



High Efficiency Mono-crystalline Photovoltaic Module



#### Overview

- High efficiency solar cells (approx. 18%) with quality silicon material for high module conversion efficiency and long term output stability and reliability.
- Positive power output tolerance from 0% to +3%.
- Rigorous quality control to meet the highest international standards.
- High transmittance, low iron tempered glass with enhanced stiffness and impact resistance.
- · Unique frame design with strong mechanical strength for greater than 30 lbs/ft<sup>2</sup> wind load and snow load withstanding and easy installation.
- Advanced encapsulation material with multilayer sheet lamination to provide long-life and enhanced cell performance.
- Outstanding electrical performance under high temperature and weak light environments.

### **Applications**

- Any large or small on-grid /off-grid solar power stations.
- Commercial/industrial building roof-top and ground systems.
- Residential roof-top and ground systems.

### Warranty

- 10 year limited product warranty on materials and workmanship.
- 25 year warranty on >80% power output and 10 year warranty on >90% power output.
- Refer to warranty document for detailed warranty information.

## Certifications

- ETL UL-1703 ISO 9000:2000
- CE TUV IEC61215 IEC61730









# **Mechanical Specifications**

Characteristic	Details
Cell Size	125mm x 125mm (4.92" x 4.92")
Module Dimension (L x W x T)	1580mm x 808mm x 40mm (62.2" x 31.8" x 1.6")
No. of Cells	6 x 12 = 72
Weight	15.5 kg (34.2 lbs)
Cable Length	900mm (35.4") for positive (+) and negative (-)
Type of Connector	MC-IV
Junction Box	IP65 Rated
No. of Holes in Frame	4 installation holes, 2 grounding holes, 4 drainage holes, & 16 air outlet holes





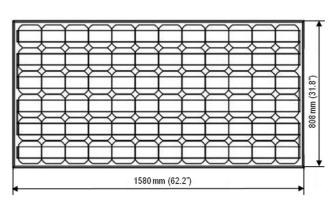
# **Electrical Specifications**

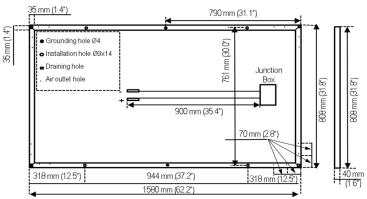
(STC\* =  $25 \, ^{\circ}$ C,  $1000 \text{W/m}^2$  Irradiance and AM=1.5)

Model	GS-S-195-Fab3		
Max System Voltage (IEC/UL)	1000V / 600V		
Maximum Power P <sub>max</sub>	195 W (0%, +3%)		
CEC Listed PTC Power	173.5 W		
Voltage at Maximum Power Point V <sub>mpp</sub>	36.2 V		
Current at Maximum Power Point Impp	5.38 A		
Open Circuit Voltage V <sub>oc</sub>	45.5 V		
Short Circuit Current Isc	5.58 A		
Module Efficiency (%)	15.3%		
Temperature Coefficient of Voc	-0.159 V/°C (-0.35% /°C)		
Temperature Coefficient of Isc	3.1x10 <sup>-3</sup> A/°C (0.06% /°C)		
Temperature Coefficient of P <sub>max</sub>	-0.88 W/°C (-0.45% /°C)		

<sup>\*</sup>Standard Test Conditions

### Physical Specifications mm (inch)

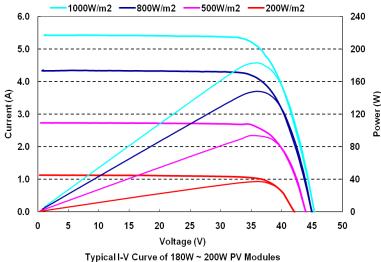




#### Other Performance Data

Power Tolerance	Operating Temperature	Max Series Fuse Rating	NOCT*
0%, +3%	-40 °C to +85 °C	10 A	45 °C ± 2 °C

<sup>\*</sup>Normal Operating Cell Temperature



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