Polysolar

PS-ASG-Series panels

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

Polysolar's PS-ASG series opaque and transparent panels incorporate amorphous silicon technology to achieve high efficiencies and aesthetic design.

Up to 72 W/m^2

Highly aesthetic dark brown finish

Transparencies up to 60% available

Works in ambient and low light levels

Less position sensitive application

Bespoke sizing available up to 3 x 2m

Range of colour options

Single or double glazed panels available

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Physical Specifications PS-ASG Series

Active Material of Cell		Amorphous silicon cell (a-Si)
Encapsulation Material		Polyvinylbutyral (PVB) thickness 0.4 mm
Front Cover		Float Glass, thickness: 3.2 mm
Back Cover		Tempered Glass, thickness: 3.2 mm
Wiring Material		Tin & silver coated copper ribbon thickness 0.1 mm
Junction Box	Bypass diode	10 A
	IP Class	IP 65
Cable length		750 mm (+) 770 mm (-) side mounted junction box or back mounted mounted junction box
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		Variable 0-60%
Frame		Frameless
Dimensions	Width	1100 mm +2/-1 mm
	Length	1400 mm +2/-1 mm
	Thickness	6.8 mm
Weight		25.5 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-AS- Series

Polysolar Model	Class	Stabilized Performance STC				
		Transparency	V_{mpp} (V)	I_{mpp} (A)	V_{oc} (V)	I_{sc} (A)
		Electrical tolerance +5/-0%				
PS-ASG-110	110 W	Opaque	78	1.41	100	1.79
PS-ASG-100	100 W	10%	77	1.27	100	1.61
PS-ASG-90	90 W	20%	77	1.13	100	1.43
PS-ASG-78	78 W	30%	77	0.99	100	1.25
PS-ASG-67	67 W	40%	77	0.87	99	1.07
PS-ASG-53	53 W	50%	75	0.71	99	0.90
PS-ASG-42	42W	60%	75	0.56	99	0.71
Max over current rating	2.0 A					
Temperature Co-efficient	I_{sc} + 0.09%/K V_{oc} – 0.33%/K P_{mpp} – 0.20%/K					
Operating Temperature	-40°C to +85°C					
Max System Voltage	600 V					

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 Isc and Voc 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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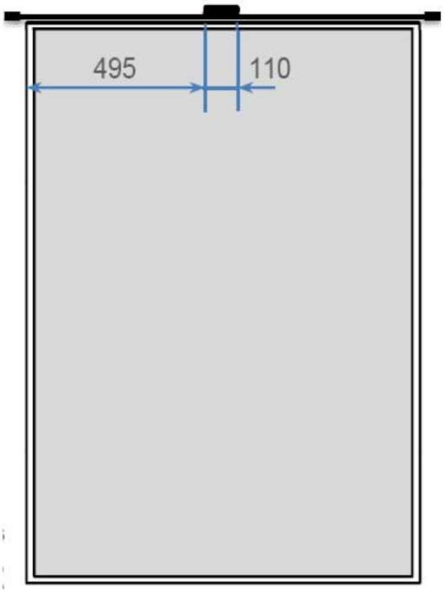
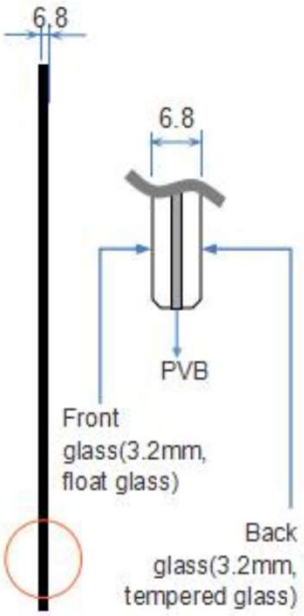
Warranty

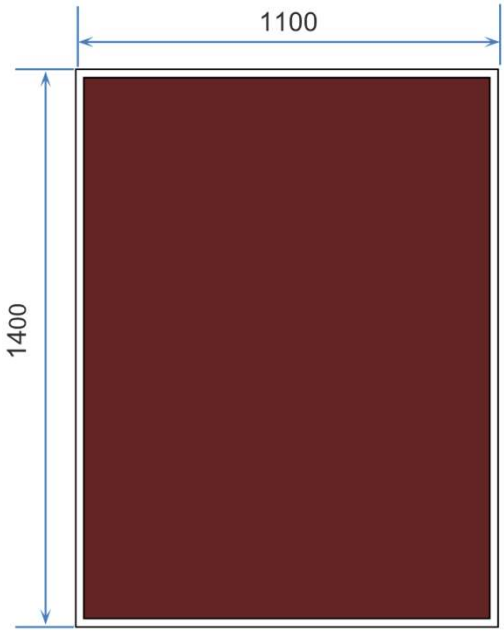
Warranty on Product (Workmanship & Materials)	Warranty on Performance (Power Grade Output)
10 years from date of shipment	90% of power grade output of the module for a 10 year period and then 80% of the power grade output of the module for a 25 year period from date of shipment
Certifications	IEC EN61646 & 61730-1 (TUV Sud) CE Mark



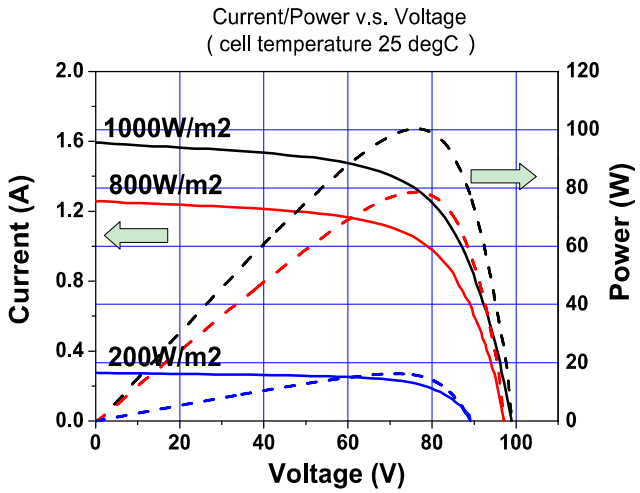
Back View

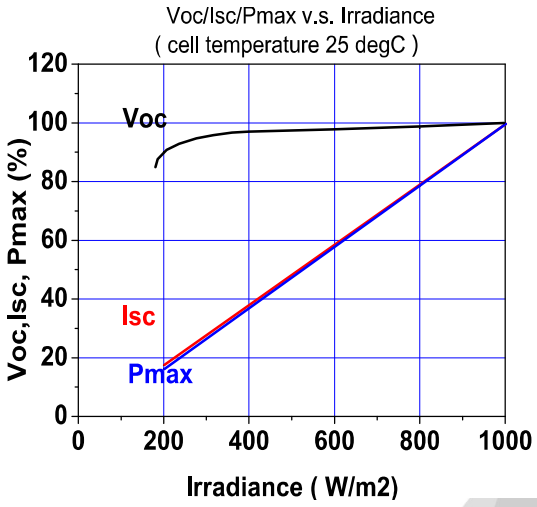


Side View



Front View





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