



Let the Light be Life™

# New PHOTOVOLTAIC MODULES IS4000C

## Thin Film CIGS



In addition to the high efficiency crystalline modules, Istar Solar® produces the **thin film photovoltaic modules**, made of solar cells produced with the innovative and high technology manufacturing process. CIGS photovoltaic modules, which do not have to be confused with amorphous modules, have an excellent energy conversion and a low degradation over time, ensuring a production of more than 25years.

### CONSTRUCTION FEATURES

<b>Cells</b>	<b>72 CIGS</b> thin film cells made of <b>Copper, Indium, Gallium and diSelenide</b> . These cells have a light absorption of 99% in a few microns of thickness, with an higher sensitivity of the whole solar spectrum, thus increasing the voltage and efficiency of the cells and therefore with an higher performance at lower solar radiations.
<b>Encapsulant</b>	Special sheets of transparent thermoplastic.
<b>Glass</b>	Solar glass, low-iron, transparent, tempered and textured to allow a maximum concentration and diffusion of light on the solar cells, even if in lower sunlight levels worldwide.
<b>Backside</b>	Sheet of White Special Multilayer Polyester/Aluminium. It contributes to a further protection of modules against the action of climatic like humidity and provides a total electrical isolation.
<b>Frame</b>	Anodized aluminum provided with 8 holes for mounting (certified wheel-base) that allows the modules to be extremely easy to install.
<b>Junction box</b>	Tyco with protection degree IP65 and two PG7 <b>cable glands</b> , and equipped with 2 by-pass diodes
<b>Cable and connectors</b>	Tyco. N° 2 Cables 4 mm <sup>2</sup> x 120 cm with +/- connectors .
<b>Warranty</b>	<b>Potenza moduli: 90% 12 anni - 80% 25 anni</b> <b>Prodotto: 10 anni</b>



### Modules Certifications

**C01 16582-100925**  
**TÜV 11-PPV-0000108/04-W01-TIC**  
**TÜV Factory Inspection**

**CEI/EN 61646**  
**CEI/EN 61730 1-2 (2007)**



### Company Certifications



Dasa-Rägister  
EN ISO 14001:2004  
IE-0112-01



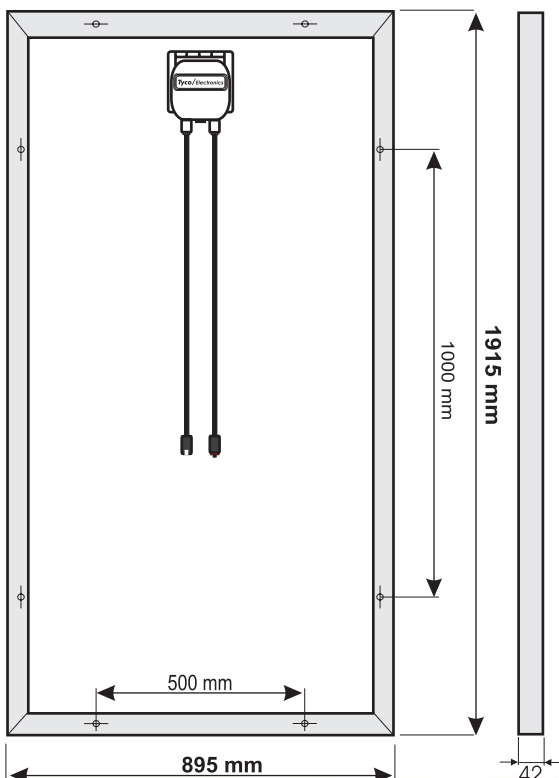
Dasa-Rägister  
EN ISO 9001:2008  
IQ-0112-03



Dasa-Rägister  
BS OHSAS 18001:2007  
IS-0112-01



**MADE IN ITALY**



### Electrical and Technical Data (STC: 1000 W/sqm - 25°C - AM 1,5)



	IS4000C				
	175 Wp	180 Wp	185 Wp	190 Wp	195 Wp
<b>Pmax</b>	175 Wp	180 Wp	185 Wp	190 Wp	195 Wp
<b>Imp</b>	5,45 A	5,50 A	5,55 A	5,60 A	5,70 A
<b>Isc</b>	6,30 A	6,35 A	6,40 A	6,40 A	6,50 A
<b>Voc</b>	43,5 V	44,6 V	44,8 V	45,8 V	46,8 V
<b>Vmp</b>	32,1 V	32,7 V	33,3 V	33,6 V	34,4 V
<b>NOCT</b>	45 °C				
<b>Maximum system voltage</b>	1000 V				
<b>Temperature range</b>	-40 to +85 °C				
<b>Hail resistance</b>	up to Ø 25 mm to 83 km/h				
<b>Relatives humidity</b>	up to 100%				
<b>Dimensions</b>	1915 x 895 x 42 mm (± 2)				
<b>Dimensions of laminate</b>	1908 x 886 x 5 mm (± 2)				
<b>Weight</b>	22 Kg framed - 19 Kg laminate				
<b>Power tolerance</b>	± 3%				
<b>Temperature coefficient</b>	Isc (α) -0,03%/°C Voc(β) -0,33%/°C Pmax(γ) -0,43%/°C				
<b>Surface load certificate</b>	5400Pa (5,4kN/m <sup>2</sup> )				

Datasheet complies with the requirements EN 50380  
Istar Solar® reserves the right to change the features of modules without notice

**ISTAR SOLAR® S.r.l.**

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