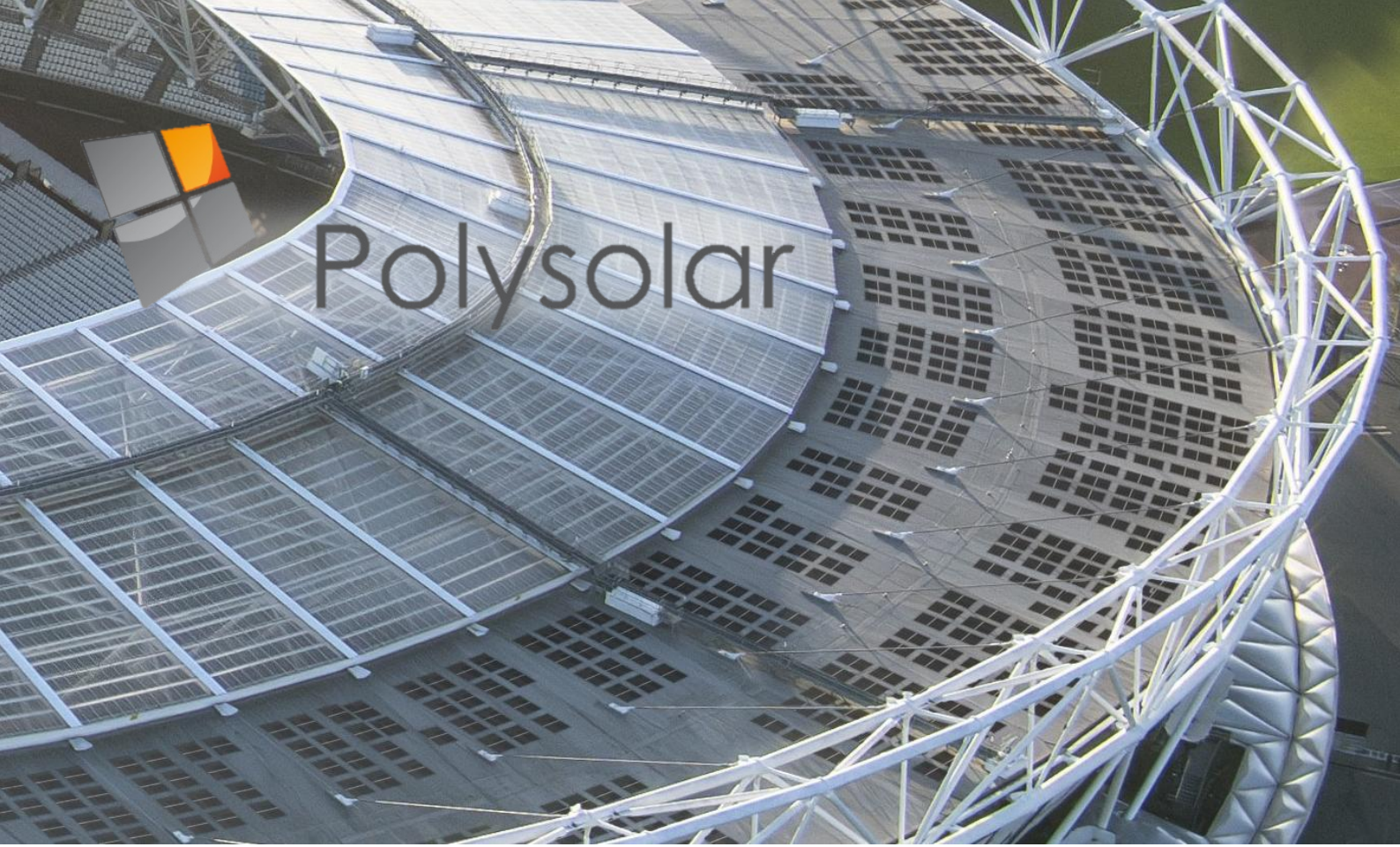




# Polysolar

## 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 < 3.5 kg/m<sup>2</sup>, 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

