



High Efficiency Polycrystalline Photovoltaic Module

Overview

- High efficiency solar cells with quality silicon material for high module conversion efficiency and long term output stability and reliability.
- 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 up to 50 lbs/ft² 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.
- Built in blocking diodes prevent reverse current flow.



Applications

- Emergency Backup, RVs, Pumps, Gates, Electric Fences, Lighting, 12 Volt Battery Charging and much more.

Warranty

- 5 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.

Mechanical Specifications (note: module dimensions may have +/- 1% variance)

Characteristic	Details
Cell Size	156mm x 104mm (6.14" x 4.40")
Module Dimension (L x W x T)	1020mm x 670mm x 35mm (40.16" x 26.37" x 1.38")
No. of Cells	36
Weight	8.2 kg (18.11 lbs)
Cable Length	900mm for positive (+) and negative (-)
Type of Connector	MC-IV comparable
Junction Box	IP65 Rated
No. of Holes in Frame	4 installation holes

MODEL: GS-STAR-100W

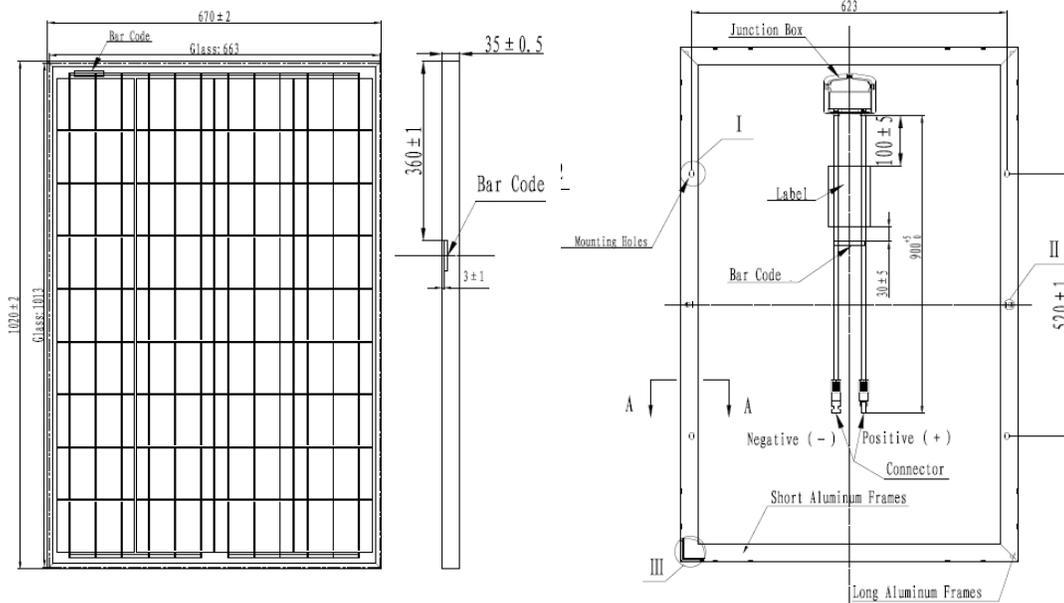
Electrical Specifications

(STC* = 25 °C, 1000W/m² Irradiance and AM=1.5)

Model	GS-STAR-100W
Max system voltage (IEC/UL)	1000V/600V
Maximum Power P _{max}	100 W* (0%, +6%)
Cell type	Poly silicon
Voltage at Maximum Power Point V _{mpp}	18.0 V
Current at Maximum Power Point I _{mpp}	5.56 A
Open Circuit Voltage V _{oc}	21.9 V
Short Circuit Current I _{sc}	6.13 A
Module Efficiency (%)	14.63%
Temperature Coefficient of V _{oc}	-0.32% /°C
Temperature Coefficient of I _{sc}	+0.04% /°C
Temperature Coefficient of P _{max}	-0.45% /°C

*Standard Test Conditions

Physical Specifications mm



Other Performance Data

Power Tolerance	Operating Temperature	Max Series Fuse Rating	NOCT*
0%, +6%	-40 °C to +85 °C	10A	45 +/-2°C

*Normal Operating Cell Temperature

www.GrapeSolar.com

For service or support call

1-541-349-9000

2635 W. 7th Place

Eugene, Oregon 97402, USA

Tel: 541.349.9000 Fax: 541.343.9000