

Polysolar

PS-MC-HS Series panels

STC Product Specifications for c-Si Mono Perc crystalline solar panels



Polysolar's lightweight PS-MC-HS Mono PERC modules offer high efficiencies up to 21.4% & a 12-year warranty

- Lightweight – less than 3kg/m², 3mm thick
- Ultra thin silicon wafers with advanced organic polymer encapsulation, offering bending radius of 0.3m
- Ease of installation - No mounting frame requirement, with bonded or riveted mounting solutions
- Comparable performance efficiencies to conventional solar panels
- Sand, dust, acid, alkali and salt mist resistance and hail shock durability

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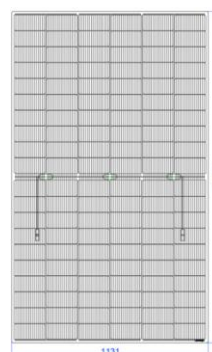
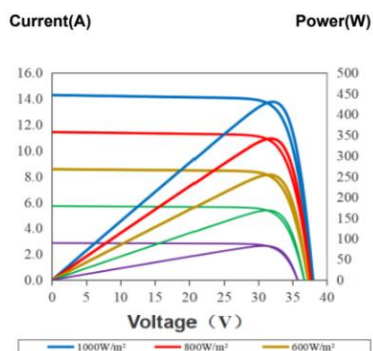
Physical Specifications PS-MC-HS Series

Active Material of Cell		Mono Crystalline Silicon
Cells		120 (6 x 20)
Encapsulant		POE White Back Sheet
Frame		None
Dimensions	Width	1131 mm
	Length	1927 mm
	Height	3 mm
Cable cross section Junction Box		4 mm ² IP68
Weight		6.3kg
The module is tested under 2400 Pa (50lb/ft ²) mechanical load or approximately to a wind speed of 1m/s. Ambient Temperature 25°C, Irradiation 1000W/m ²		




Electrical Specifications PS-MC-HS Series

Polysolar Model	Class	Stabilized Performance STC			
		V _{mpp} (V)	I _{mpp} (A)	V _{oc} (V)	I _{sc} (A)
PS-MC-HS440	440W	34.48	12.77	41.03	13.76
PS-MC-HS445	445W	34.63	12.86	41.18	13.83
PS-MC-HS450	450W	34.78	12.94	41.33	13.90
PS-MC-HS455	455W	34.93	13.03	41.48	13.97
PS-MC-HS460	460W	35.08	13.12	41.63	14.04
Temperature Co-efficient	I _{sc} -0.31%/°C V _{oc} -0.25%/°C P _{mpp} 0.046%/°C				

I-V Curves & Dimensions



Warranty

Warranty on Product (Workmanship & Materials)	Warranty on Performance (Power Grade Output)
12 years from date of shipment	25 year period from date of shipment . 1 st Year degradation less than 2%. 84.8% guaranteed for 25 years
Manufacturer Certifications   	IEC EN61215 & 61730 & 62804, UL 61730 ISO 9001: Quality Management System ISO 14001: Environmental Management ISO 45001: Health & Safety Management System

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 on the units.