

**PERC TECHNOLOGY\***  
Passivated Emitter and Rear Cell



**30** YEAR LINEAR POWER WARRANTY  
ANNI GARANZIA LINEARE PRODUZIONE

**20** YEAR PRODUCT WARRANTY  
ANNI GARANZIA PRODOTTO

## FULL BLACK LINE

**SG290M (FB)**

 MADE IN ITALY MODULE

PEIMAR monocrystalline solar panels, produced using a combination of innovative production processes and advanced engineering techniques, provide customers with maximum output and super high performance (over 20% efficiency). This allows fewer panels to be used to generate more energy, ideal if space is restricted or environmental conditions are challenging. Modern design, using matching black cells and frames and a very long lifespan ensure this monocrystalline are a great option.

\*Thanks to the use of **PERC** cells, PEIMAR modules are able to reach even higher efficiencies, as they facilitate the light imprisonment in close proximity to the rear surface and optimise the electron capture.



**POSITIVE POWER OUTPUT TOLERANCE**



MODULE FIRE PERFORMANCE: **CLASS I**



**ANTI-REFLECTIVE GLASS**



**HAILSTORM RESISTANCE**

### CELLS

**60**  
MONO



QTY:  
60 CELLS  
TYPE:  
MONO 4BB-5BB  
**PERC TECHNOLOGY** ⚡  
DIMENSION:  
156x156 mm / 6x6"

### FRAME



### BACKSHEET



### JUNCTION BOX



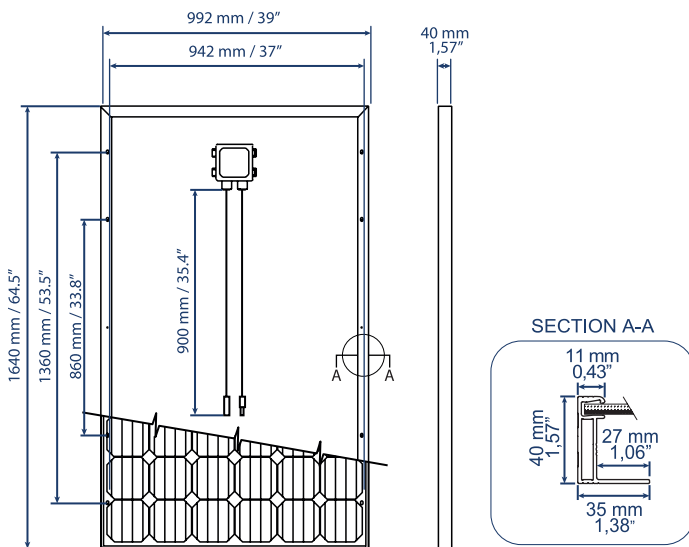
## ELECTRICAL CHARACTERISTICS (STC)\*

	SG290M (FB)
Nominal Output (Pmax)	290 W
Flash Test Power Tolerance	0/+5 W
Voltage at Pmax (Vmp)	31.6 V
Current at Pmax (Imp)	9.18 A
Open Circuit Voltage (Voc)	39.6 V
Short Circuit Current (Isc)	9.55 A
Maximum System Voltage	1000 V
Maximum Series Fuse Rating	15 A
Cell Efficiency	20.93 %
Module Efficiency	17.83 %

## MECHANICAL CHARACTERISTICS

Solar Cells	60 (6x10) monocrystalline <b>PERC</b>
Solar Cells Size	156x156 mm / 6x6"
Front Cover	3.2 mm / 0.12" thick, low iron tempered glass
Back Cover	TPT (Tedlar-PET-Tedlar)
Encapsulant	EVA (Ethylene vinyl acetate)
Frame	Anodized aluminium alloy, double wall
Frame finishing	Black
Backsheet finishing	Black
Diodes	3 Bypass diodes serviceable
Junction Box	IP67 rated
Connector	MC4 or compatible connector
Cables Length	900 mm / 35.4"
Cables Section	4.0 mm <sup>2</sup> / 0,006 in <sup>2</sup>
Dimensions	1640x992x40 mm / 64.5x39x1.57"
Weight	18 Kg / 39.7 lbs
Max. Load	Certified to 5400 Pa

## DIMENSIONS



## TEMPERATURE CHARACTERISTICS

NOCT**	45±2 °C
Temperature Coefficient of Pmax	-0.42 %/°C
Temperature Coefficient of Voc	-0.32 %/°C
Temperature Coefficient of Isc	0.047 %/°C
Operating Temperature	-40 °C ~ +85°C

## PACKAGING\*\*\*

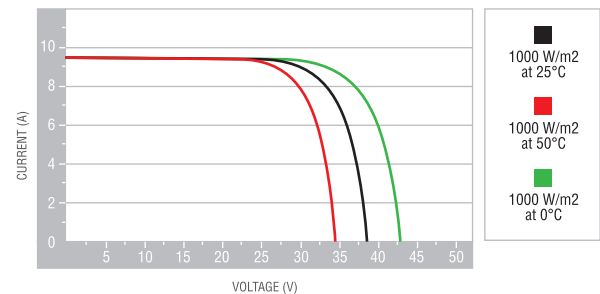
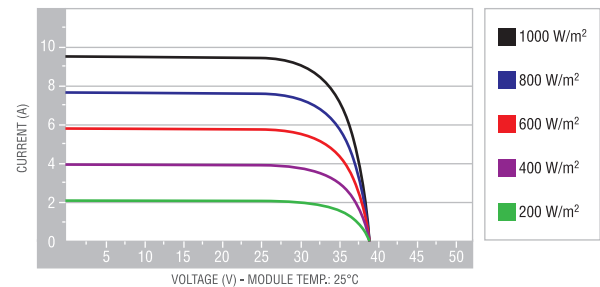
Pallet dimensions	1700x1200x1200 mm / 67x47x47"
Pieces per pallet	27
Weight	516 Kg / 1138 lbs

## CERTIFICATIONS

Fire Resistance Rating	1 (UNI 9177)
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## CURRENT/VOLTAGE CHARACTERISTICS

Values apply to modules: SG290M (FB)



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

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

\*\*\*Pallets can be stacked up to two

It is important to point out, that all technical specifications, information and figures contained in this datasheet are estimated values. Peimar reserves the right to change the technical specifications, information and figures contained in this document at any time without notice.

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**PEIMAR**  
ITALIAN PHOTOVOLTAIC MODULES

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