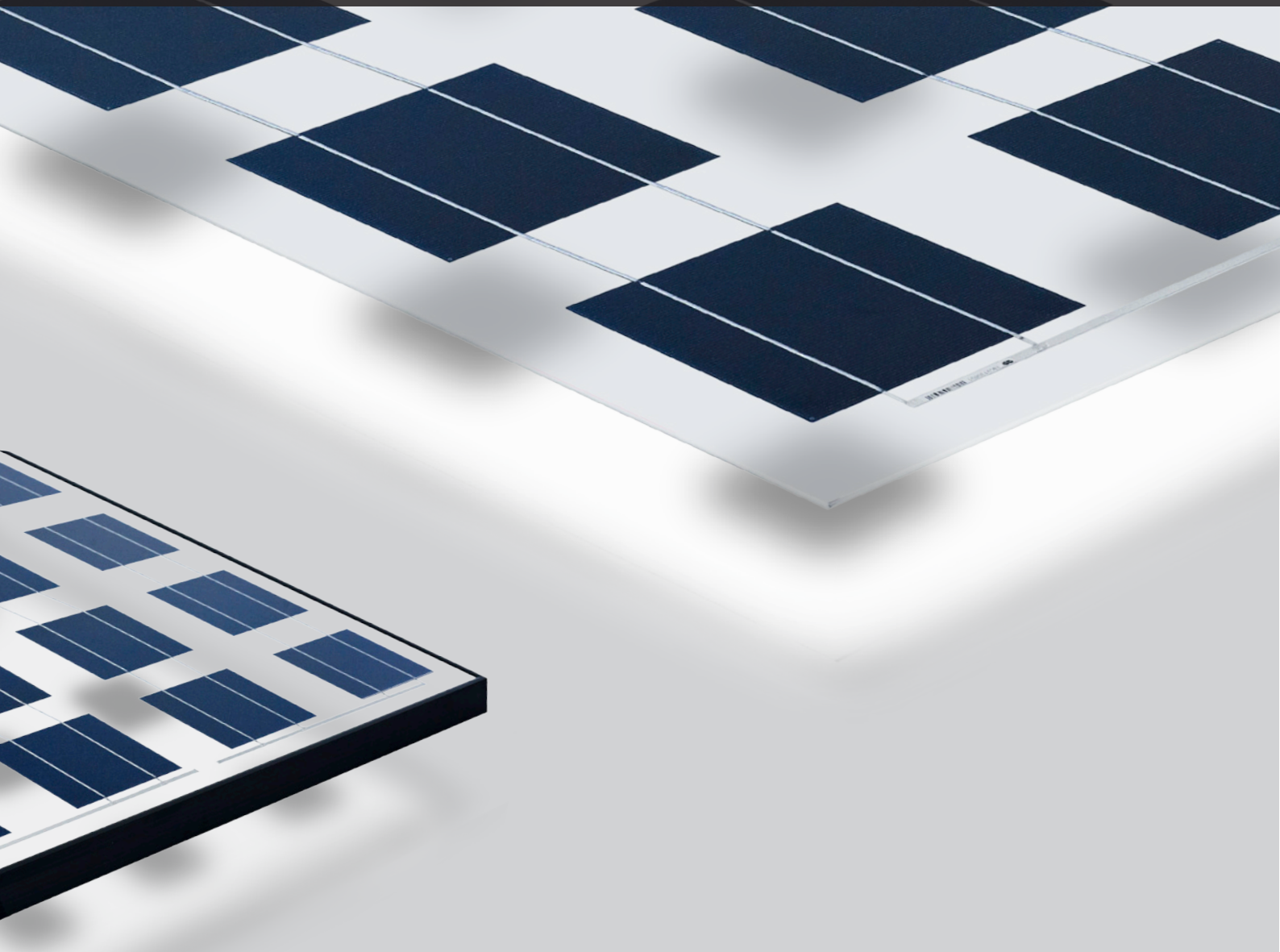


# BISOL Lumina Series

High-Transparency Multicrystalline PV Modules



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

## Certificates:



10-year product warranty

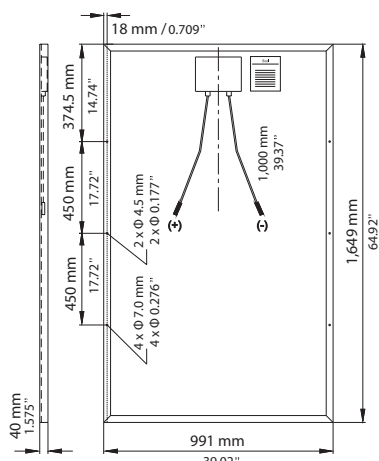


12 years on 90% power output

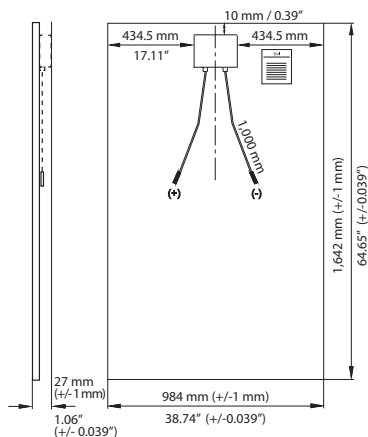


25 years on 80% power output

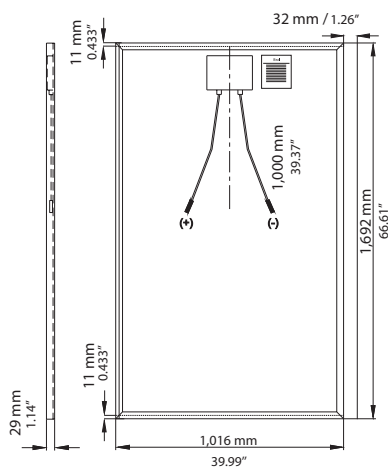
### Dimensions of module type BMU (standard frame)



### Dimensions of laminate type BLU (without frame)



### Dimensions of module type BSU (Solrif® frame)



### Electrical Specifications @ STC (AM1.5, 1,000 W/m<sup>2</sup>, 25 °C):

Module Type BMU / BSU / BLU		120	135	155	170	155	180	205	230	255
Nominal Power	$P_{MPP}$ [W]	120	135	155	170	155	180	205	230	255
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 cm <sup>2</sup>	8,537	7,563	6,590	5,617	6,590	5,130	3,671	2,211	751
	in %	52.2	46.3	40.3	34.4	40.3	31.4	22.5	13.5	4.6
Short Circuit Current	$I_{SC}$ [A]	8.85	8.85	8.85	8.85	8.85	8.85	8.85	8.85	8.85
Open Circuit Voltage	$V_{OC}$ [V]	18.1	20.7	23.2	25.8	23.2	27.1	31.0	34.9	38.7
MPP Current	$I_{MPP}$ [A]	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35
MPP Voltage	$V_{MPP}$ [V]	14.4	16.2	18.6	20.4	18.6	21.6	24.6	27.5	30.5
Solar Cell Efficiency	$\eta_C$ [%]	17.6	17.3	17.7	17.5	17.7	17.6	17.5	17.5	17.5
