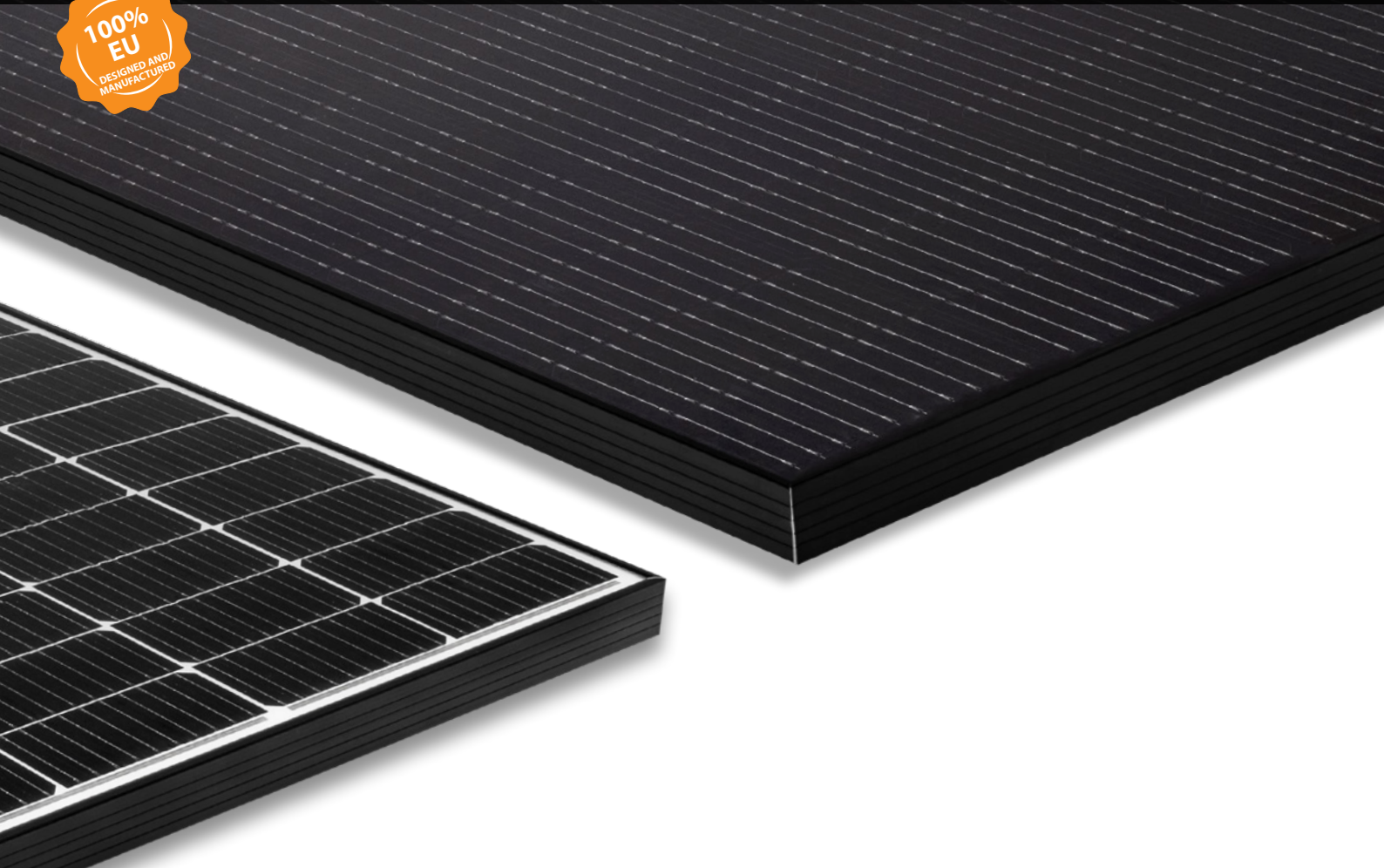


PREMIUM

BISOL Duplex

Monocrystalline Half-Cut PV Modules (132 Cells) / BBO 490-505 Wp



Designed and manufactured in EU



Higher power



Lower losses



All relevant certificates



Limited shading



Module presorting for higher profitability



Module efficiency up to 21.2 %

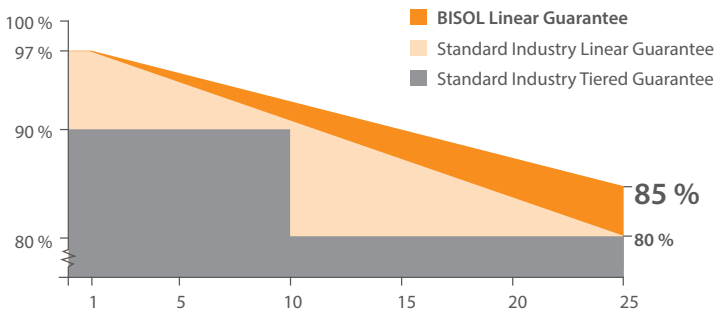


Strictly positive output power tolerances



Excellent low light performance

Guarantees:



