High Efficiency Back-Contact Monocrystalline Silicon Photovoltaic Module





Overview

- High efficiency back-contact solar cells (approx. 20%) 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 greater than 30 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.

Applications

- Commercial/industrial off-grid solar power systems.
- · Residential off-grid solar power systems.

Warranty

- 10 year limited warranty on power output ≥ 90% of the power rating.
- Refer to warranty document for detailed warranty information.

Certifications

- ISO 9000:2000
- CE





Mechanical Specifications

Characteristic	Details
Cell Size	125mm x 125mm (4.93" x 4.93")
Module Dimension (L x W x T)	1037mm x 527mm x 35mm (40.8" x 20.7" x 1.38")
No. of Cells	4 x 8 = 32
Weight	7.4 kg (16.3 lbs)
Cable Length	800mm ~ 1100mm (35.4" ~ 43.3")
Type of Connector	MC-IV
Junction Box	IP65 Rated
No. of Holes in Frame	4 installation holes, 2 grounding holes



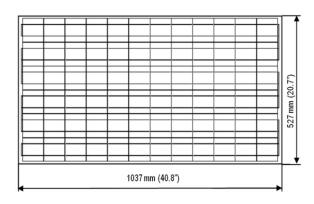
Electrical Specifications

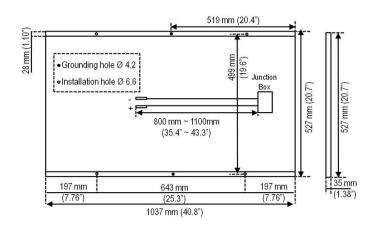
 $(STC^* = 25 \, {}^{\circ}C, \, 1000W/m^2 \, Irradiance, \, and \, AM=1.5)$

Model	GS-S-100-TS		
Max System Voltage	600 V		
Maximum Power P _{max}	100 W (-5%, +10%)		
Voltage at Maximum Power Point V _{mpp}	17.7 V		
Current at Maximum Power Point Impp	5.70 A		
Open Circuit Voltage V _{oc}	21.2 V		
Short Circuit Current Isc	6.10 A		
Module Efficiency (%)	18.3%		
Temperature Coefficient of Voc	-0.061 V/°C (-0.28% /°C)		
Temperature Coefficient of Isc	3.5x10 ⁻³ A/°C (0.06% /°C)		
Temperature Coefficient of P _{max}	-0.38 W/°C (-0.38% /°C)		

^{*}Standard Test Conditions

Physical Specifications mm (inch)





Other Performance Data

Power Tolerance	Operating Temperature	Max Series Fuse Rating	NOCT*
-5%, +10%	-40 °C to +85 °C	10 A	46 °C ± 2 °C

^{*}Normal Operating Cell Temperature

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