



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 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.

Quality Assurance

- UV exposure IEC61345, hot spot endurance, and outdoor exposure test
- Blocking diode thermal, mechanical load, and wet leakage current test
- Thermal cycling, humidity freeze, damp heat test

Applications

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

Warranty

- 5 year limited product warranty on materials and workmanship.
- 25 year warranty on >80% power output and 12 year warranty on >90% power output.
- Refer to warranty document for detailed warranty information.

Mechanical Specifications

Characteristic	Details
Cell Size	156mm x 156mm (6.14" x 6.14")
Module Dimension (L x W x T)	1480mm x 675mm x 35mm (58.27" x 26.57" x 1.38")
No. of Cells	4 x 9 = 36
Weight	12.0 kg (26.4 lbs)
Cable Length	1000mm (39.37") for positive (+) and negative (-)
Type of Connector	MC4 Comparable
Junction Box	IP65 Rated
No. of Holes in Frame	8 draining holes, 4 installation holes, 2 grounding holes

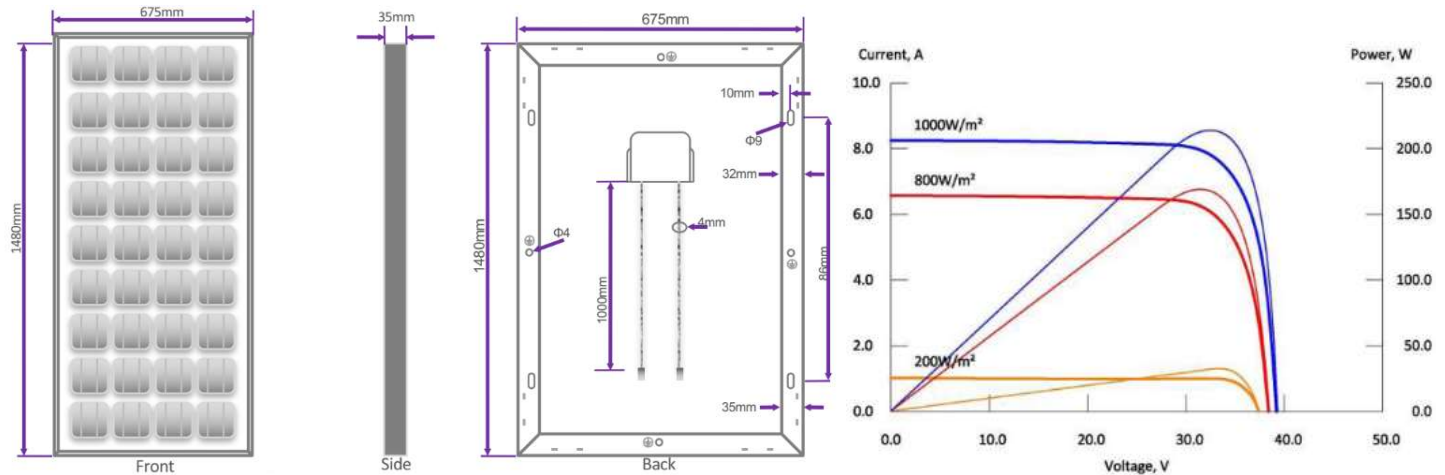


Electrical Specifications

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

Model	GS-Star-180W-US
Max System Voltage (IEC/UL)	600V
Maximum Power P _{max}	180 W (0%, +3%)
Voltage at Maximum Power Point V _{mp}	19.67 V
Current at Maximum Power Point I _{mp}	9.15 A
Open Circuit Voltage V _{oc}	24.06 V
Short Circuit Current I _{sc}	9.77 A
Module Efficiency (%)	18.0%
Temperature Coefficient of V _{oc}	-0.28 %/°C
Temperature Coefficient of I _{sc}	+0.04 %/°C
Temperature Coefficient of P _{max}	-0.38 %/°C

*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	15 A	46 °C ± 2 °C

*Normal Operating Cell Temperature

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