



Polysolar

## PS-C Series transparent panels

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



**Polysolar's PS-C glass panels incorporate amorphous silicon technology giving good efficiency at a low cost**

Up to 66 W/m<sup>2</sup>

Attractive transparent amber-tinted laminate

Less affected by shading

Works down to ambient light levels

Less position sensitive

Single or double glazed panels available





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## Physical Specifications PS-C Series

|  |              |   |
|--|--------------|---|
| Active Material of Cell  |              | Amorphous Silicon (a-Si), single junction   |
| Encapsulation Material   |              | Polyvinyl butyral (PVB) thickness 0.76 mm   |
| Front Cover  |              | Float Glass, thickness: 3.2 mm  |
| Back Cover   |              | Float Glass, thickness: 3.2 mm  |
| Wiring Material  |              | Tin & silver coated copper ribbon thickness 0.1 mm  |
| Junction Box   | Bypass diode | Yes   |
|  | IP Class     | IP 67   |
| Cable length   |              | Upwards 800 mm(+), 600 mm (-)   |
| Connecting Cable Plug  |              | Rated voltage 1000 V D.C.<br>Temperature range: -40 to 85°C<br>Plug/Socket MC4 compatible Ø 4mm<br>Cable cross section: 2.5 mm <sup>2</sup> |
| Transparency   |              | 20% ±3.5% average transmission at 400-800 nm  |
| Frame  |              | Frameless   |
| Dimensions   | Width        | 1100 mm +2/-1 mm  |
|  | Length       | 1300 mm +2/-1 mm  |
|  | Thickness    | 7.0 mm +2/-1 mm   |
| Weight   |              | 24 kg ± 0.5 kg  |
| <p>The module is tested under 2400 Pa (50 lb/ft<sup>2</sup>) mechanical load or approximately to a wind speed of 130 km/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 STC |                      |                      |                     |                     |
|-------------------------|---|----------------------------|----------------------|----------------------|---------------------|---------------------|
|                         |   | Transparency               | V <sub>mpp</sub> (V) | I <sub>mpp</sub> (A) | V <sub>oc</sub> (V) | I <sub>sc</sub> (A) |
| PS-C-901                | 90 W  | 20%                        | 103                  | 0.90                 | 137                 | 1.15                |
| Max over current rating | 2.0A  |                            |                      |                      |                     |                     |
| Temperature Coefficient | I <sub>sc</sub> +0.09%/K<br>V <sub>oc</sub> -0.34%/K<br>P <sub>mpp</sub> -0.20%/K |                            |                      |                      |                     |                     |
| Shading Coefficient     | 10% - 0.31, 20% 0.41  |                            |                      |                      |                     |                     |
| Max System Voltage      | 1000 V dc (IEC)<br>600 V dc (UL)  |                            |                      |                      |                     |                     |

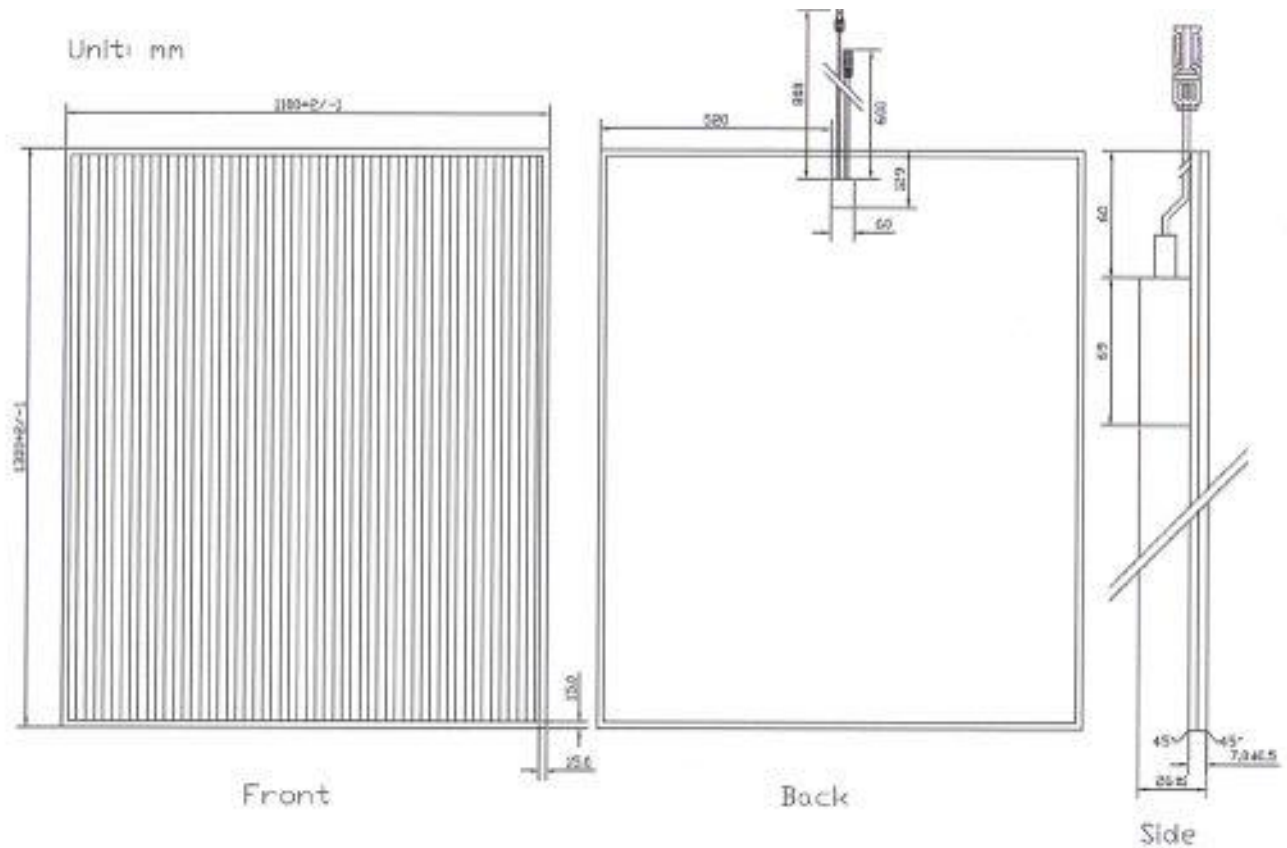
The units electrical ratings are measured under Standard Test Conditions (STC) and have been delivered on the specific table of electrical characteristics as shown above. A photovoltaic module may produce more current and/or voltage than reported at STC. Sunny, cool weather and reflection from snow or water can increase current and power output. Therefore, the values of I<sub>sc</sub> and V<sub>oc</sub> 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/m<sup>2</sup>, AM 1.5, 25 °C. The exactly measured electrical characteristics are shown on the label of the units.



## Warranty

| Warranty on Product<br>(Workmanship & Materials) | Warranty on Performance<br>(Power Grade Output)  |
|--|--|
| <b>5 years from date of shipment</b>             | 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 |
| <b>Certifications</b>                            | IEC EN 61646 & 61730-1 & 61730-2<br>CE Mark  |

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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