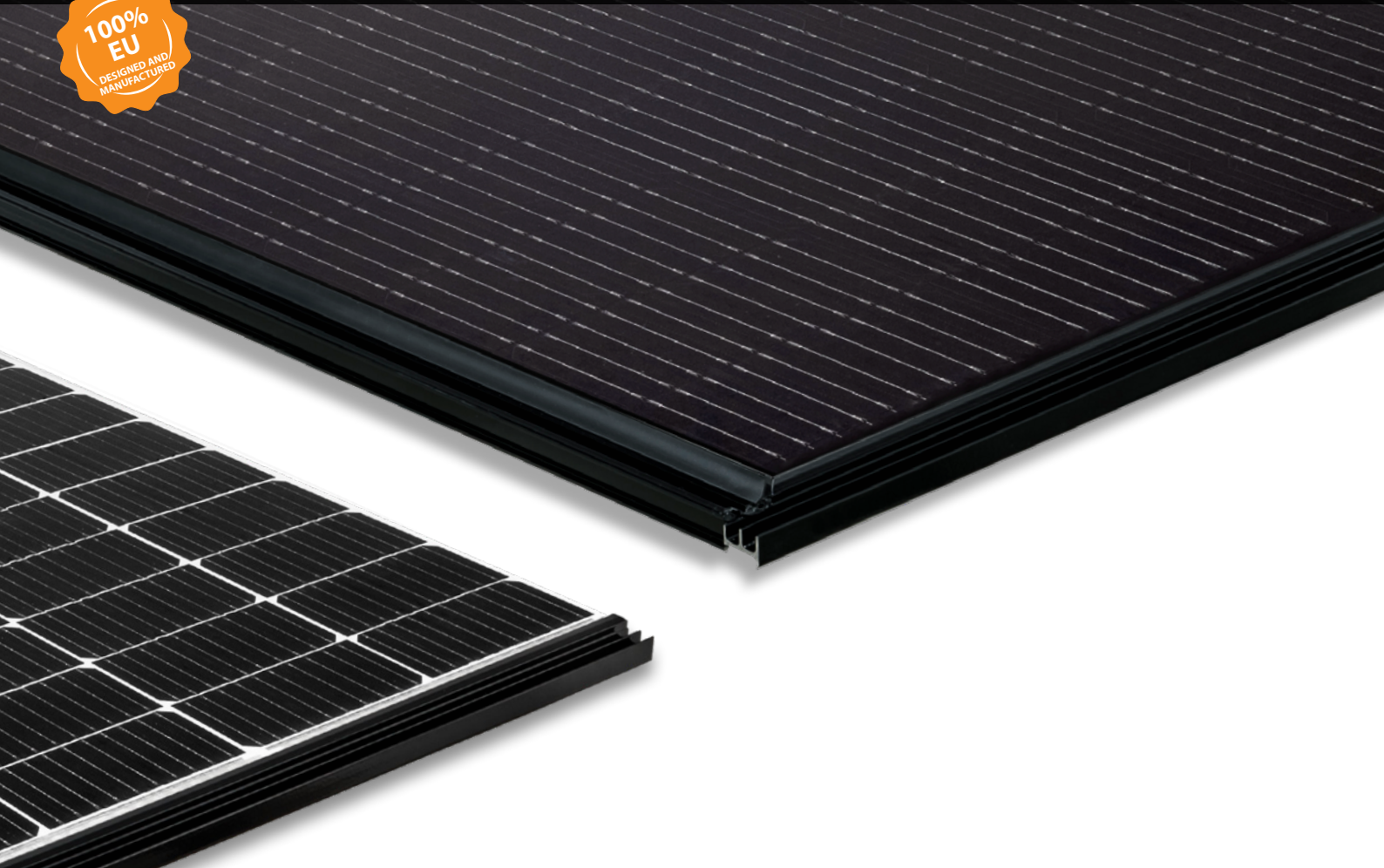


PREMIUM

# BISOL BIPV

Monocrystalline Roof Integrated PV Modules / BSO 400-420 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 21.5 %

