



# Polysolar

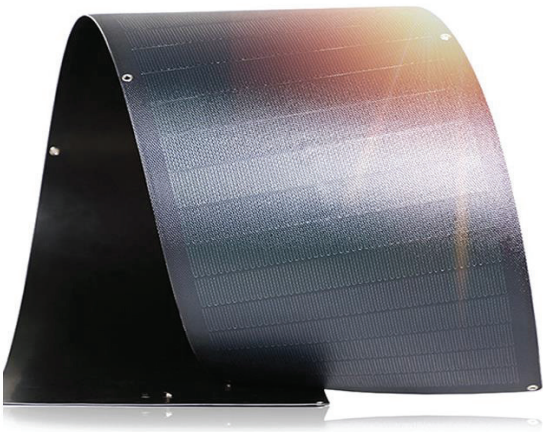
## PS-CIGS-MS Series Flex Panels

STC Product Specifications for thin-film CIGS solar PV modules



**Polysolar's PS-CIGS-MS series lightweight flexible stick-on panels offer the versatility for a wide range of BIPV applications**

- Light weight  $2.4\text{kg/m}^2$
- High performance thin-film CIGS PV technology
- Ease of installation with sticky back plastic or eyelets pre-applied
- Works in low and ambient light conditions
- Conforms to curved surfaces
- Highly flexible and shatterproof
- Bespoke sizes available
- Reliable and waterproof





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## Physical Specifications PS-CIGS-MS Series

|                         |              |                                                                                                           |             |
|-------------------------|--------------|-----------------------------------------------------------------------------------------------------------|-------------|
| Active Material of Cell |              | Copper Indium Gallium Selenide<br>CIGS Technology                                                         |             |
| Back Cover              |              | Plastic                                                                                                   |             |
| Wiring Material         |              | Tin & silver coated copper ribbon thickness 0.1 mm                                                        |             |
| Juncti<br>on Box        | Bypass diode | Yes                                                                                                       |             |
|                         | IP Class     | IP 68                                                                                                     |             |
| Cable length            |              | Upwards 700 mm(+), 700 mm (-)                                                                             |             |
| Connecting Cable Plug   |              | Rated voltage 1000 V D.C.<br>Plug/Socket MC4 compatible Ø 4mm<br>Cable cross section: 2.5 mm <sup>2</sup> |             |
| Fabrication             |              | Frameless / Glassless                                                                                     |             |
| Dimensions              |              | Width (mm)                                                                                                | Length (mm) |
|                         | Flex 85      | 348 ± 1                                                                                                   | 1710 ± 1    |
|                         | Flex 130     | 348 ± 1                                                                                                   | 2585 ± 1    |
|                         | Flex 285     | 348 ± 2                                                                                                   | 5905 ± 5    |
|                         | Flex 310     | 1293 ± 1                                                                                                  | 2585 ± 1    |
| Weight                  |              | 2Kg/m <sup>2</sup>                                                                                        |             |
| Bend Radius             |              | 508 mm                                                                                                    |             |

## Electrical Specifications PS-CIGS-MS Series

| Polysolar Model         | Class                                                                                            | Stabilized Performance STC  |                         |                         |                        |                        |
|-------------------------|--------------------------------------------------------------------------------------------------|-----------------------------|-------------------------|-------------------------|------------------------|------------------------|
|                         |                                                                                                  | Watts                       | V <sub>mpp</sub><br>(V) | I <sub>mpp</sub><br>(A) | V <sub>oc</sub><br>(V) | I <sub>sc</sub><br>(A) |
|                         |                                                                                                  | Electrical tolerance +5/-0% |                         |                         |                        |                        |
| Flex 85                 | 85 W                                                                                             | 86                          | 20.9                    | 4.07                    | 25.5                   | 4.47                   |
| Flex 130                | 130W                                                                                             | 130                         | 32.1                    | 4.06                    | 39.4                   | 4.49                   |
| Flex 285                | 285W                                                                                             | 285                         | 67.9                    | 4.26                    | 85.8                   | 4.74                   |
| Flex 310                | 310W                                                                                             | 310                         | 76.3                    | 4.07                    | 93.3                   | 4.48                   |
| Max over current rating | 10A                                                                                              |                             |                         |                         |                        |                        |
| Temperature Coefficient | I <sub>sc</sub> +0.008%/K<br>V <sub>oc</sub> -0.28%/K<br>P <sub>mpp</sub> -0.38%/K<br>NOCT 48 °C |                             |                         |                         |                        |                        |
| Max System Voltage      | 1000 V dc (IEC)<br>1000 V dc (UL)                                                                |                             |                         |                         |                        |                        |

| Warranty on Product<br>(Workmanship & Materials) | Warranty on Performance<br>(Power Grade Output)                                                                                                                                   |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 years from date of shipment                    | 25 Year performance. 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 and 62716<br>CE Mark MCS<br>Class A TPO                                                                                                                       |

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 of the units.