



## **A0290AC85 / A0290AV85 A0290AC90 / A0290AV90**

### **Amorphous Thin-Film Module 85/90 W**

Compared to the traditional mono or poly-crystalline silicon panels, amorphous silicon technology involves the use of less energy during the production phase. Amorphous silicon panels are the most suitable solutions with reference to eco-sustainability because in a few years they are able to give back energy spent in producing them and can even produce up to 10-12 times more in their lifetime. In same position, at dawn and during twilight or cloudy days thin film panels can generate 10% to 15% a year than poly-crystalline silicon modules. Moreover, other panels

usually operate at much higher temperatures than the standard test temperature (25°C). With higher temperature the electricity generated by crystalline modules is more affected by this difference, so it decreases a lot. This makes Albasolar amorphous silicon modules the ideal choice for higher temperatures implementations.

All Albasolar modules are certified TUV and tested by the Politecnico of Turin.

	85 W	90 W	
Electrical characteristics at STC irradiance level 1000W/m <sup>2</sup> , AM 1.5 and cell temperature 25°C	maximum power current - Impp	87,5 V	89,1 A
	maximum power voltage - Vmpp	0,98 A	1,01 A
	open circuit current - Voc	114,2 V	115,4 V
	short circuit current - Isc	1,19 A	1,22 A
	maximum reverse current	3 A	
Electrical characteristics at NOCT irradiance level 800W/m <sup>2</sup> , AM 1.5, wind velocity 1m/s, Tamb 20°C	temperature - NOCT	45°C	
	peak power - NOCT	67,3 W	70,30 W
	maximum power voltage - Vmpp	84,30 V	85,79 V
	maximum power current - Impp	0,80 A	0,82 A
	open circuit current - Voc	106,6 V	107,78 V
	short circuit current - Isc	0,96 A	0,99 A
Thermal and system	α Pmpp	-36 mW/°C	
	α Vmpp	-112 mV/°C	
	α Impp	1,3 mA/°C	
	α Voc	-230 mV/°C	
	α Isc	1,0 mA/°C	
	max system voltage	1000 V	
Dimensions	length framed/unframed	1408/1400 ±3 mm	
	width framed/unframed	1108/1100 ±3 mm	
	thickness framed/unframed	35±1/25±2 mm	
	weight framed/unframed	28,3/25,1 kg	
Guarantees	performance warranty	25 years power guarantee (90% until 12 years, 80% until 25 years)	
	product warranty	12 years	
Certificates		IEC EN 61646 IEC 61730	
		TUV	

**AVAILABLE UNFRAMED,  
ANODIZED FRAMED OR  
OPTIONAL ALUMINUM**

#### Our Amorphous Thin-Film Module characteristics:

- At dawn and during twilight or cloudy days thin film panels can generate 10% to 15% more than crystalline silicon panels
- Better performance at higher temperature compared to Crystalline Silicon Cells
- Best solution in terms of eco-sustainability
- Versatility of application (excellent yield both horizontally and vertically)

#### Condizioni di garanzia:

- 12 years guarantee on the product
- 25 years guarantee on the power voltage (90% until 12 years, 80% until 25 years)
- Certificates and compliance with standard IEC 61646 IEC 61730
- TUV Certificate

