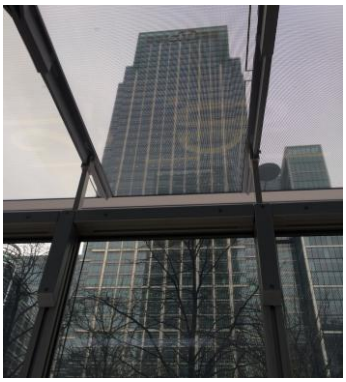
Polysolar

Transparent Solar PV Glass

PS-CT Series Product Specifications for
CdTe thin-film glass/glass laminate transparent glazing units



Polysolar's PS-CT panel provides an innovative, colourless design with variable transparency

Available in transparencies up to 50%

See-through aesthetic finish

PV generation even in ambient light

Less position sensitive - ideal for BIPV

Bespoke sizing / glass available

Single or double glazed panels available

MCS CERTIFIED

bsi Toughened Safety Glass KITEMARK™
KM 642424

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Physical Specifications PS-CT Series

Active Material of Cell		Cadmium Telluride (CdTe)
Encapsulation Material		Polyvinyl butyrate (PVB) thickness 0.4 mm
Front Cover		Float Glass,thickness: 3.2 mm
Back Cover		Tempered Glass, thickness: 3.2 mm
Wiring Material & thickness		Tin & silver coated copper ribbon: 0.1 mm
Junction Box	**Bipass diode**	10 A
	IP Class	IP 65
Cable length		700 mm (+) 700 mm (-) side mounted junction box or 650 mm (+) 650 mm (-) back mounted junction box
Connecting Cable Plug		Rated voltage 1000 V D.C. Temperature range: -40 to 85 °C Plug/Socket MC4 compatible Ø 4 mm Cable cross section: 2.5 mm^2
Transparency		Variable 10-50%
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 $lb/ft^{2)}$ 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 Transparent

Polysolar Model	Class	Stabilized Performance STC				
		Transparency	V_{mpp} (V)	I_{mpp} (A)	V_{oc} (V)	I_{sc} (A)
		Electrical tolerance +5/-0%				
PS-CT-72	72 W	10%	87.0	0.82	116	0.88
PS-CT-64	64 W	20%	87.0	0.73	116	0.78
PS-CT-56	56 W	30%	87.0	0.64	116	0.68
PS-CT-48	48 W	40%	87.0	0.55	116	0.59
PS-CT-40	40 W	50%	87.0	0.46	116	0.49
Max over current rating	2.0 A					
Temperature Coefficient	I_{sc} + 0.06%/K V_{oc} – 0.32%/K P_{mpp} – 0.21%/K					
Max System Voltage	1000 V					

Warranty

Warranty on Product (Workmanship & Materials)	**Warranty on Performance (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 EN 61646 & 61730-1 & 61730-2 MCS 017 (BSI) Kitemark

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_{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/m^2 , AM 1.5, 25 .The exactly measured electrical characteristics are shown on the label of the units.

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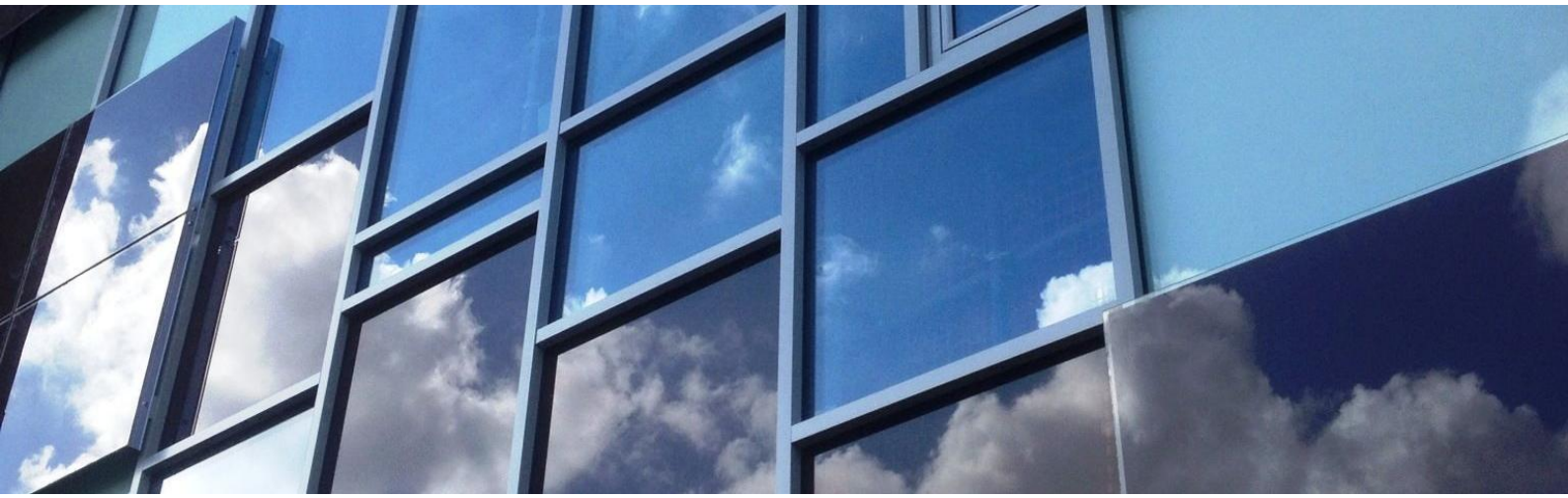

World leaders in the design, development and project management of Building Integrated Photovoltaic solutions

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