BISOL Lumina Series

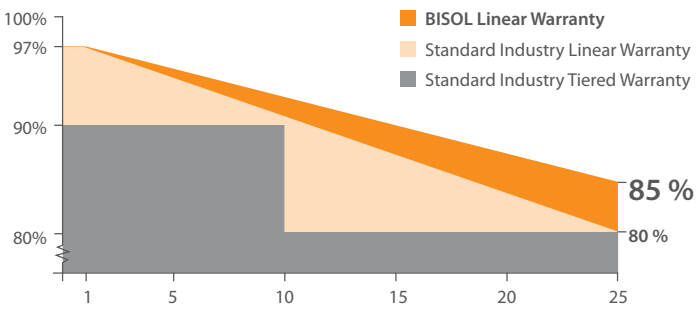
High-Transparency Monocrystalline PV Modules

BISOL
Solar company!



- Made in EU
- Sets of 28 to 60 cells available
- Transparent back foil
- Available with or without frame
- Choice of standard or BIPV frame
- Natural light transmission

Warranties:



25 Linear warranty
85% power output in 25th year

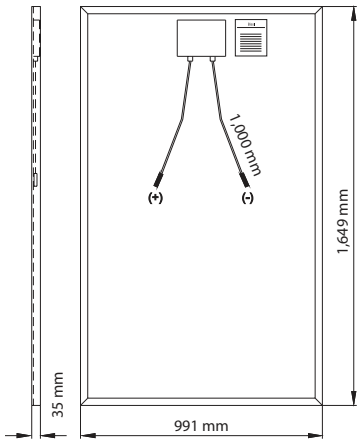
10 Product warranty
10 years

In compliance with:

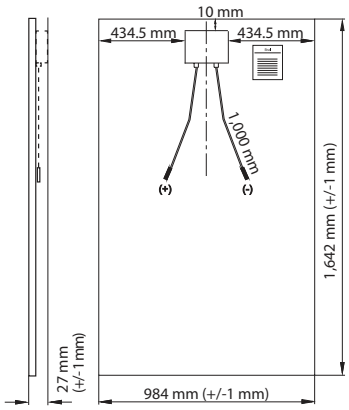
HW3 · CRE3 · European Recycling Platform · IEC 61730 Ed.1 61215 Ed.2 · IEC 62804-1 · IEC 61701 Salt water mist resistance · CE · AIT Austrian Institute of Technology · TÜVRheinland · IEC 62716 Ammonia resistance · ANSI UL 1703 · AS5033 compliant · ISO 9001 ISO 14001 OHSAS 18001 BUREAU VERITAS Certification · ISTITUTO GIORDANO Qualità al Plurale Fire resistant - Class 1 (UNI 9177) · MCS

Certificates available upon special request. Additional charges may apply.

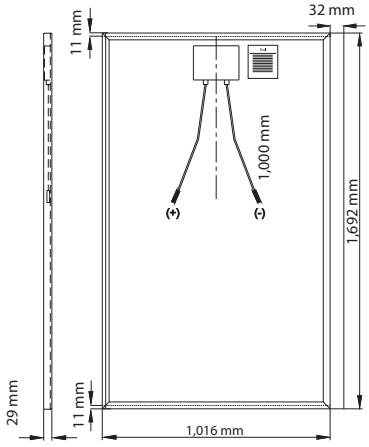
Dimensions of module type BMO (standard frame)



Dimensions of laminate type BLO (without frame)



Dimensions of module type BSO (Solrif® frame)



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

Module Type BMO / BSO / BLO		130	150	170	185	170	195	225	250	280
Nominal Power	P_{MPP} [W]	130	150	170	185	170	195	225	250	280
Number of cells		28	32	36	40	36	42	48	54	60
Cell matrix		4 x 7	4 x 8	4 x 9	4 x 10	6 x 6	6 x 7	6 x 8	6 x 9	6 x 10
Transparent area	in cm²	8,662	7,707	6,752	5,797	6,752	5,320	3,887	2,454	1,021
	in %	53.0	47.2	41.3	35.5	41.3	32.6	23.8	15.0	6.2
Short Circuit Current	I_{SC} [A]	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35
Open Circuit Voltage	V_{OC} [V]	18.6	21.3	24.0	26.6	24.0	28.0	31.9	35.9	39.9
MPP Current	I_{MPP} [A]	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
MPP Voltage	V_{MPP} [V]	14.4	16.7	18.9	20.6	18.9	21.7	25.0	27.8	31.1
Solar Cell Efficiency	η_C [%]	19	19	19	19	19	19	19	19	19
Module Efficiency	η_M [%]	8	9	10	11	10	12	14	15	17
Power Output Tolerance		+/-3 %								
Maximum Reverse Current		18 A								
Maximum System Voltage		1,000 V (Application Class A)								

Additional power classes available upon request. | Efficiency at irradiation 200 W/m²: 99.3 % of STC efficiency or higher. | Power measurement tolerance: +/- 3 %.

Thermal Specifications:

Current Temperature Coefficient	α	+ 0.046 %/K
Voltage Temperature Coefficient	β	- 0.30 %/K
Power Temperature Coefficient	γ	- 0.39 %/K
NOCT		44 °C
Temperature range		-40 °C to +85 °C

Mechanical Specifications:

Length x Width x Thickness	BMO: 1,649 mm x 991 mm x 35 mm / BSO (Solrif®): 1,692 mm x 1,016 mm x 29 mm / BLO: 1,642 mm x 984 mm x 27 mm
Weight	BMO: 18.3 kg / BSO (Solrif®): 18.4 kg / BLO 15.8 kg
Solar Cells	Mono c-Si in series / 156 mm x 156 mm (6+")
Junction Box / Connectors	Three bypass diodes / MC4 compatible / IP 67
Frame	Standard frame (anodized AL with drainage holes and rigid anchored corners) or BIPV (Solrif®) frame or laminate
Frame Colour	Any RAL colour code, black or silver
Back Sheet Colour	Transparent
Glass	3.2 mm glass with anti-reflective coating / tempered / high-transparency / low-iron content
Packaging	BMO: 28 modules per pallet / stackable 3 pallets high BSO (Solrif®): 24 modules per pallet / stackable 2 pallets high BLO: 30 laminates per pallet / stackable 2 pallets high
Certified Nominal Load	5,400 Pa for BMO / 2,400 Pa for BSO (Solrif®) / maximum nominal load for BLO depends on Laminate fixation system
Impact resistance	Hailstone / Φ 25 mm / 83 km/h (51 mph)

All unspecified tolerances are ± 5 %. Unspecified product properties remain under full discretion of BISOL.

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Dealer Information

www.bisol.com I www.bisol.co.uk

Additional terms & conditions apply. Please see *Standard Limited Warranty* and *General Terms and Conditions*.

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