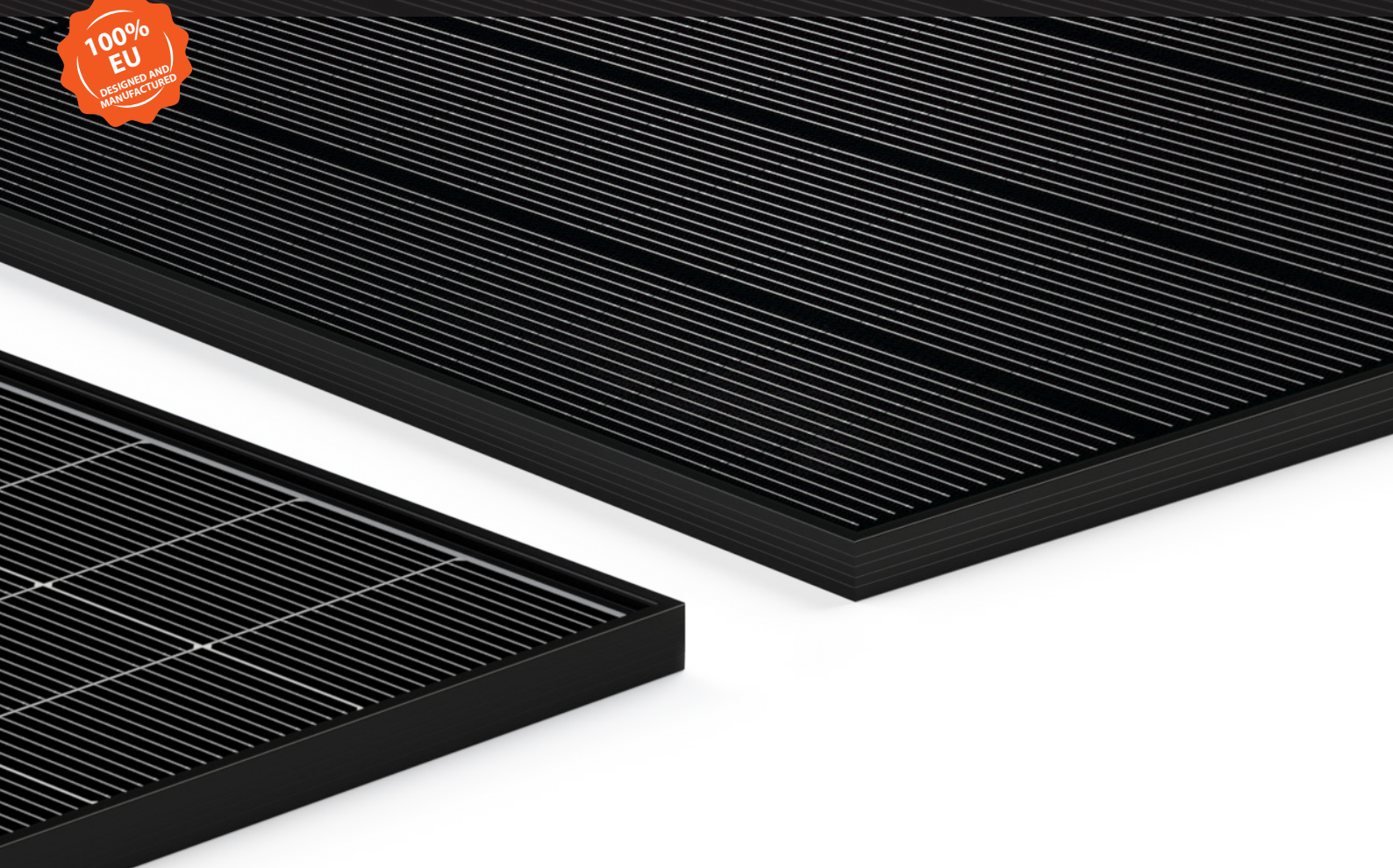


PREMIUM

BISOL Duplex

Monocrystalline Half-Cut PV Modules (108 Cells) / BBO 500-520 Wp



Designed and manufactured in EU



Higher power



Lower losses



All relevant certificates



Limited shading



Module presorting for higher profitability



Module efficiency up to 23.2 %

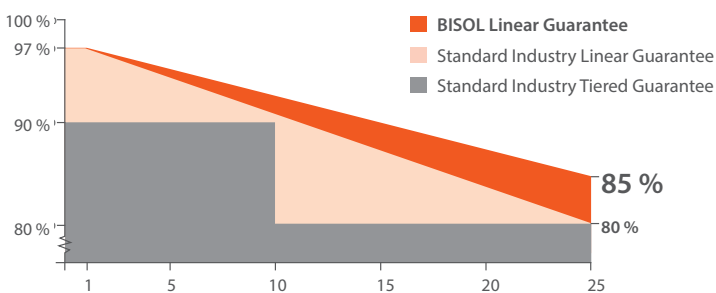


Strictly positive output power tolerances



Excellent low light performance

Guarantees:



