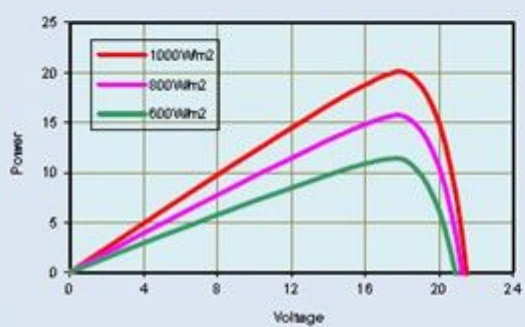
Current-Voltage Relationship, variable light intensity



Current-Voltage Relationship, variable temperature



Power-Voltage Relationship, variable light intensity



Power-Voltage Relationship, variable temperature

