



BISOL BMU 221-245 Wp

Multicrystalline Silicon Photovoltaic Modules



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

Module Type		BMU-221	BMU-227	BMU-233	BMU-239	BMU-245
Maximum Power	P_{MPP} [W]	221	227	233	239	245
Short Circuit Current	I_{SC} [A]	8.25	8.35	8.45	8.56	8.65
Open Circuit Voltage	V_{OC} [V]	36.8	37.1	37.5	37.8	38.1
MPP Current	I_{MPP} [A]	7.65	7.80	7.90	8.00	8.15
MPP Voltage	V_{MPP} [V]	28.8	29.2	29.5	29.8	30.2
Solar Cell Efficiency	η_C [%]	15.1	15.5	16.0	16.4	16.8
Module Efficiency	η_M [%]	13.5	13.9	14.3	14.6	15.0

Additional power classes available upon request.

Efficiency of modules at low irradiation (200 W/m²) decreases to 95.7 % of efficiency at STC.

Electrical Specifications:

Solar Cell Type		Multicrystalline Silicon
Solar Cell Dimensions		156 mm x 156 mm (6+")
Number of Cells		60 in series
Power Output Tolerance		0/+6 W
Current Temperature Coefficient	α	+ 5.5 mA/°C
Voltage Temperature Coefficient	β	- 120 mV/°C
Power Temperature Coefficient	γ	- 0.40 %/°C
Maximum System Voltage		1,000 V (Application Class A)
NOCT		44 °C
Maximum Reverse Current		13 A

Electrical Specifications under Real-life Conditions vs. STC (AM1.5, 800 W/m², Cell Temperature 44 °C):

Module Type		BMU-221	BMU-227	BMU-233	BMU-239	BMU-245
Maximum Power	P_{MPP} [W]	163	168	172	176	181
Short Circuit Current	I_{SC} [A]	6.70	6.78	6.86	6.95	7.03
Open Circuit Voltage	V_{OC} [V]	34.1	34.4	34.8	35.1	35.3
MPP Current	I_{MPP} [A]	6.19	6.31	6.39	6.47	6.59
MPP Voltage	V_{MPP} [V]	26.3	26.6	26.9	27.2	27.5
Solar Cell Efficiency	η_C [%]	14.0	14.3	14.7	15.1	15.5
Module Efficiency	η_M [%]	12.5	12.8	13.2	13.5	13.8



Made in EU



10-year product warranty



Strictly positive power output tolerances



Module presorting for a more profitable investment



Lightweight



All relevant certificates

WARRANTIES:

10-year product warranty
12 years on 90 % power output
25 years on 80 % power output

www.bisol.co.uk



BMU 221-245 Wp

Certificates:



Salt mist corrosion test (IEC 61701)

Ammonia test (IEC 62716)

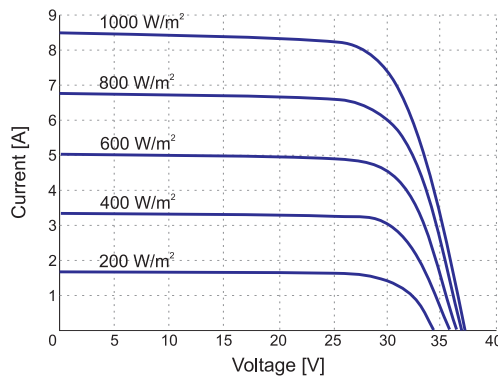
Recycled by:



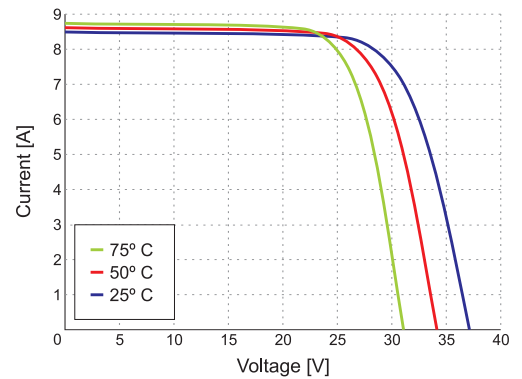
Mechanical Specifications:

Length x Width x Thickness	1,649 mm x 991 mm x 40 mm (64.92"x 39.02" x 1.575")
Weight	18.5 kg (40.79 lbs)
Junction Box, Connectors	Tyco (IP 65) with three bypass diodes
Certified Nominal Load	5,400 Pa

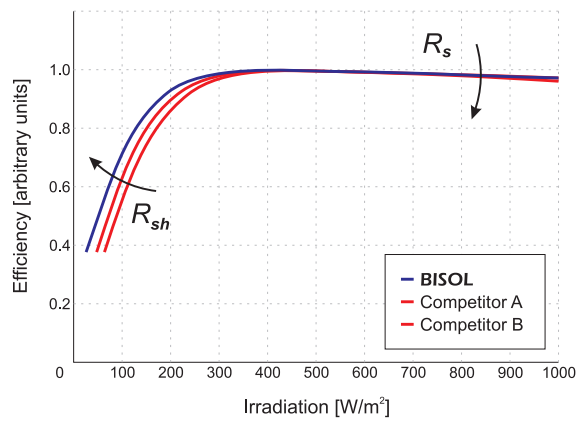
I-V Curve at Various Irradiation Levels



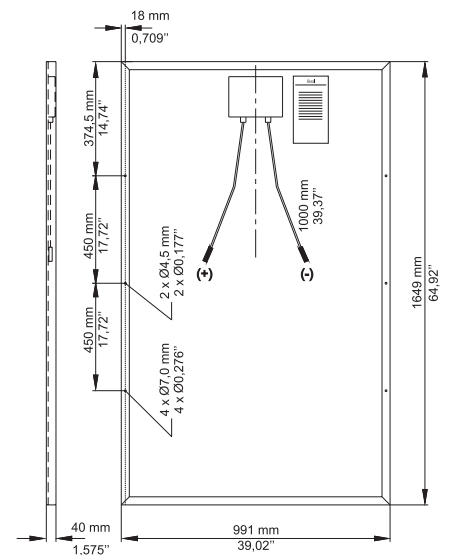
I-V Curve at Various Cell Temperatures



Effective Efficiency



Dimensions



Dealer Information:

