



Solar company!

Colour your **LIFE!**

BISOL Spectrum





Deep RED

Coloured Glass

BISOL Spectrum

With respect for our natural surroundings and the architectural legacy in mind, we are introducing exclusive **BISOL Spectrum** photovoltaic modules with coloured glass, whereby you no longer have to compromise aesthetics for efficiency when harnessing the endless power of the sun.

BISOL Spectrum modules were designed not only to conform, but also to refine the architectural traits of buildings and roofs of various types and styles. Available in a wide palette of colours, BISOL Spectrum PV modules can now really become an integral part of the building by either seamlessly blending into the historic character of the building in its natural setting, or by contributing to the manifestation of the building's modern design features. Their unique look allows discreet blending with the scenery, hence preserving the timeless beauty of diverse natural settings. Either way, BISOL Spectrum modules will undoubtedly add a timeless aesthetical value.

Advantages:



Made in EU



Available in variety of colours



A perfect colour match to your roof



On-roof or BIPV



PID free



Module presorting for higher profitability



Exellent low light performance



Double insulation

RED glass is a good choice for most European roofs, especially if the building is under cultural heritage protection, since the panels will be almost invisible.

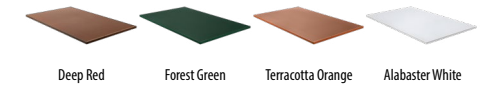


Deep Red

Terracotta ORANGE

Coloured Glass

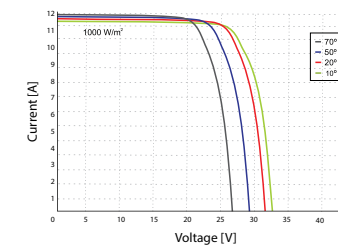
Electrical Specifications @ STC (1,000 W/m², AM 1.5, 25 °C):



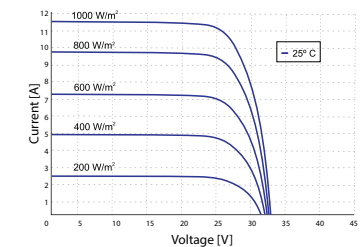
Module Type	BDO	350	335	305	255
Nominal Power	P_{MPP} [W]	350	335	305	255
Short Circuit Current	I_{SC} [A]	11.50	11.05	9.95	8.30
Open Circuit Voltage	V_{OC} [V]	38.3	38.6	38.5	38.3
MPP Current	I_{MPP} [A]	10.65	10.25	9.35	7.75
MPP Voltage	V_{MPP} [V]	32.9	32.7	32.7	33.0
Power Output Tolerance		±3 %			
Maximum Reverse Current		20 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 ±3 %.

I-V Curve at Various Irradiation Levels



I-V Curve at Various Cell Temperatures



ORANGE glass matches the shades of brick roofs all around the world, and maintains the colour recognition of the environment.



Terracotta Orange



Alabaster WHITE

Coloured Glass

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

In compliance with:

IEC 61730 Ed.1
61215 Ed.2

IEC 62804-1

IEC 62716
Ammonia resistance



Certificates available upon special request. Additional charges may apply.

WHITE glass is a great solution for easy blend-in with large surface buildings that also keeps them cooler.











Alabaster White

Forest GREEN

Coloured Glass

Colour Availability

Spectrum PV module	Frames, BIPV Flashings, Middle and End Clamps	Solar Glass
 Deep Red	 RAL 8017	RAL 8015
 Forest Green	 RAL 6009	RAL 6007
 Terracotta Orange	 RAL 8004	RAL 8023
 Alabaster White	 RAL 9016	RAL 9016

The actual colour shades may vary from the images shown. Colour inconsistencies in a module may appear due to the nature of this product.



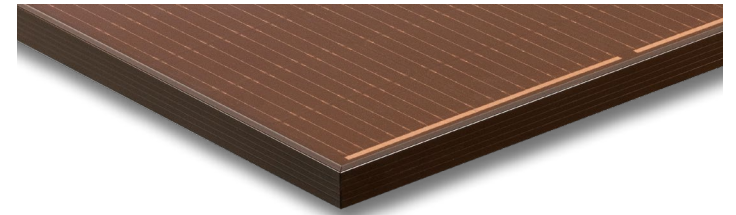
GREEN glass goes well with the natural environment and is the greenest solution for the planet.



