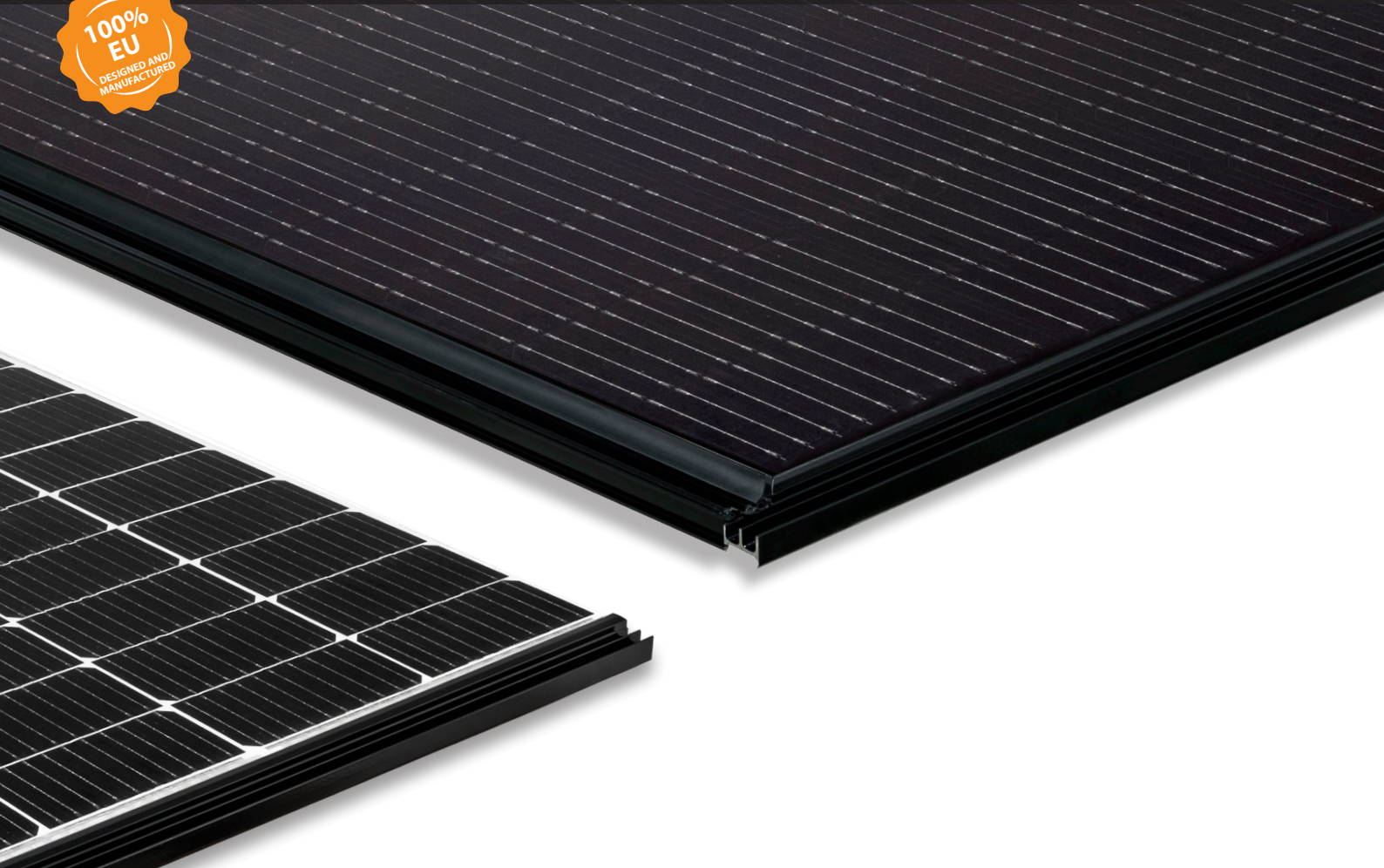


PREMIUM

# BISOL BIPV

Monocrystalline Roof Integrated PV Modules / BSO 430-440 Wp



Designed and manufactured in EU



Replaces conventional roof tiles



PID free



Limited shading



Module presorting for higher profitability



Supremely low degradation



Module efficiency up to 22.3 %

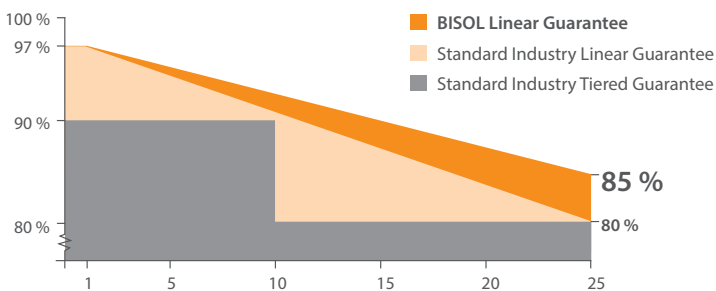


Up to 13 % higher real-life performance



Excellent low light performance

## Guarantees:



Linear Guarantee  
85 % power output in 25<sup>th</sup> year

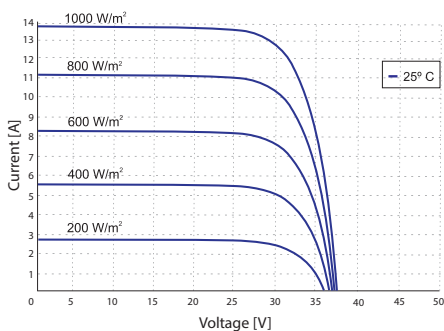


Product Guarantee  
Standard: 15 years  
Extra: 20 years

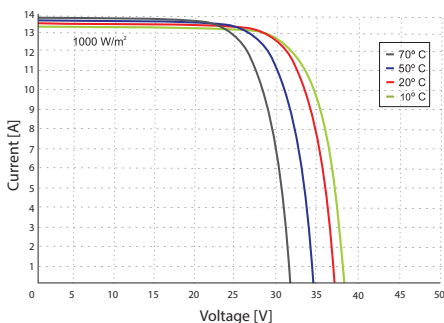
## In compliance with:



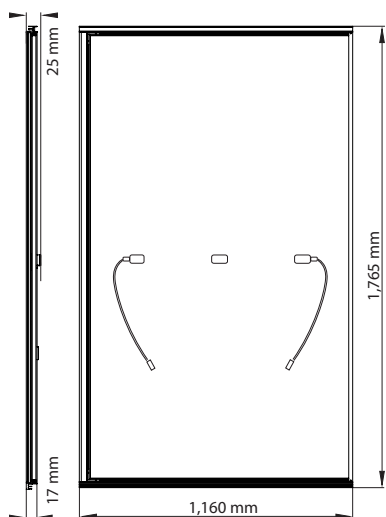
### I-V Curve at Various Irradiation Levels



### I-V Curve at Various Cell Temperatures



### Dimensions



### Electrical Specifications @ STC (AM 1.5, 1,000 W/m<sup>2</sup>, 25 °C):

Module Type	BSO	430	435	440
Nominal Power	$P_{MPP}$ [W]	430	435	440
Short Circuit Current	$I_{SC}$ [A]	14.4	14.4	14.6
Open Circuit Voltage	$V_{OC}$ [V]	38.1	38.2	38.4
MPP Current	$I_{MPP}$ [A]	13.7	13.8	13.9
MPP Voltage	$V_{MPP}$ [V]	31.4	31.6	31.7
Module Efficiency	$\eta_M$ [%]	22.0	22.3	22.5
Cell Efficiency	$\eta_C$ [%]	24.0	24.3	24.6
Power Output Tolerance		0/+5 W		
Maximum System Voltage		1,500 V		
Maximum Reverse Current		25 A		
Protection Class		Class II		

