

CSG 80 Crystalline Silicon on Glass solar module

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SUMMARY OF QUALITIES

- General purpose, high voltage solar module using patented Crystalline Silicon on Glass technology, ideal for medium to large size installations
- Silicon layer 150 times thinner than standard crystalline technologies
- Exceptional durability: highly resistant to water, temperature and other environmental factors
- Aesthetically pleasing appearance for architectural applications
- No toxic material used in the module. Lead free soldering
- Lightweight module with anodised aluminium frame
- Supplied with quick-locking cables to reduce installation time
- Certified to IEC 61215/IEC 61646, IEC 61730 and TÜV Safety Class II (pending)

25 years output warranty (80 %)

12 years output warranty (90 %)

5 years product warranty



PERFORMANCE

STANDARD TEST CONDITIONS (STC)*		NOMINAL OPERATING CONDITIONS (NOCT*)	
Rated and minimum power	80 W	Minimum power	59 W
Voltage at max. power (V _{mp})	59 V	Voltage at max. power	54 V
Current at max. power (I _{mp})	1,4 A	Current at max. power	1,1 A
Open – circuit voltage (V _{oc})	83 V	Open – circuit voltage	76 V
Short – circuit current (I _{sc})	1,6 A	Short – circuit current	1,3 A

*STC: irradiance level 1000 W/m², spectrum AM 1,5 G, cell temperature 25 °C

*NOCT: irradiance level 800 W/m², spectrum AM 1,5 G, wind velocity 1 m/s, ambient temperature 20 °C

Electrical characteristics for power bins other than CSG 80 available upon request.

TEMPERATURE EFFECTS

Temperature coefficient of I _{sc}	+0,14 %/K = +2,3 mA/K
Temperature coefficient of V _{oc}	-2,2 mV/cell/K = -390 mV/K
Temperature coefficient of power	-0,58 %/K = -0,46 W/K
NOCT	41 °C

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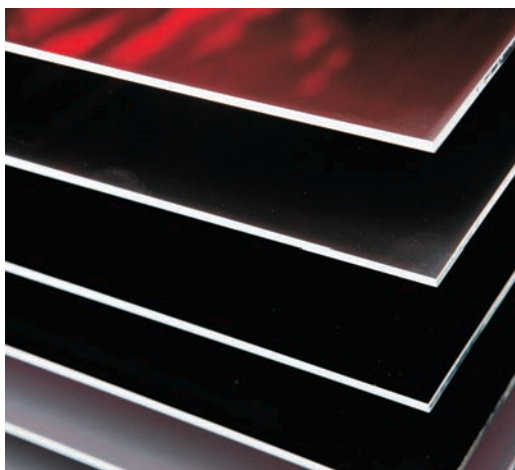
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MECHANICAL CHARACTERISTICS

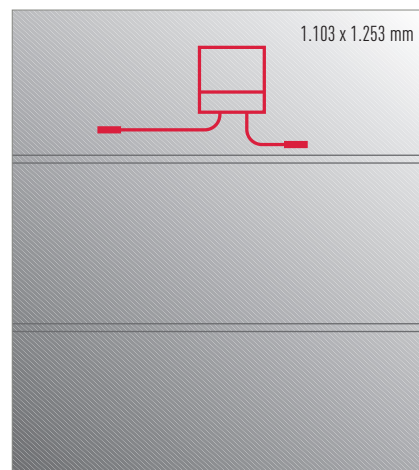
STRUCTURE	
Front cover	Borosilicate glass (3,3 mm)
Cell type	Crystalline Silicon on Glass
Number of cells	175, monolithically connected
Bypass diode	1
Encapsulant	EVA (Ethylene Vinyl Acetate)
Backsheet	White TPE, 1000 V rated
Frame	Silver anodised aluminium, 41x1,8 mm double cross members
Output terminals	Multi-contact MC-4,80 cm cables

DIMENSIONS (framed)	
Length	1.253 mm
Width	1.103 mm
Depth	41,0 mm
Weight	14,5 kg

OPERATING LIMITS	
Maximum system voltage	1000 V
Operating temperature	-40 °C ... + 90 °C
Tested wind resistance	130 km/h
Hail resistance	25 mm at 83 km/h



Available in 5-watts power bins from 70 to 90 watts.



Drawing of the backside of the module