[polysolar.co.uk](http://polysolar.co.uk), Tel: +44(0)1223911534, [info@polysolar.co.uk](mailto:info@polysolar.co.uk)



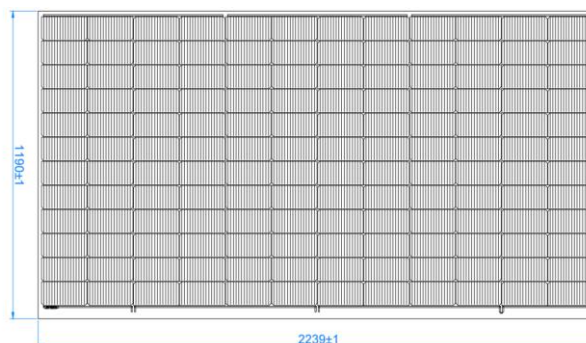
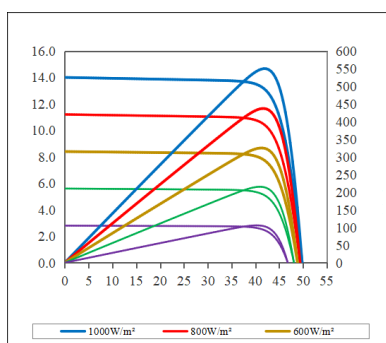
## Physical Specifications PS-MC-HS Series

|                                                                                                                                                                                 |        |                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------|
| Active Material of Cell                                                                                                                                                         |        | Mono Crystalline Silicon |
| Cells                                                                                                                                                                           |        | 144 (12 x 12)            |
| Encapsulant                                                                                                                                                                     |        | POE White Back Sheet     |
| Frame                                                                                                                                                                           |        | None                     |
| Dimensions                                                                                                                                                                      | Width  | 1190 mm                  |
|                                                                                                                                                                                 | Length | 2239 mm                  |
|                                                                                                                                                                                 | Height | 3 mm                     |
| Cable cross section Junction Box                                                                                                                                                |        | 4 mm <sup>2</sup> IP68   |
| Weight                                                                                                                                                                          |        | 7.7 kg                   |
| The module is tested under 2400 Pa (50lb/ft <sup>2</sup> ) mechanical load or approximately to a wind speed of 1m/s. Ambient Temperature 25°C, Irradiation 1000W/m <sup>2</sup> |        |                          |

## Electrical Specifications PS-MC-HS Series

| 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-MC-HS535             | 535W                                                                           | 41.3                       | 12.96                | 49.50               | 13.67               |
| PS-MC-HS540             | 540W                                                                           | 41.5                       | 13.02                | 49.70               | 13.75               |
| PS-MC-HS545             | 545W                                                                           | 41.7                       | 13.07                | 49.90               | 13.83               |
| PS-MC-HS550             | 550W                                                                           | 41.9                       | 13.13                | 50.10               | 13.91               |
| PS-MC-HS555             | 555W                                                                           | 42.1                       | 13.19                | 50.30               | 13.99               |
| Temperature Coefficient | I <sub>sc</sub> 0.046%/°C V <sub>oc</sub> -0.25%/°C -0.31P <sub>mpp</sub> %/°C |                            |                      |                     |                     |

## I-V Curves & Dimensions



## Warranty

| Warranty on Product<br>(Workmanship & Materials)                                                                                                                                                                                                                                                  | Warranty on Performance<br>(Power Grade Output)                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 years from date of shipment                                                                                                                                                                                                                                                                    | 25 year period from date of shipment . 1 <sup>st</sup> Year degradation less than 2%. 84.8% guaranteed for 25 years                                                 |
| <b>Manufacturer Certifications</b><br>   | IEC EN61215 & 61730 & 62804, UL 61730<br>ISO 9001: Quality Management System<br>ISO 14001: Environmental Management<br>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<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 on the units.