

PREMIUM

# BISOL® Spectrum

Monocrystalline PV Modules With Coloured Glass



Made in Europe



30 years of EU Guarantee



Hail and Fire resistant



Uncompromisingly certified



6.000 Pa Snow load



PID and LETID free



Highest Efficiency

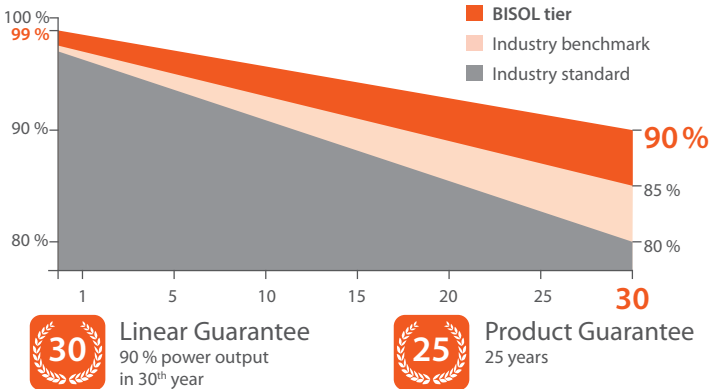


Module sorting technology



Low maintenance costs

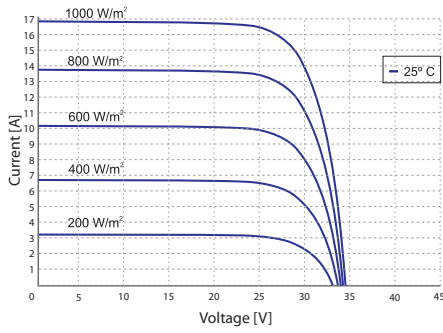
## Guarantee:



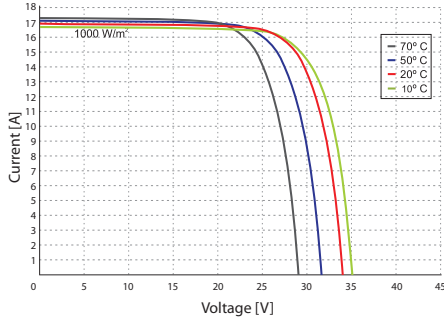
## In compliance with:



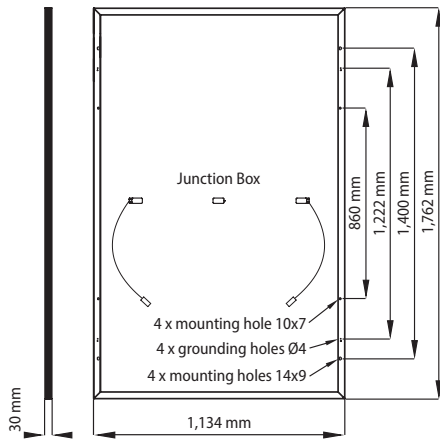
## I-V Curve at Various Irradiation Levels



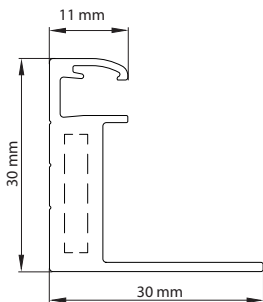
## I-V Curve at Various Cell Temperatures



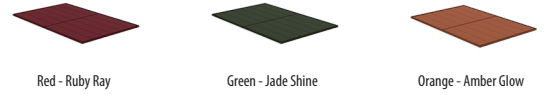
## Dimensions



## Frame Cross Section



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



Module Type	BDO	360	410	360
Nominal Power	$P_{MPP}$ [W]	360	410	360
Short Circuit Current	$I_{SC}$ [A]	14.4	16.9	14.2
Open Circuit Voltage	$V_{OC}$ [V]	33.4	33.6	33.9
MPP Current	$I_{MPP}$ [A]	13.0	15.3	13.0
MPP Voltage	$V_{MPP}$ [V]	27.7	26.8	27.7
Module Efficiency	$\eta_M$ [%]	18.0	20.5	18.0
Cell Efficiency	$\eta_C$ [%]	19.6	22.3	19.6
Power Output Tolerance			±3 %	
Maximum Reverse Current			30 A	
Maximum System Voltage			1,500 V	
Protection Class			Class II	

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 ±3 %.

The actual colour shades may vary from the images shown. Colour inconsistencies in a module may appear due to the nature of this product.

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

Module Type	BDO	360	410	360
Nominal Power	$P_{MPP}$ [W]	277.0	315.0	277.0
Short Circuit Current	$I_{SC}$ [A]	11.6	13.6	11.5
Open Circuit Voltage	$V_{OC}$ [V]	32.0	32.2	32.5
MPP Current	$I_{MPP}$ [A]	10.5	12.3	10.5
MPP Voltage	$V_{MPP}$ [V]	26.4	25.5	26.4

## Thermal Specifications:

Current Temperature Coefficient	$\alpha$	+ 0.05 %/°C
Voltage Temperature Coefficient	$\beta$	- 0.25 %/°C
Power Temperature Coefficient	$\gamma$	- 0.29 %/°C
NOCT		42 °C ± 3 °C
Temperature Range		- 40 °C to + 85 °C

## Mechanical Specifications:

Length x Width x Thickness	1,762 x 1,134 x 30 mm
Weight	21 kg
Solar Cells	96 Half-Cut c-Si / 182.25 x 105 mm
Junction Box / Connectors / IP	3 bypass diodes / MC4 compatible; On demand: MC4 EVO2 / IP 68
Cable Length	Default: 1,200 mm On demand (for portrait orientation): 300 mm
Frame	Anodized Al with mounting and drainage holes / rigid anchored corners.
Backsheet Colour	Black
Glass	3.2 mm AR coating tempered glass / high-transparency / low-iron content
Certified Test Load (Snow/Wind)	6,000 Pa / 2,400 Pa
Impact Resistance	Hailstone / $\Phi$ 40 mm / 99.1 km/h (61.6 mph)

Tolerances of values are ±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
35	178 x 116 x 128 cm	3 pallets	759 kg	28