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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

### **Polysolar Limited PS -CT Series Opaque Panels PS-CT-85 Opaque**

Also available on the web at  
[EnergyPal.com/polysolar-limited-solar-panels/ps-ct-85-opaque](http://EnergyPal.com/polysolar-limited-solar-panels/ps-ct-85-opaque)



# Polysolar

## PS -CT-Series Opaque panels

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



**Polysolar's black opaque thin-film PS-CT series is a high efficiency panel with side or back connectors**

High energy yield 118 Watts/m<sup>2</sup>

Highly aesthetic black finish

Works down to ambient light levels

Less position sensitive

Bespoke sizing available

Single or double glazed panels available



APPROVED PRODUCT





## Physical Specifications PS-CT-Series Opaque

|  |              |   |
|--|--------------|---|
| Active Material of Cell  |              | Cadmium Telluride (CdTe)  |
| Encapsulation Material   |              | Polyvinyl butyrate (PVB) thickness<br>0.76 mm   |
| Front Cover  |              | Float Glass, thickness: 3.2 mm  |
| Back Cover   |              | Tempered Glass, thickness: 3.2 mm   |
| Wiring Material  |              | Tin & silver coated copper ribbon<br>thickness 0.1 mm   |
| Junction Box   | Bypass diode | 10 A  |
|  | IP Class     | IP 65   |
| Cable length   |              | 700 mm (+) 700 mm (-) side mounted<br>junction box<br>or 650 mm (+) 650 mm (-) back<br>mounted junction box                                       |
| Connecting Cable Plug  |              | Rated voltage 1000 Volts D.C.<br>Temperature range: -40 to 85 °C<br>Plug/Socket MC4 compatible Ø 4 mm<br>Cable cross section: 2.5 mm <sup>2</sup> |
| Transparency   |              | Variable 0-40%  |
| Frame  |              | Frameless   |
| Dimensions   | Width        | 600 mm+2/-1 mm  |
|  | Length       | 1200 mm +2/-1 mm  |
|  | Thickness    | 6.8 mm+2/-1 mm  |
| Weight   |              | 11.8 kg   |
| 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 |              |   |

## Electrical Specifications PS-CT-Series Opaque

| Polysolar Model         | Class   | Stabilized Performance STC |                      |                     |                     |
|-------------------------|---|----------------------------|----------------------|---------------------|---------------------|
|                         |   | V <sub>mpp</sub> (V)       | I <sub>mpp</sub> (A) | V <sub>oc</sub> (V) | I <sub>sc</sub> (A) |
| PS-CT-85 Opaque         | 85W   | 96.6                       | 0.88                 | 120.5               | 0.98                |
| Max over current rating | 2.0 A   |                            |                      |                     |                     |
| Temp Co-efficient       | I <sub>sc</sub> +0.06%/K<br>V <sub>oc</sub> -0.32%/K<br>P <sub>mpp</sub> -0.21%/K |                            |                      |                     |                     |
| Max System Voltage      | 1000 Vdc  |                            |                      |                     |                     |

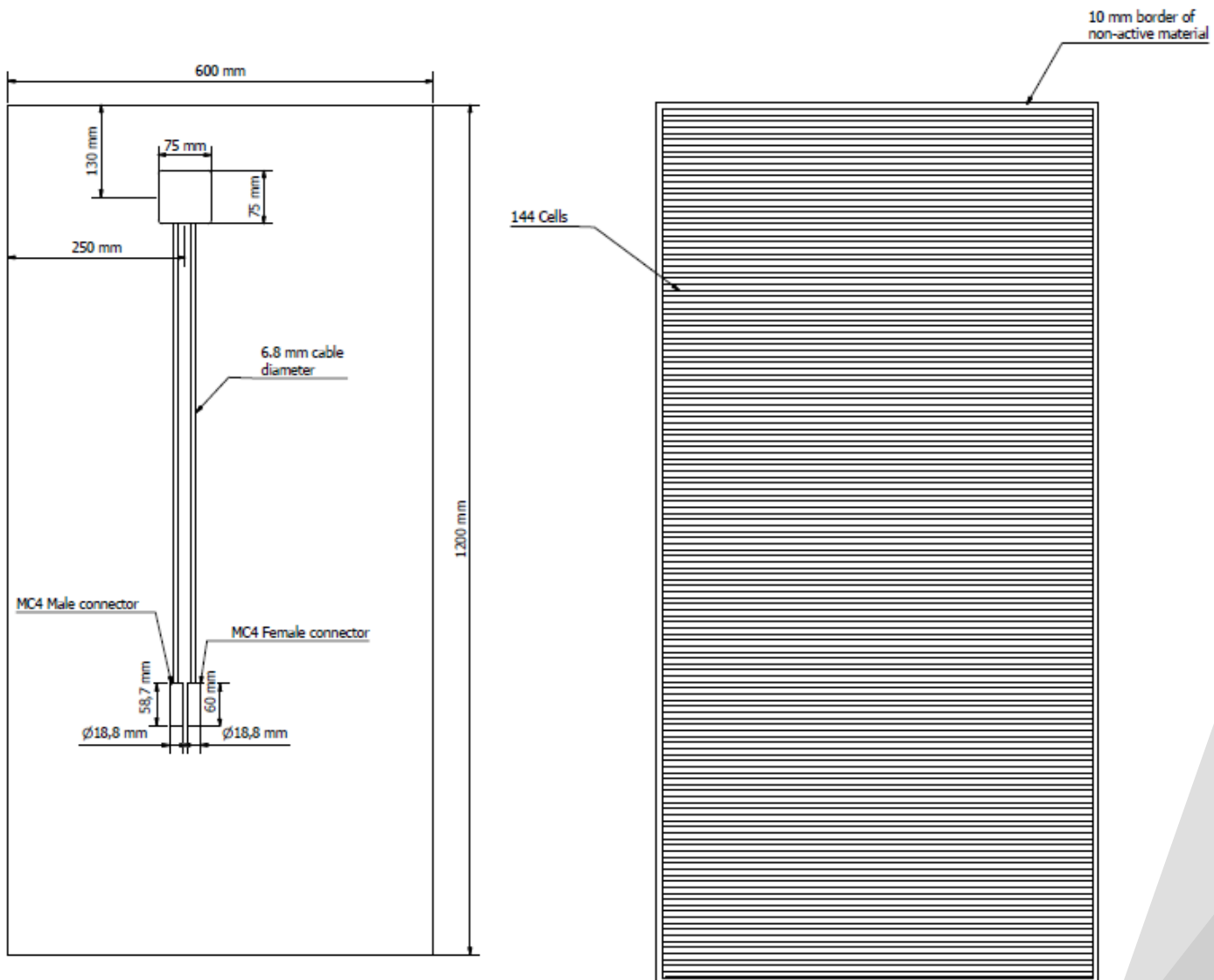
The unit's electrical ratings are measured under Standard Test Conditions (STC) and have been delivered on the specific table of electrical characteristics as shown above. A photovoltaic module may produce more current and/or voltage than reported at STC. Sunny, cool weather and reflection from snow 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.



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## Warranty

| Warranty on Product<br>(Workmanship & Materials) | Warranty on Performance<br>(Power Grade Output)  |
|--|--|
| 10 years from date of shipment                   | 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 |
| Certifications                                   | IEC EN6164 & 61730-1 & 61730-2<br>MCS 017 (BSI)<br>Kitemark<br>CE Mark   |







# Polysolar

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