

2nd Generation Monocrystalline PV modules S6M-2G of 230, 235, 240, 245 and 250 Wp.



## Product Certifications

Factory Inspection Certification according to GSE requirements.

Certified according to IEC 61215:2005 standard (manufacturing approval and design qualification).

Certified according to IEC 61730-1 and IEC 61730-2:2004 standards (electrical safety qualification).



## Company Certifications



European manufacturing in its own facilities certified according to OHSAS 18001, ISO 14001 and 9001 standards.

## Guarantees

10 years: materials.  
10 years: 90% of the nominal power.  
25 years: 80% of the nominal power.

## Technical characteristics

High efficiency, of up to 15,3%, with **positive tolerances**. (-0, +5Wp).

Light module weighing 19 kg with encapsulated serial number.

Snow load (5.400 Pa).

High corrosion resistance in salty environments and agricultural areas (has passed the IEC 61701 salt mist corrosion test and the IE 62716 ammonia corrosion test).



## Key facts of Solaria

The only Spanish solar photovoltaic company listed on the Madrid Stock Exchange.

Vertically integrated company, with full control over the whole production process.

Design and production of monocrystalline and polycrystalline silicon cells.

Solaria intensively uses its modules in self operated plants and large facilities turnkey solutions for third parties.

## Electrical characteristics of the S6M-2G series(\*)

		S6M2G230	S6M2G235	S6M2G240	S6M2G245	S6M2G250
Maximum power (-0,+5Wp)	$P_{max}$	230 Wp	235 Wp	240 Wp	245 Wp	250 Wp
Voltage at maximum power	$V_{mpp}$	29,46 V	29,75 V	30,05 V	30,33 V	30,61 V
Current at maximum power	$I_{mpp}$	7,81 A	7,90 A	7,99 A	8,08 A	8,17 A
Open circuit voltage	$V_{oc}$	37,10 V	37,34 V	37,58 V	37,82 V	38,06 V
Short circuit current	$I_{sc}$	8,44 A	8,47 A	8,49 A	8,52 A	8,54 A
Module efficiency	$E_{fm}$	14,1%	14,4%	14,7%	15,0%	15,3%

Temperature coefficient of $I_{sc}$		+0,015%/K
Temperature coefficient of $V_{oc}$		-0,31%/K
Temperature coefficient of $P_{max}$		-0,46%/K
Maximum reverse current		20 A
Maximum system voltage (IEC)		1000 V (Clase A)

Efficiency reduction in a partial loading performance: lower than 5% (200 W/m<sup>2</sup>, 25°C).

(\*) Electric values under Standard Test Conditions (STC) with an irradiation value of 1000W/m<sup>2</sup>, at an AM 1,5 solar spectrum and a temperature of 25°C. The measurement tolerance of the electric parameters is ±2,5%

## Electrical characteristics under NOCT conditions (800 W/m<sup>2</sup>, AM 1,5, 20°C, 1m/s) at 46±2 °C

		S6M2G230	S6M2G235	S6M2G240	S6M2G245	S6M2G250
Maximum power (-0,+5Wp)	$P_{max}$ (Wp)	169,71	173,38	177,09	180,72	184,42
Voltage at maximum power	$V_{mpp}$ (V)	27,55	27,83	28,11	28,37	28,63
Current at maximum power	$I_{mpp}$ (A)	6,16	6,23	6,30	6,37	6,44
Open circuit voltage	$V_{oc}$ (V)	34,4	34,63	34,85	35,07	35,29
Short circuit current	$I_{sc}$ (A)	6,79	6,81	6,83	6,85	6,87

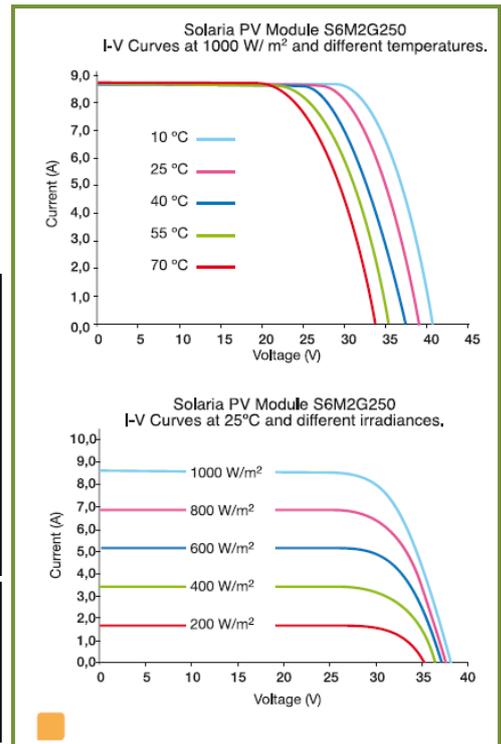
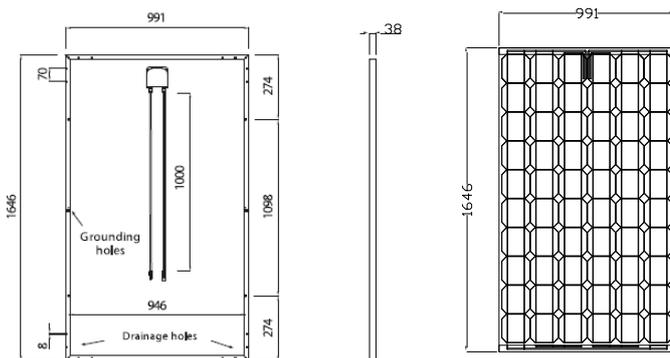
## Constructive and dimensional characteristics

Dimensions (± 3 mm) 1646 x 991 x 38 mm.  
 Weight (Kg) 19 kg.  
 Solar Cells **Cell type:** mono-crystalline texturised and antireflective coated.  
**Cell arrangement:** 60 (6x10). Available in 2 and 3 bus bar.  
 Construction **Front:** high transmission tempered glass 3,2 mm thickness.  
**Rear:** highly insulating backsheet.  
**Encapsulation:** EVA (Ethylene – Vinyl - Acetate).  
**Frame:** anodized aluminium with water drainage holes

## Electrical connections

Junction box IP 65.  
 Protection diodes Including removable by-pass diodes.  
 Connectors 100 cm long cables (Ø4 mm<sup>2</sup>) and fast MC4plus IP67 connectors or compatible.

## Mechanical characteristics



Distributor Stamp

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This datasheet follows IEC 50380 standards.  
 Data in this technical datasheet is subject to change without prior warning by Solaria.  
 Please, before using this product consult the Installation Manual.