



Polysolar

PS-C-901 Series Product Specifications Ver 20913

Polysolar Photovoltaic Glazing

**STC Product Specifications for thin-film
glass/glass laminate BIPV glazing units**

PS-C- Series modules

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Physical Specifications PS-C-Series

Model Type		PS-C Series Amber Tinted Transparent Module
Active Material of Cell		Amorphous Silicon (a-Si), single junction
Material for Encapsulation		Polyvinylbutyral (PVB), thickness: 0.76 mm
Front Cover		Float Glass, thickness: 3.2 mm
Back Cover		Float Glass, thickness: 3.2mm
Wiring Material		Tin & silver coated copper ribbon thickness 0.1mm
Junction Box	Bypass diode	Yes
	IP Class	IP 67
Cable length		Upwards 800mm (+), 600mm (-)
Connecting Cable Plug		Rated voltage 1000 Volts D.C. Temperature range: -40 to 85°C Plug/Socket MC4 compatible Ø 4mm Cable cross section: 2.5mm ²
Transparency		20 +/-3.5% average transmission (T%) at 400-800nm
Frame		No frameless glass-laminate module (edge clamp: 13mm +/-1)
Dimensions	Width	1100mm+2/-1mm
	Length	1300mm +2/-1mm
	Thickness	7.0± 0.5mm
	+ junction box	26.± 1.0mm Available as DGU also Text
Weight		24.0± 0.5Kg
Certifications		IEC 6164 & 61730 by TÜV- Rheinland MCS – NQA certified, CE Mark
<p>The module is tested under 2400 Pa (50lb/ft²) mechanical load or approximately to a wind speed of 130km/h (80 mph) with certified mounting solutions. Other mounting solutions for higher mechanical loads are also available and can be warranted by Polysolar</p>		



Electrical Specifications PS-C-Series

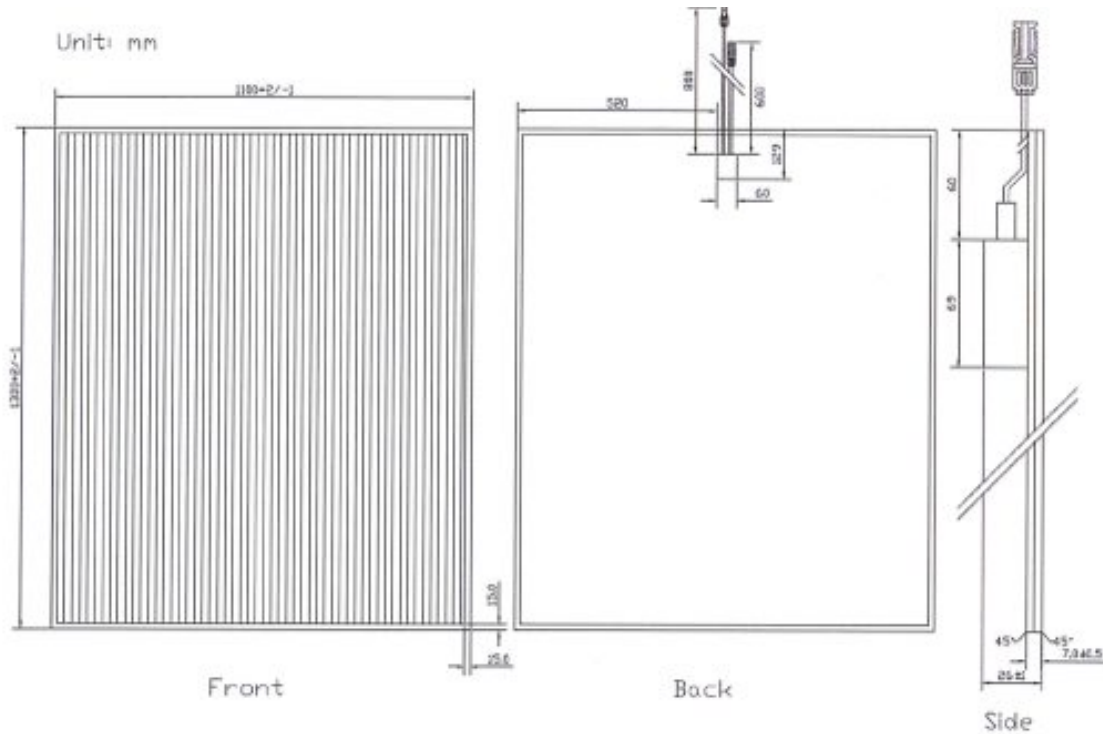
Polysolar Model	Class	Stabilized Performance				Initial Performance			
		V _{mpp} (V)	I _{mpp} (A)	V _{oc} (V)	I _{sc} (A)	V _{mpp} (V)	I _{mpp} (A)	V _{oc} (V)	I _{sc} (A)
		Electrical tolerance ± 10%							
PS-C-902	85W	103	0.85	137	1.11	106	1.05	140	1.15
PS-C-901	90W	103	0.90	137	1.15	111	1.06	140	1.20
PS-C-900	95W	103	0.95	138	1.20	111	1.07	141	1.23
Max over current rating	2.0A. 2A Fuse								
Temp Co-efficient	I _{sc} +0.09%/K V _{oc} -0.34%/K P _{mpp} -0.20%/K								
Max System Voltage	1000Vdc (IEC) 600Vdc (UL)								
Irradiance (W/m ²)	P _{mpp} (W)	V _{mpp} (V)	I _{mpp} (A)		V _{oc} (V)		I _{sc} (A)		
1000 (STC)	92	106	0.86		139		1.04		
800	65	98	0.66		127		0.83		
600	52	98	0.59		127		0.76		
400	34	98	0.30		126		0.45		
200	15	97	0.15		125		0.19		

