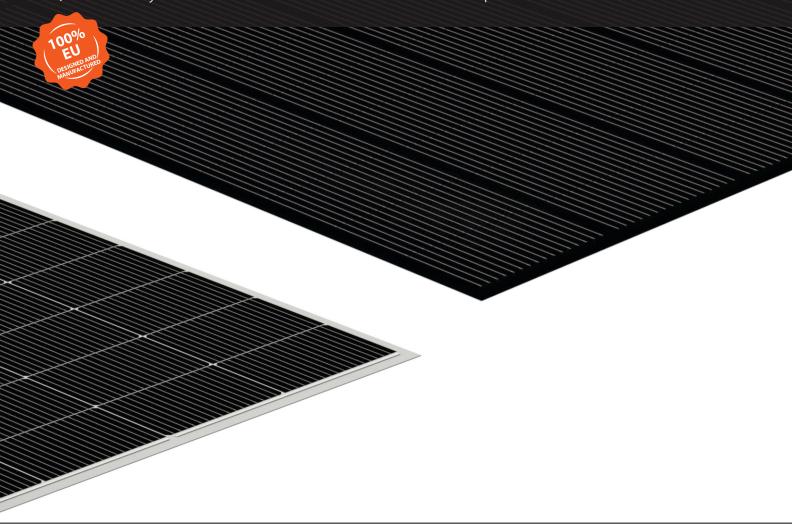
BISOL Laminate



Monocrystalline PV Laminates / BBO 500-520 Wp





Designed and manufactured in EU



Strictly positive output power tolerances



PID free



Ideal for integration



Module presorting for higher profitability



Supremely low degradation



Module efficiency up to 23.2 %



Up to 13 % higher real-life performance



Excellent low light performance

Guarantees:

100 % ■ BISOL Linear Guarantee 97 % Standard Industry Linear Guarantee ■ Standard Industry Tiered Guarantee 90 % 85 % 80 % 80 % 1-20

Linear Guarantee 85 % power output in 25th year



In compliance with:



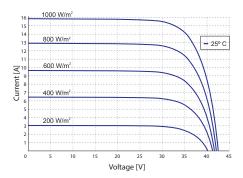




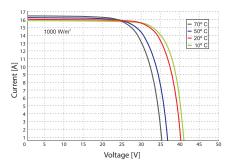




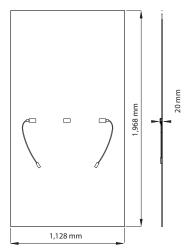
I-V Curve at Various Irradiation Levels



I-V Curve at Various Cell Temperatures



Dimensions





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

Module Type	ВВО	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>I_{MPP}</i> [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. I Efficiency at irradiation 200 W/m²: 99.3 % of STC efficiency or higher. I Tolerances for V_{oc} and I_{sc} and other electrical parameters are ± 3 %.

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

Module Type	ВВО	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	а	+ 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	1,968 x 1,128 x 20 mm
Weight	21 kg
Solar Cells	108 Half-Cut c-Si / 182.25 x 105 mm
Junction Box / Connectors	3 bypass diodes / MC4 compatible / IP 68
Cable Length	Default: 1,200 mm On demand (for portrait orientation): 300 mm
Glass	3.2 mm AR coating tempered glass / high-transparency / low-iron content
Certified Test Load (Snow / Wind)	Depending on Laminate fixation system*
Impact Resistance	Hailstone / Φ 35 mm / 83 km/h (51 mph)

*Certification process can be provided by BISOL upon special request. Additional charges may apply. Tolerances of values are ± 5 %. Unspecified product properties remain under full discretion of BISOL Production.

Packaging Information:











Modules per Pallet

Packing Dimension: Length/Width/Height

Stackable

•••••

30 216 x 116 x 136 cm

2 pallets

Packing Weight 660 kg Tot. Nr. of Pallets/Load

*Loading of laminates requires the use of truck with loading opening higher than 272 cm.