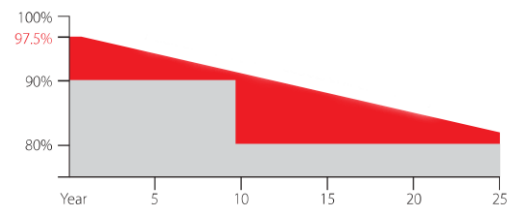# MONOCRYSTALLINE SOLAR PANEL
TS-S320M

TOP SOLAR

- 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 3% positive tolerance
- Series of internal harsh tests
- Authorised photovoltaic certificates
- 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.
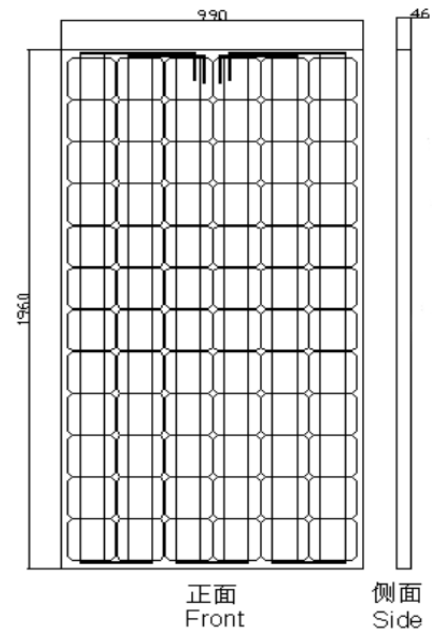
97.5%

100%

90%

80%

Year   5   10   15   20   25

MONOCRYSTALLINE SOLAR PANEL
TS-S320M

Electrical Characteristics under STC*

Model No.:	TS-S320M
Maximum Power-Pmax(Wp)	320W
Voltage at Maximum Power-Vmp(V)	38.64V
Current at Maximum Power-Imp(A)	8.29A
Open Circuit Voltage-Voc(V)	46.36V
Short Circuit Current-Isc(A)	9.11A
Solar Panel Efficiency(%)	16.5
Power Tolerance(%)	0/+3

Mechanical Characteristics

Cell Type	Monocrystalline	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
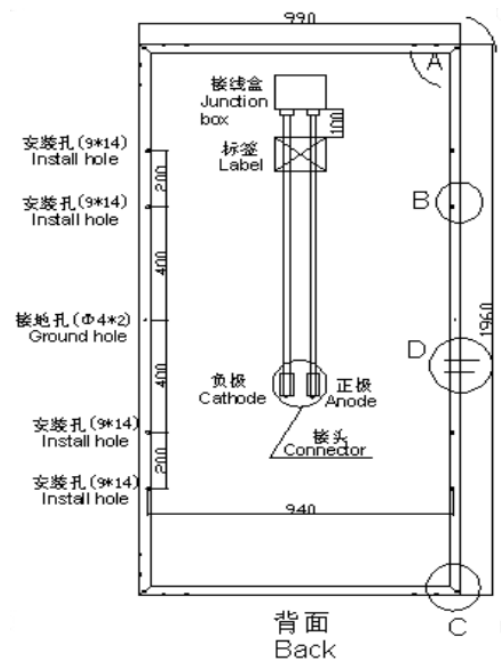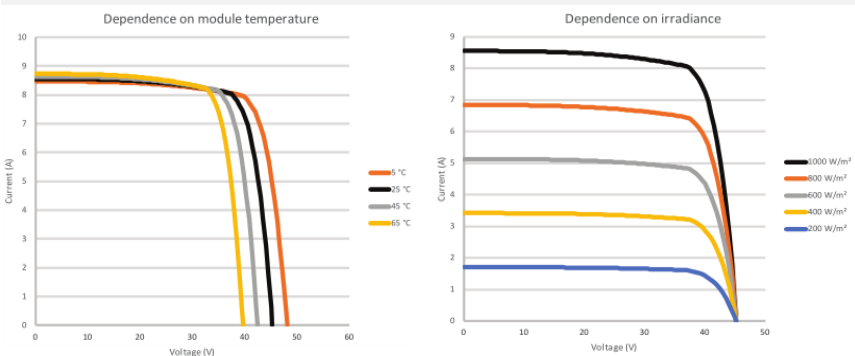
NOCT*	45±2℃
Temperature Coefficient of Pmax(%)	−0.40/℃
Temperature Coefficient of Voc(%)	−0.31/℃
Temperature Coefficient of Isc(%)	0.04/℃

Maximum System Ratings

Operating Temperature	−40℃ to +85℃
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

990

1960

46

正面 Front   側面 Side

接线盒 Junction box
标签 Label
安装孔 (9*14) Install hole
安装孔 (9*14) Install hole
接地孔 (Φ4*2) Ground hole
负极 Cathode   正极 Anode
接头 Connector
安装孔 (9*14) Install hole
安装孔 (9*14) Install hole
990
940
1960
200 400 400 200

A B D C

背面 Back

Dependence on module temperature

Dependence on irradiance

5℃ 25℃ 45℃ 65℃

1000 W/m² 800 W/m² 600 W/m² 400 W/m² 200 W/m²

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