

## SG FULL BLACK LINE SG270M / SG280M



### MONO-CRYSTALLINE SOLAR MODULE

60 CELLS 156x156mm

30-years linear warranty to guarantee maximum efficiency and reliability. Thank to the combination of innovative production processes and advanced engineering techniques, Peimar is able to provide high-efficiency monocrystalline solar panels. The employ of solar cells with an efficiency greater than 20% allows our panels to guarantee maximum output and high performances under extremely changing environmental conditions. We choose certified suppliers and use the best materials for our panels, thus ensuring them to be extremely flexible and resistant to atmospheric agents and accidental shocks. Modern design, high-performances and a very long lifespan: these are the strongest points of our monocrystalline solar panels!



High reliability with guaranteed  
0 to +5W power output tolerance



30 Year Linear Power Warranty  
12 Year Product Warranty



Excellent performance  
under different light  
conditions



IP65 JUNCTION BOX  
Able to withstand the most varied  
atmospheric conditions



Passing mechanical load test of  
5400 Pa to withstand heavier snow  
load and 2400 Pa to withstand  
wind pressure



Compact and ultra-light aluminum  
frame with 40mm thickness to  
handle the panel in a easier way

# SG270M / SG280M

## SG FULL BLACK LINE

### ELECTRICAL CHARACTERISTICS (STC)\*

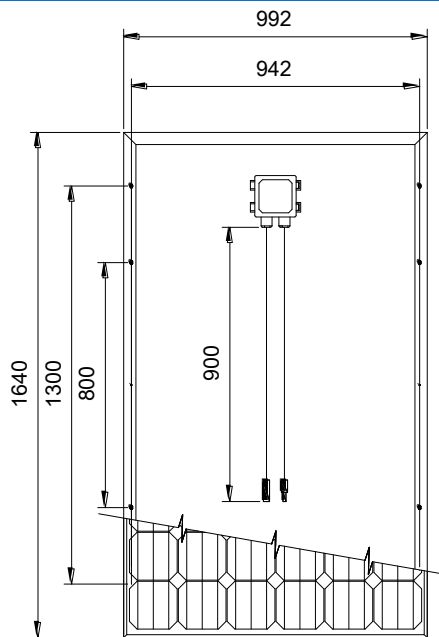
	SG270M	SG280M
Nominal Output (Pmax) [W]	270	280
Flash Test Power Classification [W]	0 / +5	0 / +5
Voltage at Pmax (Vmp) [V]	30.9	31.2
Current at Pmax (Imp) [A]	8.81	9.07
Open Circuit Voltage (Voc) [V]	39.2	39.5
Short Circuit Current (Isc) [A]	9.44	9.71
Maximum System Voltage [V]	1000	
Maximum Series Fuse Rating [A]	15	15
Cell Efficiency [%]	19.49	20.21
Module Efficiency [%]	16.50	17.11

STC\* (Standard Test Condition): Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, Air Mass 1.5

### MECHANICAL CHARACTERISTICS

Solar Cells	60(6x10) mono-crystalline cells 156x156 mm
Font Cover	3.2 mm thick, low iron tempered glass
Back Cover	TPT (Tedlar-PET-Tedlar)
Encapsulant	EVA (Ethylene vinyl acetate)
Frame	Black anodized aluminium alloy, double wall
Diodes	3 Bypass diodes serviceable
Junction Box	IP65 rated
Connector	MC4 or compatible connector
Cables	Length: 900 mm / Section: 4.0 mm <sup>2</sup>
Dimensions	1640 x 992 x 40 mm
Weight	18 kg
Max. Load	Certified to 5400 Pa

### DIMENSIONS



### TEMPERATURE CHARACTERISTICS

NOCT**	45±2 °C
Temperature Coefficient of Pmax	-0.45 %/°C
Temperature Coefficient of Voc	-0.32 %/°C
Temperature Coefficient of Isc	0.047 %/°C
Operating Temperature	-40°C ~ +85°C

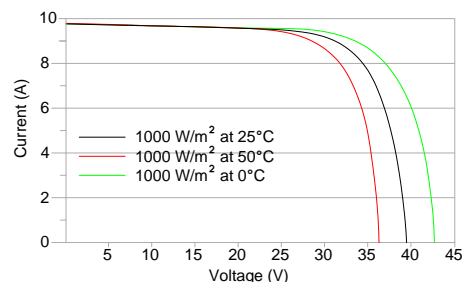
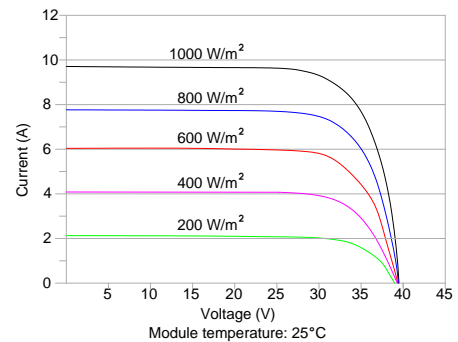
NOCT\*\*: Nominal Operation Cell Temperature Sun 800W/m<sup>2</sup>; Air 20°C; Wind speed 1m/s

### PACKING CONFIGURATION

Pallet dimensions	1700 x 1100 x 1200 mm
Pieces per pallet	27 pcs
Weight	516 kg

\* Pallets can be stacked up to two

### CURRENT / VOLTAGE CHARACTERISTICS\*



\* The above values apply to SG280M



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