



Polysolar



PS-M-NX Series panels

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



Polysolar's PS-M-NX opaque and transparent panels incorporate micromorph technology to achieve high efficiencies and aesthetic design.

Up to 104 W/m²

Highly aesthetic black finish

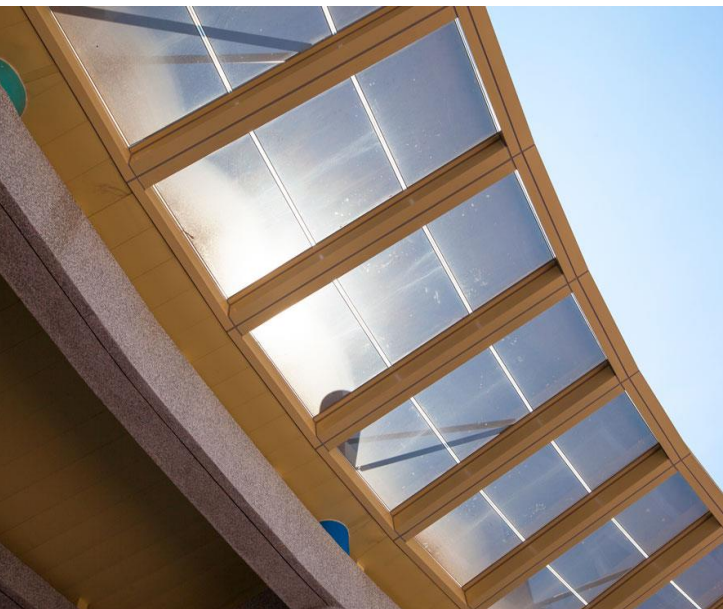
Transparencies up to 50% available

Works down to ambient light levels

Less position sensitive

Bespoke sizing available

Single or double glazed panels available





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Physical Specifications PS-M-NX Series

Active Material of Cell		Amorphous Silicon Tandem cell (α -Si/ μ c-Si)
Encapsulation Material		Polyvinylbutyral (PVB) thickness 0.9 mm
Front Cover		Tempered Glass, thickness: 4 mm
Back Cover		Tempered Glass, thickness: 4 mm
Wiring Material		Tin & silver coated copper ribbon thickness 0.1 mm
Junction Box	Bypass 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 Volts D.C. Temperature range: -40 to 85°C Plug/Socket MC4 compatible \varnothing 4mm Cable cross section: 2.5mm ²
Transparency		Variable 0-50%
Frame		Frameless
Dimensions	Width	1100 mm +2/-1 mm
	Length	1400 mm +2/-1 mm
	Thickness	8.9 mm +2/-1 mm
Weight		32 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-M-NX Series

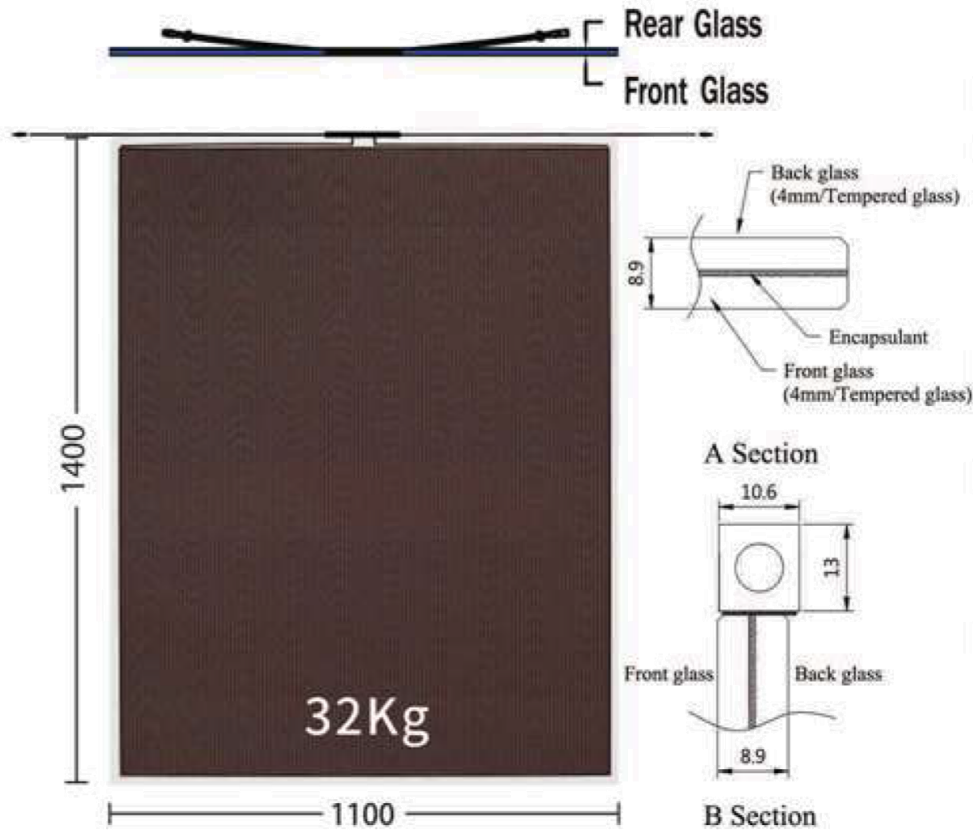
Polysolar Model	Class	Stabilized Performance STC				
		Transparency	V _{mpp} (V)	I _{mpp} (A)	V _{oc} (V)	I _{sc} (A)
Electrical tolerance +5/-0%						
PS-M-NX 160AN	160 W	Opaque	131	1.22	170	1.33
PS-M-NX 135AN	135 W	10%	125	1.08	167	1.19
PS-M-NX 120AN	120 W	20%	125	0.96	167	1.08
PS-M-NX 95AN	95 W	30%	120	0.79	166	0.89
PS-M-NX 80AN	80 W	40%	120	0.67	165	0.77
PS-M-NX 65AN	65 W	50%	118	0.55	164	0.64
Max over current rating	2.0 A					
Temperature Co-efficient	I _{sc} + 0.06%/K V _{oc} - 0.32%/K P _{mpp} - 0.21%/K					
Shading Coefficient	10% - 0.31, 20% 0.41					
Max System Voltage	1000 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 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.



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 CE Mark





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