The units electrical ratings are measured under Standard Test Conditions (STC) and have been delivered on the specific table of electrical characteristics as shown above. A photovoltaic module may produce more current and/or voltage than reported at STC. Sunny, cool weather and reflection from snow or water can increase current and power output. Therefore, the values of I_{sc} and V_{oc} marked on the units should be multiplied by a factor of 1.25 when determining component voltage ratings, conductor capacities, fuse sizes, and size of controls connected to PV output. [STC]: 1000 W/m², AM 1.5, 25 °C. The exactly measured electrical characteristics are shown on the label of the units. All electrical data is average production data and is subject to a measuring equipment tolerance; module nominal power is subject to a tolerance of ±2% and power class is sorted on basis of +4.99Wp/-0Wp. Manufacturer warranty: 5 years Performance Warranty; 10years @ 90% of power rating & 25years @ 80% of power rating.



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Dimensions and Drawings



Warranty

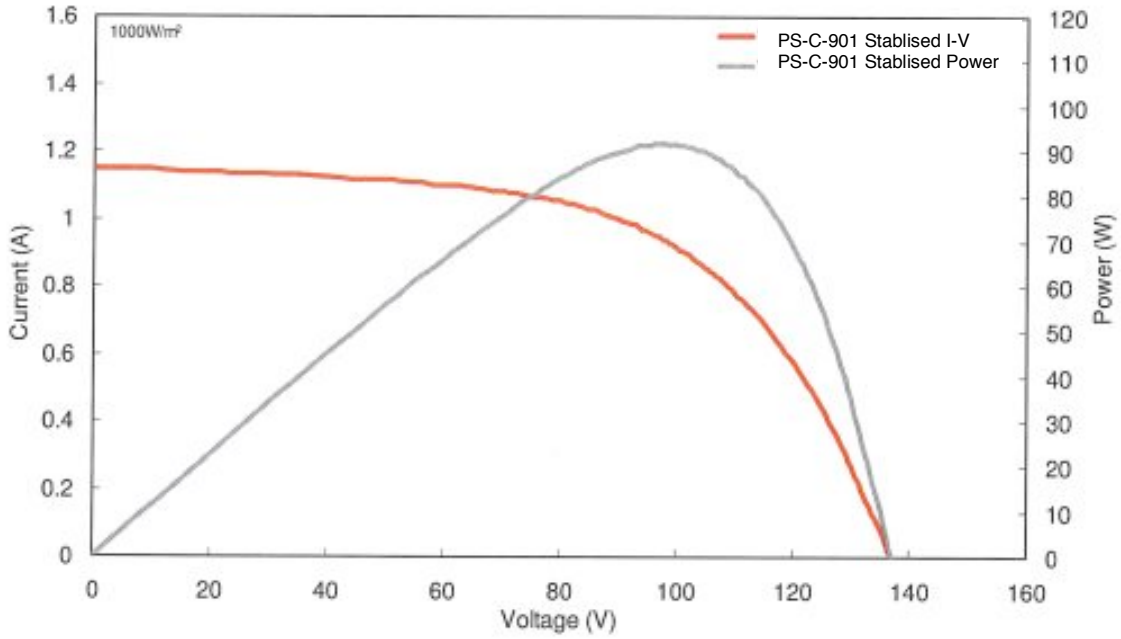
Warranty on Product (Workmanship & Materials)	Warranty on Performance (Power Grade Output)
5 years from date of shipment from Polysolar	90% of power grade output of the module for a 10 year period and then 80% of the power grade output of the module for a 25 year period from date of shipment from Polysolar

Note: Modules must only be used in configurations where the negative polarity of the PV panel is connected to the ground. Failure to comply with this requirement will invalidate the warranty for the module