Module Efficiency	$\eta_M$ [%]	7.3	8.3	9.5	10.4	9.5	11.0	12.5	14.1	15.6
Power Output Tolerance		+/- 3 %								
Maximum Reverse Current		13 A								
Maximum System Voltage		1,000 V (Application Class A)								

Efficiency at irradiation 200 W/m<sup>2</sup> decreases to 95.7 % of efficiency at STC.

### Thermal Specifications:

Current Temperature Coefficient	$\alpha$	+ 4.9 mA/°C
Voltage Temperature Coefficient	$\beta$	- 121 mV/°C
Power Temperature Coefficient	$\gamma$	- 0.35 %/°C
NOCT		44 °C
Temperature range		-40 °C to +85 °C

### Mechanical Specifications:

Length x Width x Thickness	BMU: 1,649 mm x 991 mm x 40 mm (64.92" x 39.02" x 1.575") / BSU (Solrif®): 1,692 mm x 1,016 mm x 29 mm (66.61" x 39.99" x 1.14") / BLU: 1,642 mm x 984 mm x 27 mm (64.65" x 38.74" x 1.062")
Weight	BMU: 18.5 kg (40.79 lbs) / BSU (Solrif®): 18.4 kg (40.57 lbs) / BLU 15.8 kg (34.83 lbs)
Solar Cells	Multi 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 tempered glass / high-transparency / low-iron content
Packaging	BMU: 16 or 25 modules per pallet / stackable 3 pallets high BSU (Solrif®): 24 modules per pallet / stackable 2 pallets high BLU: 30 laminates per pallet / stackable 2 pallets high
Certified Nominal Load	5,400 Pa for BMU / 2,400 Pa for BSU (Solrif®) and BLU
Impact resistance	Hailstone / Ø 25 mm / 83 km/h (51 mph)

### Dealer Information

www.bisol.com