Linear Guarantee
85% power output in 25th year



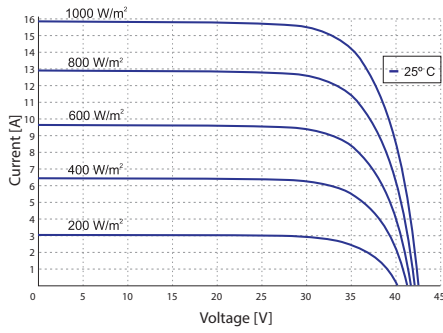
Product Guarantee
Standard: 15 years
Extra: 20 years

In compliance with:

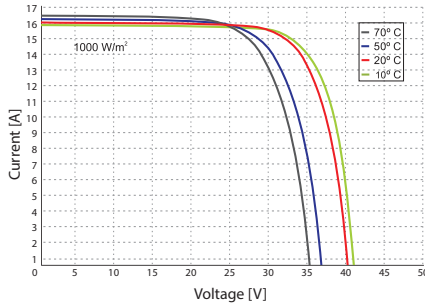


Certificates available upon special request. Additional charges may apply.

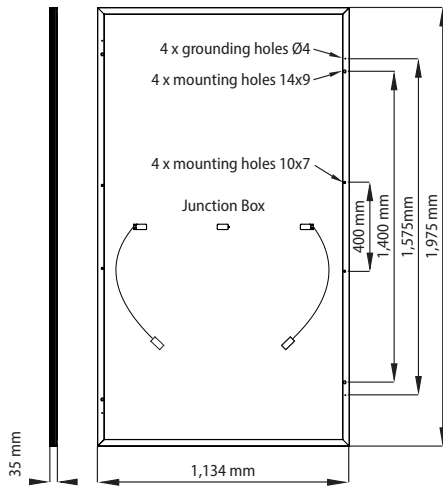
I-V Curve at Various Irradiation Levels



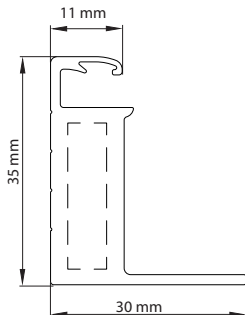
I-V Curve at Various Cell Temperatures



Dimensions



Frame Cross Section



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

Module Type	BBO	500	510	520
Nominal Power	P_{MPP} [W]	500	510	520
Short Circuit Current	I_{SC} [A]	16.0	16.1	16.2
Open Circuit Voltage	V_{OC} [V]	39.6	40.0	40.6
MPP Current	I_{MPP} [A]	15.0	15.2	15.4
MPP Voltage	V_{MPP} [V]	33.3	33.6	33.8
Module Efficiency	η_M [%]	22.3	22.8	23.2
Cell Efficiency	η_C [%]	24.2	24.7	25.2
Power Output Tolerance		0/+5 W		
Maximum System Voltage		1,500 V		
Maximum Reverse Current		30 A		
Protection Class		Class II		

Additional power classes available upon request. | 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 $\pm 3\%$.

Electrical Specifications @ NOCT (800 W/m², AM 1.5, 42 °C, Wind 1 m/s):

Module Type	BBO	500	510	520
Nominal Power	P_{MPP} [W]	384	391	399
Short Circuit Current	I_{SC} [A]	12.9	13.0	13.1
Open Circuit Voltage	V_{OC} [V]	37.9	38.3	38.9
MPP Current	I_{MPP} [A]	12.1	12.3	12.4
MPP Voltage	V_{MPP} [V]	31.7	31.9	32.1

Thermal Specifications:

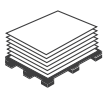
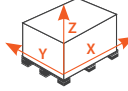



Current Temperature Coefficient	α	+ 0.05 %/°C
Voltage Temperature Coefficient	β	- 0.25 %/°C
Power Temperature Coefficient	γ	- 0.29 %/°C
NOCT		42 °C (± 3 °C)
Temperature Range		- 40 °C to + 85 °C

Mechanical Specifications:

Length x Width x Thickness	1,975 x 1,134 x 35 mm	
Weight	23.5 kg	
Solar Cells	108 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.	
Glass	3.2 mm AR coating tempered glass / high-transparency / low-iron content	
Certified Test Load (Snow/Wind)	5,400 Pa / 2,400 Pa	
Impact Resistance	Hailstone / Φ 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
30	200 x 116 x 128 cm	3 pallets	732 kg	26