



# POLYCRYSTALLINE SOLAR PANEL



## TS-S310P



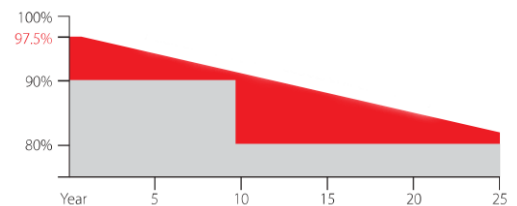
-  High conversion efficiency
-  Extremely environmental testing
-  Salt mist corrosion resistant
-  IP67 Junction box
-  Strong compressive strength
-  Fire test approved
-  PID Resistant

## GIVING YOU MORE

-  3% positive tolerance
-  Authorised photovoltaic certificates

-  Series of internal harsh tests
-  Linear performance warranty

Top Solar was established in 2008 and is a hi-tech corporation with its core business in R&D, manufacturing and sale of high efficiency solar panel.



[www.topsolar-energy.com](http://www.topsolar-energy.com)

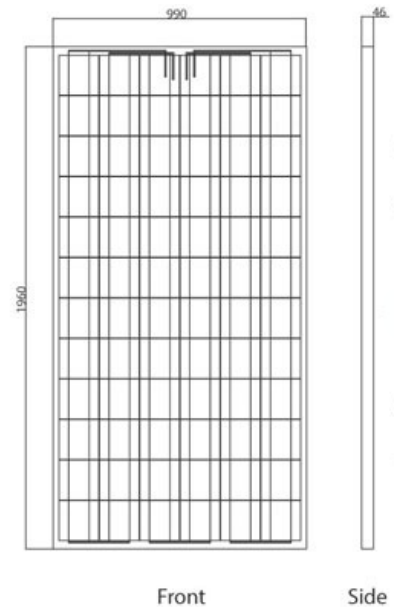
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### Electrical Characteristics under STC\*

Model No.:	TS-S310P
Maximum Power-Pmax(Wp)	310W
Voltage at Maximum Power-Vmp(V)	37.72V
Current at Maximum Power-Imp(A)	8.22A
Open Circuit Voltage-Voc(V)	44.67V
Short Circuit Current-Isc(A)	9.05A
Solar Panel Efficiency(%)	16.0
Power Tolerance(%)	0/+3

### Mechanical Characteristics

Cell Type	Polycrystalline	156*156mm
Number of Cells	72(6*12)	
Dimension	1960*990*46mm	
Weight	23.0kg	
Front Glass	Low Iron Tempered Glass	
Encapsulant	EVA	
Frame	Anodized Aluminum Alloy	



### Temperature Characteristics

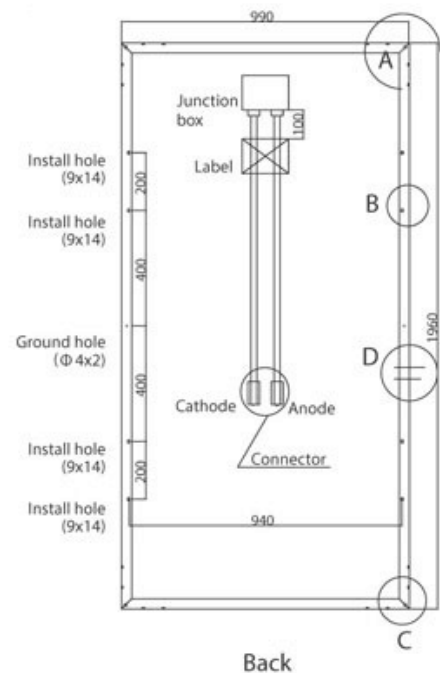
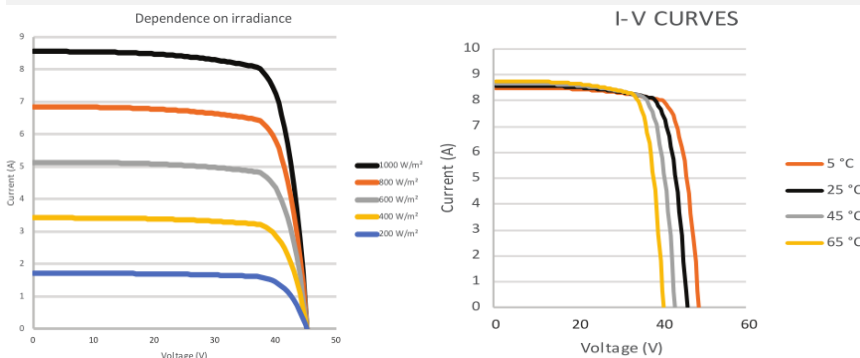
NOCT*	45±2 °C
Temperature Coefficient of Pmax(%)	-0.40/°C
Temperature Coefficient of Voc(%)	-0.31/°C
Temperature Coefficient of Isc(%)	0.04/°C

### Maximum System Ratings

Operating Temperature	-40°C to +85°C
Maximum System Voltage	1000V DC
Maximum Series Fuse Rating	15A

### Warranty

- 12 years product warranty
- 12 years warranty on 90% power output
- 25 years warranty on 80% power output



\*STC(Standard Testing Conditions):Irradiance 1000W/m<sup>2</sup>,cell temperature 25°C,AM=1.5 \*NOCT(Nominal Operating Cell Temperature):Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C,wind speed 1m/s  
The specifications in this datasheet are subjected to change without prior notice