

Monocrystalline Solar Modules

SUNGEN SGM-D Series 160W/165W/170W/175W/180W

Product Features

- High conversion efficiency photovoltaic modules made of mono-crystalline silicon solar cells.
- Integrated bypass diodes in the junction box reduce the power loss effect in a string caused by events such as shading.
- Module is glass to back sheet laminated.
- Water-protected connector system, easy for installation.

Quality and Safety

- Product warranty : Free from defects in material and workmanship for 5 years.
- Power warranty :
Maintain more than 90% of minimum rated power for 10 years.
Maintain more than 80% minimum rated power for 25 years.
- According to IEC 61215.
- According to IEC 61730.
- According to UL 1703.
- TÜV, UL certified.



Brief Information

- 125mm x 125mm (4.92inches x 4.92inches) mono-crystalline solar cells.
- 72 cells in series (6X12).
- 2,400N/m² (50psf) mechanical load-bearing capacity
245kg/m² (50pounds/foot²).
- 1000VDC (IEC)/ 600 VDC (UL) maximum system voltage.

Applications

- On-grid PV Systems.
- Off-grid PV Systems.
- Residential Roof Top Systems.
- Commercial Roof Top Systems.
- Ground Installations.

Please read our extensive installation guide carefully prior to installing the photovoltaic modules.

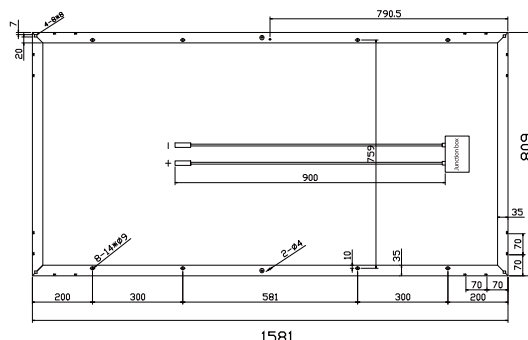
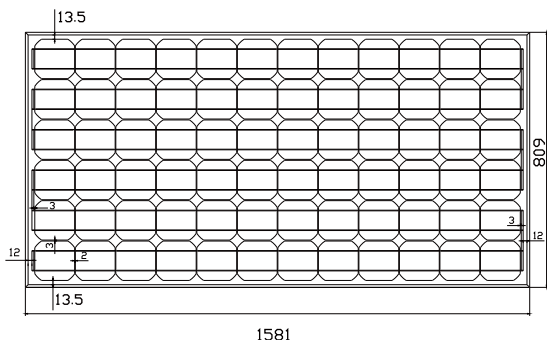


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TRUE eco-NOMY



Characteristics

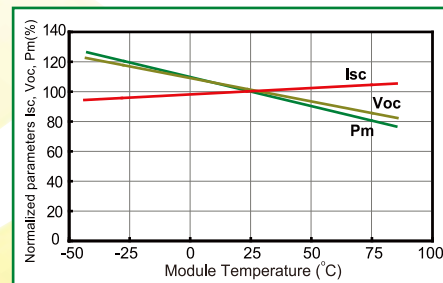
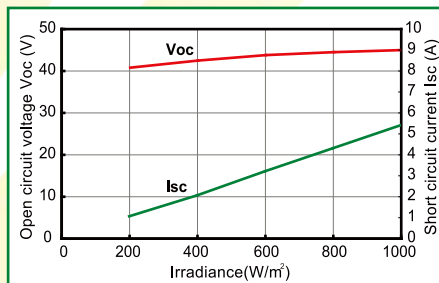
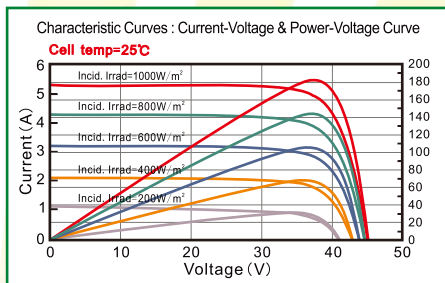
Model	SGM-160D	SGM-165D	SGM-170D	SGM-175D	SGM-180D
Max-power Voltage (Vmp)	34.5V	35.4V	35.0V	35.8V	36.2V
Max-power Current (Imp)	4.64A	4.66A	4.78A	4.89A	4.97A
Open-circuit Voltage (Voc)	41.8V	43.6V	44.2V	44.2V	44.2V
Short-circuit Current (Isc)	5.07A	5.08A	5.15A	5.25A	5.36A
Max-power (Pm)	160W	165W	170W	175W	180W
Module Efficiency (η)	12.67%	12.90%	13.41%	13.81%	14.16%
Temperature Coefficient of Pm	-0.37%/K				
Temperature Coefficient of Voc	-0.34%/K				
Temperature Coefficient of Isc	0.09%/K				
NOCT	48°C \pm 2°C (118.4°F \pm 3.6°F)				
Operating Temperature	-40°C \sim +85°C (-40°F \sim +185°F)				
Maximum System Voltage	1000VDC (IEC)/ 600 VDC (UL)				

Specifications

Cell	125mm x 125mm (4.92 inches x 4.92 inches)	Dimension of Module	1581mm x 809mm x 40mm (62.24 inches x 31.85 inches x 1.57 inches)
Tolerance	-1% \sim +3%	Weight	15.5kg (34.16lbs)
No. of Cells	72 (12 x 6)		

Standard Test Conditions: Irradiance 1000W/m², Spectrum AM1.5 at 25°C, Voc or Isc can be customized.

Characteristic Curves (SGM-180D)



Please note the graphs above will have a tolerance.

SUNGEN International Ltd. March 2010

SUNGEN reserves the rights to modify these specifications and warranties without notice.