Forest Green



On-Roof Solution



Detail of standard frame

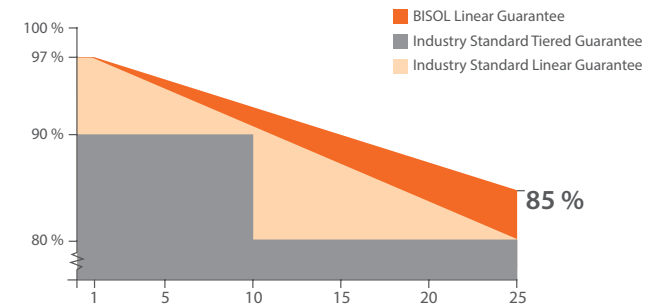
Guarantees:



Product Guarantee
15 years



Linear Guarantee
85 % output in 25th year



Roofs represent 20-25% of the total urban area and with photovoltaics, they present an opportunity for sustainable building designs.



Solar energy produces no pollution, has no environmental effects and is ecologically acceptable.

Mechanical Specifications

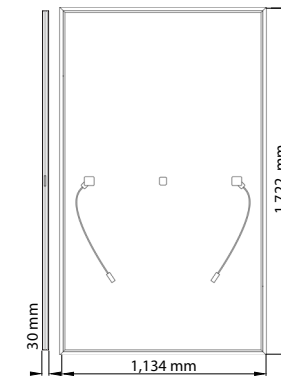
Length x Width x Thickness	BDO: 1,722 x 1,134 x 30 mm
Weight	BDO: 22 kg
Solar Cells	108 Half-Cut mono PERC c-Si / 182 x 91 mm
Junction Box / Connectors / IP	Three bypass diodes / MC4 compatible / IP 68
Cable Length	Default: 1,200 mm On demand (for portrait orientation): 300 mm
Frame	Standard frame (anodized Al with drainage holes / rigid anchored corners)
Frame Colour	Any RAL colour code, black or silver
Back Sheet Colour	Black
Glass	3.2 mm glass with anti-reflective coating / tempered / high-transparency / low-iron content
Impact resistance	Hailstone / Ø 25 mm / 83 km/h (51 mph)

Packaging Information:

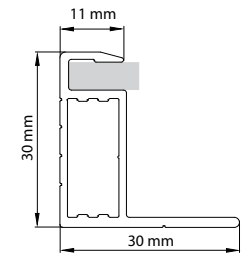


Module Type	Modules per Pallet	Packaging Dimension: Length/Width/Height	Stackable	Packaging Weight	Tot. Nr. of Pallets/ Load
BDO	35	175 x 116 x 128 cm	3 pallets	794 kg	30