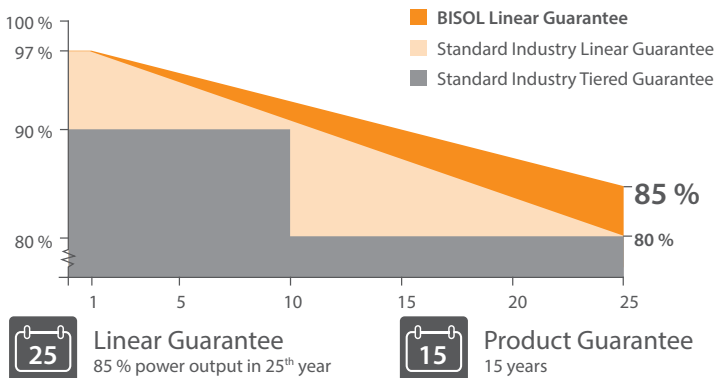


Up to 13 % higher real-life performance



Excellent low light performance

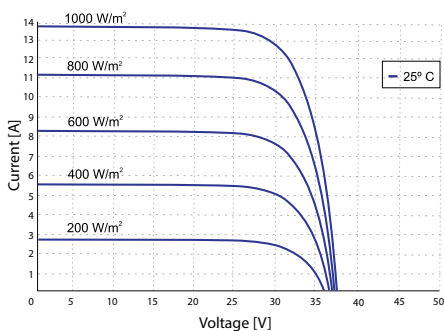
## Guarantees:



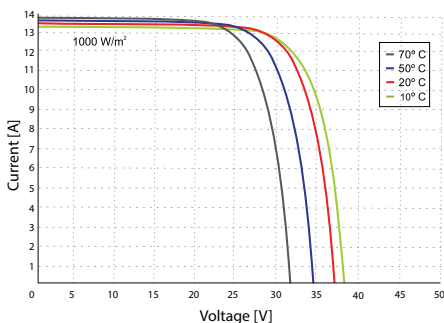
## In compliance with:



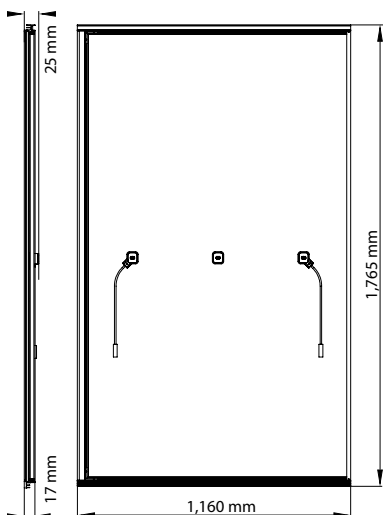
### I-V Curve at Various Irradiation Levels



### 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	400	410	420
Nominal Power	$P_{MPP}$ [W]	400	410	420
Short Circuit Current	$I_{SC}$ [A]	13.74	13.90	14.06
Open Circuit Voltage	$V_{OC}$ [V]	37.0	37.2	37.4
MPP Current	$I_{MPP}$ [A]	12.95	13.19	13.42
MPP Voltage	$V_{MPP}$ [V]	30.9	31.1	31.3
Module Efficiency	$\eta_M$ [%]	20.5	21.0	21.5
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>, 43 °C, AM 1.5, Wind 1 m/s):

Module Type	BSO	400	410	420
Nominal Power	$P_{MPP}$ [W]	303	311	318
Short Circuit Current	$I_{SC}$ [A]	11.09	11.22	11.35
Open Circuit Voltage	$V_{OC}$ [V]	35.3	35.5	35.6
MPP Current	$I_{MPP}$ [A]	10.45	10.65	10.83
MPP Voltage	$V_{MPP}$ [V]	29.0	29.3	29.4

### Thermal Specifications:

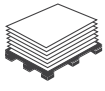
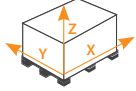



Current Temperature Coefficient	$\alpha$	+ 0.05 %/°C
Voltage Temperature Coefficient	$\beta$	- 0.26 %/°C
Power Temperature Coefficient	$\gamma$	- 0.34 %/°C
NOCT		43 $\pm$ 2 °C
Temperature Range		- 40 °C to + 85 °C

### Mechanical Specifications:

Length x Width x Thickness	1,765 x 1,160 x 25 mm
Weight	22.5 kg
Solar Cells	108 Half-Cut mono PERC 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