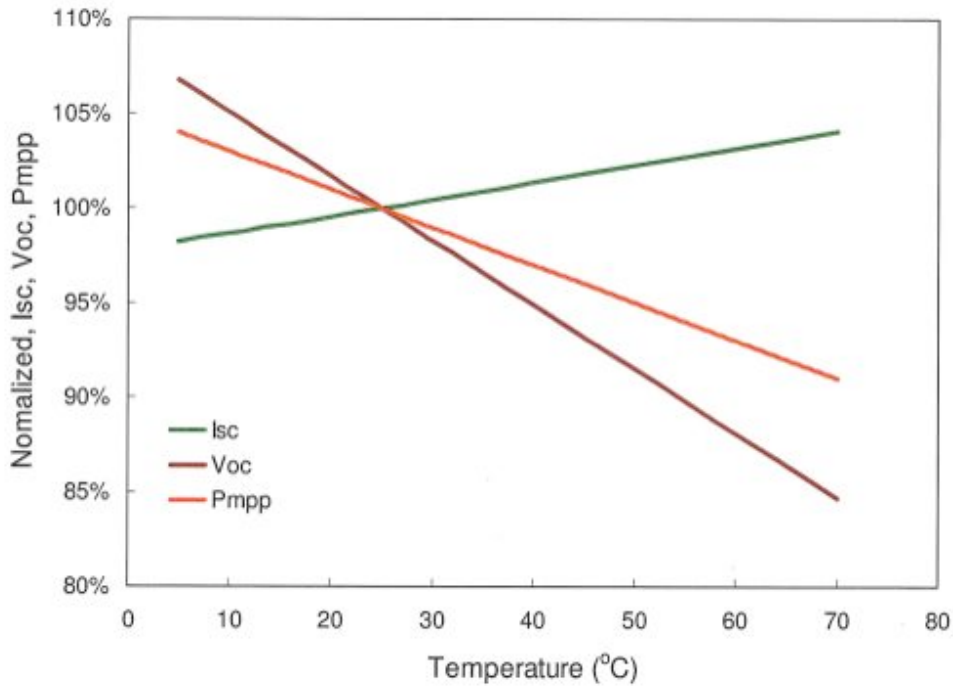


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Performance Characteristics



Temperature Coefficients



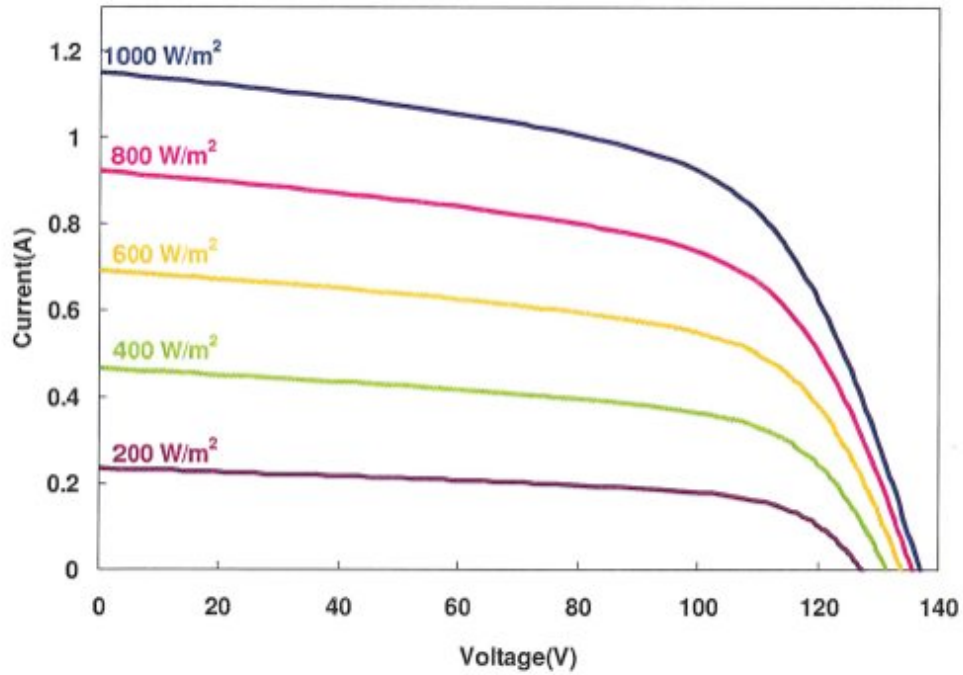


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Module Performance Under Different Irradiances

Measurements at AM 1.5 and 25°C cell temperature

Note: All electrical data is subject to a measuring equipment tolerance of +/- 3%. Electronic tolerance is +/- 10% except Pmpp



Irradiance [W/m ²]	Pmpp [W]	Vmpp [V]	Impp [A]	Voc [V]	Isc [A]
1000	93	104	0.90	137	1.15
800	74	105	0.71	136	0.92
600	55	105	0.53	134	0.69
400	37	105	0.35	131	0.46
200	18	104	0.17	127	0.23