Dimensions



BISO Spectrum module BDO with standard frame

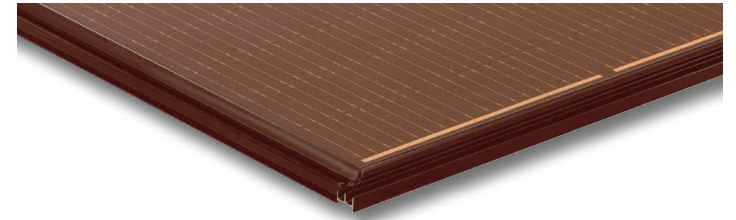


Cross section of standard frame



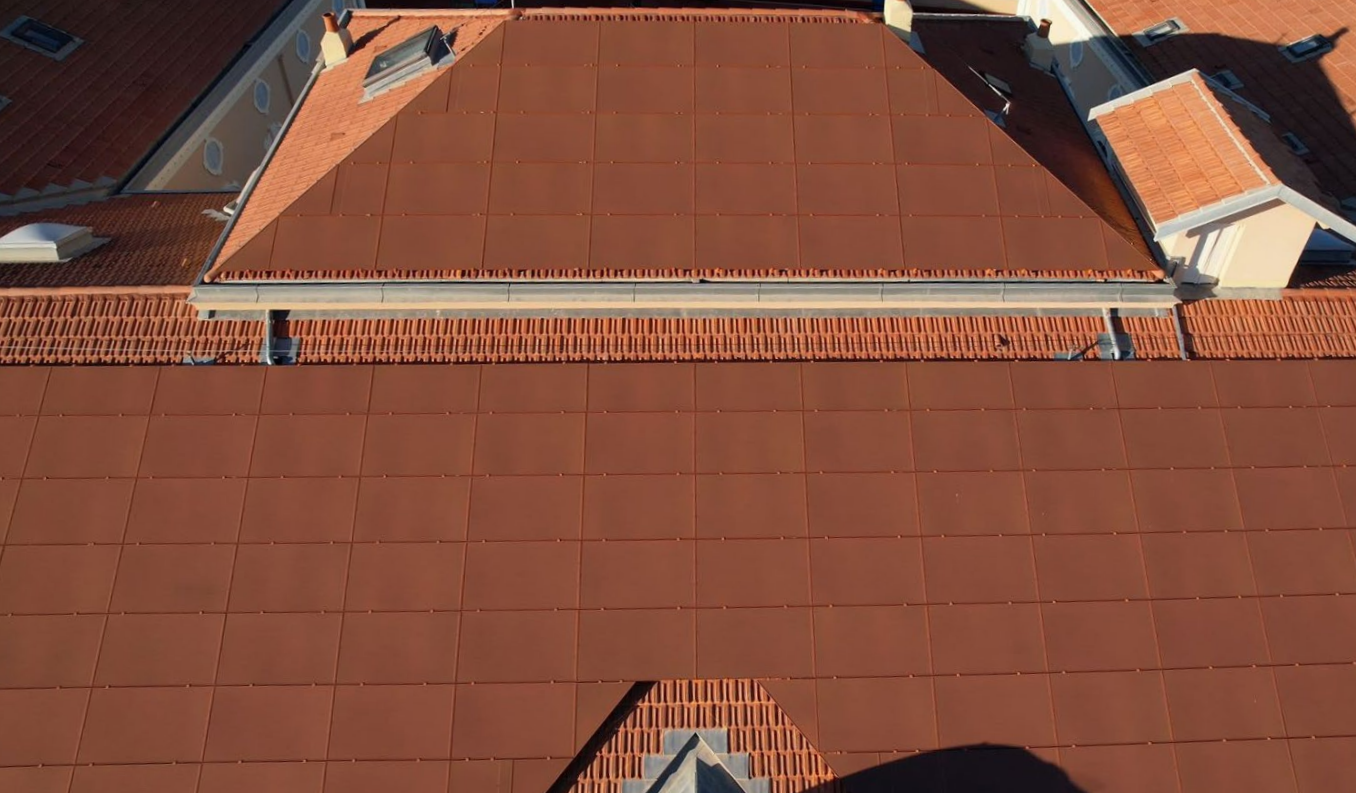
Roof-Integrated Solution

BISOL Spectrum PV modules are also available as a BIPV solution used in roof-integrated applications, that can be more cost effective simply because their composition and location replaces a number of conventional components. The overlapping of the specially framed BIPV modules produces an elegant PV array that completely replaces the conventional roofing. Maximum visual conformity and an unobtrusive appearance of the PV system are achieved by fully matching the colour of the end flashings, making it especially appealing to the eye. Coloured PV modules teamed up with building-integrated trim allow the PV system to fully blend in with even the most particular roof types, offering new possibilities of applying photovoltaic to most delicate historic and listed buildings in conservation areas.



Detail of special BIPV (Solrif®) frame

BIPV removes any distinction between energy systems and building materials. It is aesthetic, multi-functional, eco-friendly, and signals a step into the future.





"Thanks to the BISOL Spectrum, we now have the possibility to please all our customer concerns. Some of them dislike solar panels because of their aesthetic appearance, while for the majority the return on investment (ROI) is of the highest importance. Now we have the solution that meets both needs – BISOL Spectrum!"

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Scan the QR code to watch our beautiful promo video *Power & Elegance!*

