

# **BISOL** Laminate

Monocrystalline PV Laminates / BBO 500-510 Wp







Designed & manufactured in EU



Ideal for integration



Module efficiency up to 21.5 %



Strictly positive output power tolerances



+13 %

Module presorting for higher profitability

Up to 13 % higher real-life performance



PID free

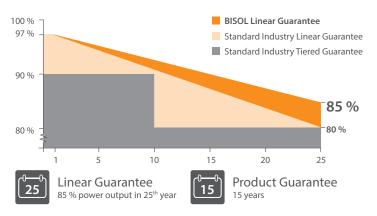


Supremely low degradation



Excellent low light performance

#### **Guarantees:**

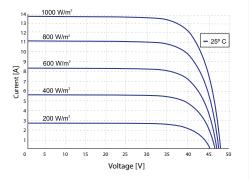


#### In compliance with:



Certificates available upon request. Additional charges may apply. Laminates are manufactured according to IEC 61730 Ed.1 and IEC 61215 Ed.2 standards, but require a certification together with each specific frame or mounting system that the customer decides to use.

I-V Curve at Various Irradiation Levels



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

Module Type	BBO	500	510
Nominal Power	P <sub>MPP</sub> [W]	500	510
Short Circuit Current	I <sub>SC</sub> [A]	13.85	13.96
Open Circuit Voltage	<i>V<sub>OC</sub></i> [V]	45.5	45.8
MPP Current	I <sub>MPP</sub> [A]	13.16	13.36
MPP Voltage	V <sub>MPP</sub> [V]	38.0	38.2
Module Efficiency	п <sub>м</sub> [%]	21.0	21.5
Power Output Tolerance		0/+5 W	
Maximum System Voltage	num System Voltage 1,500 V		00 V
Maximum Reverse Current		25 A	
Protection Class		Class II	

Additional power classes available upon request. I Efficiency at irradiation 200 W/m<sup>2</sup>: 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/m<sup>2</sup>, AM 1.5, 43 °C, Wind 1 m/s):

Module Type	BBO	500	510
Nominal Power	<i>P<sub>MPP</sub></i> [W]	378	386
Short Circuit Current	I <sub>SC</sub> [A]	11.18	11.27
Open Circuit Voltage	<i>V</i> <sub>OC</sub> [V]	43.4	43.6
MPP Current	I <sub>MPP</sub> [A]	10.62	10.78
MPP Voltage	V <sub>MPP</sub> [V]	35.6	35.8

#### **Thermal Specifications:**

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

## **Mechanical Specifications:**

Length x Width x Thickness	2,087 x 1,128 x 20 mm
Weight	23.5 kg
Solar Cells	132 Half-Cut mono PERC c-Si / 182 mm x 91 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
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 25 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:**



2 pallets

22\*

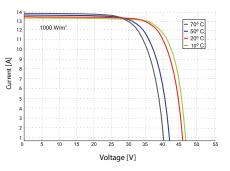
748 kg

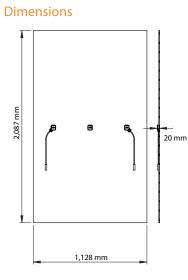
30

228 x 120 x 136 cm

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

I-V Curve at Various **Cell Temperatures** 







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