Linear Guarantee
85 % power output in 25th year



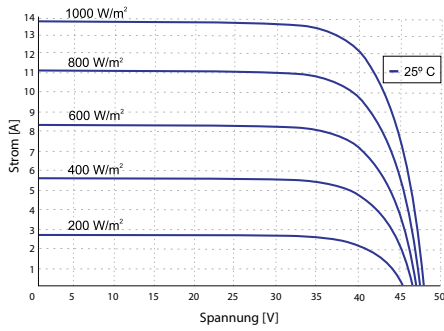
Product Guarantee
15 years

In compliance with:

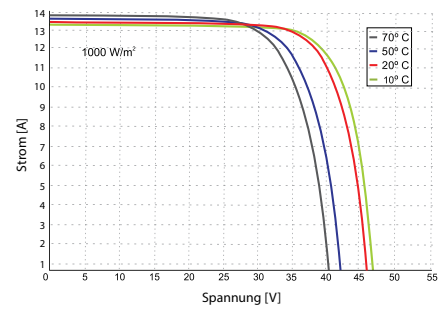


Certificates available upon special request. Additional charges may apply.

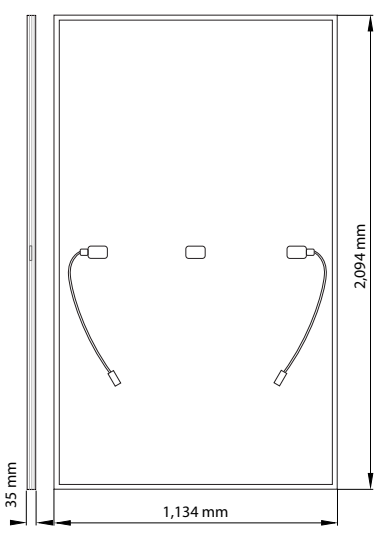
I-V Curve at Various Irradiation Levels



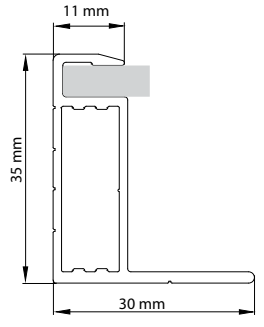
I-V Curve at Various Cell Temperatures



Dimensions



Frame Cross Section



Electrical Specifications @ STC (AM1.5, 1,000 W/m², 25 °C):

Module Type	BDO	490	495	500	505
Nominal Power	P_{MPP} [W]	490	495	500	505
Short Circuit Current	I_{SC} [A]	13.77	13.83	13.85	13.92
Open Circuit Voltage	V_{OC} [V]	45.2	45.3	45.5	45.6
MPP Current	I_{MPP} [A]	12.96	13.06	13.16	13.25
MPP Voltage	V_{MPP} [V]	37.8	37.9	38.0	38.1
Module Efficiency	η_M [%]	20.6	20.8	21.0	21.2
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/m²: 99.3 % of STC efficiency or higher. | Tolerances for V_{OC} and I_{SC} are 3 %.

Electrical Specifications @ NMOT (800 W/m², 20 °C, AM 1.5, Wind 1 m/s):

Module Type	BDO	490	495	500	505
Nominal Power	P_{MPP} [W]	398.7	402.7	406.8	410.9
Short Circuit Current	I_{SC} [A]	10.99	11.04	11.06	11.10
Open Circuit Voltage	V_{OC} [V]	45.79	45.89	46.09	46.19
MPP Current	I_{MPP} [A]	10.34	10.42	10.50	10.58
MPP Voltage	V_{MPP} [V]	38.5	38.6	38.7	38.8

Power measurement tolerance: ±3 %.

Thermal Specifications:

Current Temperature Coefficient	α	+ 0.05 %/°C
Voltage Temperature Coefficient	β	- 0.26 %/°C
Power Temperature Coefficient	γ	- 0.34 %/°C
NOCT		43 ± 2 °C
Temperature Range		- 40 °C to + 85 °C

Mechanical Specifications:

Length x Width x Thickness	2,094 x 1,134 x 35 mm
Weight	26 kg
Solar Cells	132 Half-Cut mono PERC c-Si / 182 x 182 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 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 / Ø 25 mm / 83 km/h (51 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
30	212 x 115,5 x 127 cm	3 pallets	807 kg	24