

PREMIUM

# BISOL Spectrum

Monocrystalline PV Modules With Coloured Glass



Designed and  
manufactured in EU



Double insulation



Higher snow load:  
up to 6.000 Pa



PID Free



Module presorting  
for higher profitability



Supremely low  
degradation



A perfect colour match  
to your roof

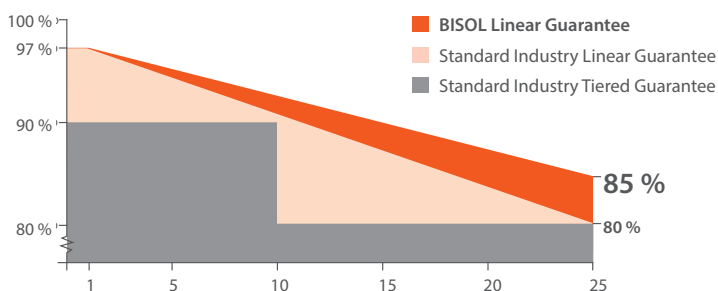


Available in variety of  
colours



Excellent low light  
performance

## Guarantees:



## In compliance with:

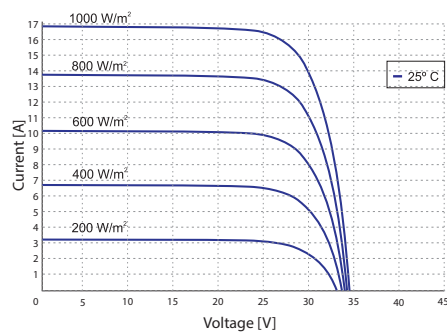


Linear Guarantee  
85 % power output  
in 25<sup>th</sup> year

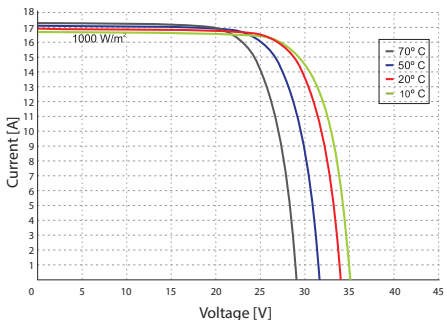


Product Guarantee  
Standard: 15 years  
Extra: 20 years

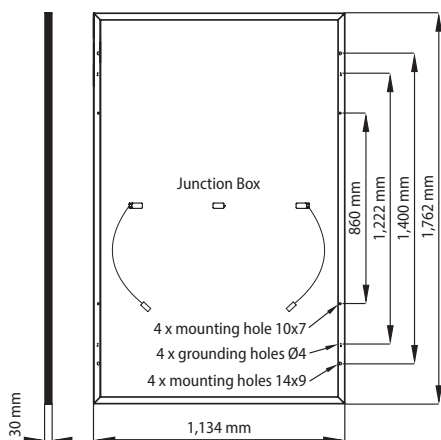
## I-V Curve at Various Irradiation Levels



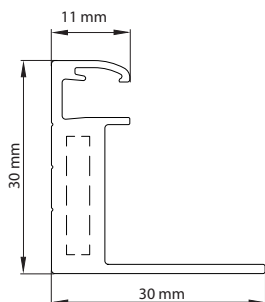
## I-V Curve at Various Cell Temperatures



## Dimensions



## Frame Cross Section



## Electrical Specifications @ STC (AM 1.5, 1,000 W/m², 25 °C):

		Red - Ruby Ray	Green - Jade Shine	Orange - Amber Glow
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		$\pm 3$ %		
Maximum Reverse Current		30 A		
Maximum System Voltage		1,500 V		
Protection Class		Class II		

Efficiency at irradiation 200 W/m²: 99.3 % of STC efficiency or higher. | Tolerances for  $V_{OC}$  and  $I_{SC}$  and other electrical parameters are  $\pm 3$  %.

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/m², 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 $\pm$ 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 / 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 / Ø 35 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
35	178 x 116 x 128 cm	3 pallets	759 kg	28