Additional power classes available upon request. | Efficiency at irradiation 200 W/m<sup>2</sup>: 99.3 % of STC efficiency or higher. | Tolerances for  $V_{OC}$  and  $I_{SC}$  and other electrical parameters are  $\pm 3$  %.

### Electrical Specifications @ NOCT (800 W/m<sup>2</sup>, 42 °C, AM 1.5, Wind 1 m/s):

Module Type	BSO	430	435	440
Nominal Power	$P_{MPP}$ [W]	329.0	333.0	337.0
Short Circuit Current	$I_{SC}$ [A]	11.61	11.61	11.77
Open Circuit Voltage	$V_{OC}$ [V]	36.5	36.6	36.8
MPP Current	$I_{MPP}$ [A]	11.04	11.12	11.21
MPP Voltage	$V_{MPP}$ [V]	29.8	30.0	30.1

### Thermal Specifications:

Current Temperature Coefficient	$\alpha$	+ 0.045 %/°C
Voltage Temperature Coefficient	$\beta$	- 0.250 %/°C
Power Temperature Coefficient	$\gamma$	- 0.300 %/°C
NOCT		42 $\pm$ 3 °C
Temperature Range		- 40 °C to + 85 °C

### Mechanical Specifications:

Length x Width x Thickness	1,765 x 1,160 x 25 mm
Weight	22.5 kg
Solar Cells	108 Half-Cut c-Si / 182 mm x 91 mm
Junction Box / Connectors / IP	3 bypass diodes / MC4 compatible / IP 68
Cable Length	Default: 1,200 mm
Frame	Solrif® / thickness: 17 mm
Glass	3.2 mm AR coating tempered glass / high-transparency / low-iron content
Impact Resistance	Hailstone / $\Phi$ 25 mm / 83 km/h (51 mph)

Tolerances of values are  $\pm 5$  %. Unspecified product properties remain under full discretion of BISOL Production.

### Packaging Information:

Modules per Pallet	Packaging Dimension: Length/Width/Height	Stackable	Packaging Weight	Tot. Nr. of Pallets/Load
24	191 x 120 x 136 cm	2 pallets	580 kg	28