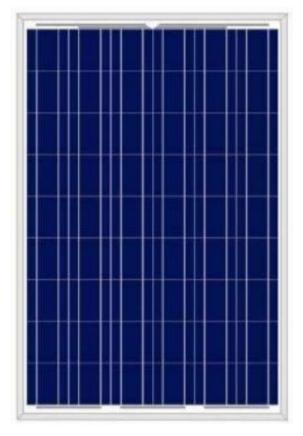
POLYCRYSTALLINE SOLAR PANEL TS-S230P









PID Resistant

GIVING YOU MORE



3% positive tolerance



Authorised photovoltaic certificates

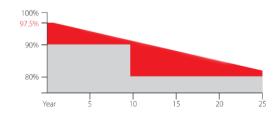
P





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.



Shenzhen Top Solar Energy Co., Ltd.

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Shajing Town,Baoan District,Shenzhen City,Guangdong Province,China Tel:86 755 85224431 Fax:86 755 28167996 Email:info@topsolar-energy.com

www.topsolar-energy.com



Electrical Characteristics under STC*

Model No.:	TS-S230P
Maximum Power-Pmax(Wp)	230W
Voltage at Maximum Power-Vmp(V)	28.08V
Current at Maximum Power-Imp(A)	8.2A
Open Circuit Voltage-Voc(V)	33.37V
Short Circuit Current-Isc(A)	8.76A
Solar Panel Efficiency(%)	15.6
Power Tolerance(%)	0/+3

Mechanical Characteristics

Cell Type	Polycrystalline 156*156mm	
Number of Cells	54(6*9)	
Dimension	1485*990*40mm	
Weight	17.0kg	
Front Glass	Low Iron Tempered Glass	
Encapsulant	EVA	
Frame	Anodized Aluminum Alloy	

侧面 正面

Side

Front

Maximum System Ratings

Temperature Characteristics

Temperature Coefficient of Pmax(%)

Temperature Coefficient of Voc(%) Temperature Coefficient of Isc(%)

Operating Temperature	−40 °C to +85°C	990
Maximum System Voltage	1000V DC	1
Maximum Series Fuse Rating	15A	安装孔 (9+14) box

45±2°℃

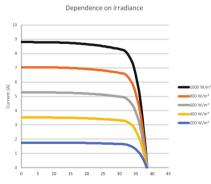
−0.40/°C **−0.31/°**C

0.04/°℃

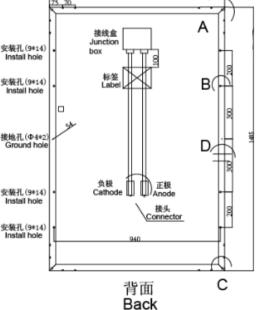
Warranty

NOCT*

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



Dependence on module temperature 20 25 Voltage (V) 30



*STC(Standard Testing Conditions):Irradiance 1000W/m²,cell temperature 25 °C,AM=1.5 *NOCT(Nominal Operating Cell Temperature):Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s The specifications in this datasheet are subjected to change without prior notice