

# BERLIN ALTERNATIVE ENERGY INDUSTRY Renewable Energy Solutions

El Kilo Circle, Mecca Str. 136, 3<sup>rd</sup>. Floor, Amman-Jordan www.baeindustry.com

### M 60 - 250 Watt MONO-CRYSTALLINE SOLAR PANEL

Our M60-250/220 Watt Mono-crystalline solar modules with a maximum power of 220Wp are produced with state-of-the-art robotic production line.

These modules are suitable for use in most electrical power application and have excellent durability to prevailing weather conditions.

- High efficiency 6" solar cells with high performance solar module create more power under the same conditions.
- Bypass diodes minimize power drop caused by shade.
- High transparency low- iron tempered glass, EVA laminate and waterproof back sheet, plus heavy duty anodized/PVDF coated aluminum frame.
- Output terminal have water proof connectors.
- TüV Certificate (PV197173-008-TA).
- Constant quality control.





Unique design on drainage slots for vertical and horizantal constructions to avoide deforming due to freezing weather



Our Photovoltaic Modules are successfully qualified according to their Design, Performance and Safety.

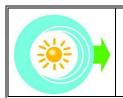


High output performance Long term reliablity Sufficient reverse current Good resistance to mechanical loads





CEI EN 61215 (2006) CEI EN 61730-1 (2007) CEI EN 61730-2 (2007)

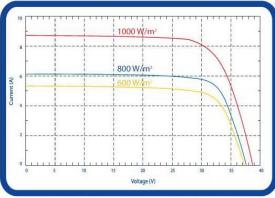


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#### Product M 60 - 250

ELECTRICAL DATA	UNIT	VALUES
Nominal Power ±3% [W <sub>P</sub> ]	Pnom	250
Voltage at Nominal Power [v]	Vmpp	30.46
Current at Nominal Power [A]	Impp	8.21
Open-circuit Voltage [v]	Voc	37.80
Short-circuit Current [A]	Isc	8.78
Voltage Temperature Coefficient	mV/cell/C°	-2.00
Current Temperature Coefficient	mA/cell/C°	3.70
Power Temperature Coefficient	% / C°	-0.38
Module Efficient [%]	η′	15.3



**Current - Voltage Curve** 

MODULE COMPONENTS	VALUES	
Solar Cells per Module	60 (6 x 10) in series	
Cell Type	Mono-crystalline sillicon, 156 x 156 mm² - Pseudo Square	
Connection	Junction Box IP65 with 3 Bypass diods, Solar Cable	
	(length 0.8m - cross section 4mm²) with MC4 interconnection	
Front Surface	Low Iron 3.2mm Thick Pattern Solar Glass	
Frame Material	Anodized / PVDF Coated Aluminum	

DIMENTIONS and WEIGHT	VALUES	
Dimenions [mm]	1655 x 990 x 45	
Weight [kg]	~ 19.8	

LIMITS	VALUES
System Voltage [V∞]	1000
Maximum Reverse Current IRC [A]	15
Operating Module Temperature [c°]	-40 to +85
Fire Classification	C

VALUES	
10 Years 90% of Minimum Power Output	
25 Years 80% of Minimum Power Output	
5 Years Under Normal Conditions	

